

Women entrepreneurship: A sentiment analysis

Aam Slamet Rusydiana¹, Nadia Nurul Izza²

¹Shariah Economics Applied Research and Training (SMART), Bogor, Indonesia ²Islamic Economics, Islamic Economics and Business Faculty, Tazkia Islamic University College, Bogor, Indonesia

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Corresponding author:

Aam Slamet Rusydiana aamsmart@gmail.com

Author's email:

nadian.izza31@gmail.com

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Center for Islamic Economics Studies and Development, Faculty of Business and Economics, Universitas Islam Indonesia

Abstract

Purpose – This study aims to determine the sentiment towards women's entrepreneurship development in the last 32 years, from 1987 to 2019

Methodology – The method used is descriptive statistical analysis combined with meta-analysis and sentiment from secondary data in metadata from 98 Scopus indexed publications, then processed using Microsoft Excel 2019 and SentiStrength software.

Findings – The sentiment analysis results show that the expert opinions on the development of women's entrepreneurship are diverse, with positive sentiment at 30.6%, negative sentiment at 30.6%, and neutral sentiment at 38.8%. Based on the study results, it was found that there had been a rise in the study on the topic of developing women's entrepreneurship in the scholarly literature.

Implications – These results can be used as illustrations to provide education and literacy about existing barriers to women's entrepreneurship. A strong commitment from a variety of stakeholders, including interested parties such as policymakers and the government, hoped to play a critical role in supporting and strengthening the women entrepreneurship ecosystem to advance economic empowerment by advancing innovation in tandem with the advancement of digitalization in the form of digital technology, improving the education system and employment practices can maximize the potential of female entrepreneurs, resulting in positive outcomes such as job creation and increased welfare, as well as assisting the United Nations in implementing the Sustainable Development Goals (SDGs).

Originality – There are no papers discussing the evolution of global views of interest in women's entrepreneurship research using the sentiment method. Therefore, this paper is among the first.

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Introduction

Entrepreneurship is now viewed as a critical engine for economic progress, and women contribute significantly globally (De Vita et al., 2014; Kaciak & Welsh, 2020). Women-owned enterprises are one of the fastest-growing segments of the global entrepreneurial community. They contribute significantly to innovation, employment, and wealth development across all economies (Brush et al., 2009). Entrepreneurial activity is frequently entwined with a country's economic backdrop (Maden, 2015). Entrepreneurship is commonly seen in countries with low economic growth (Ahl, 2006; Baughnn et al., 2006; Bruin et al., 2007; Datta & Gailey, 2012). Economic systems in these countries may be unable to provide an appropriate supply of wage jobs, providing a drive for entrepreneurship (Baughnn et al., 2006).

According to the Annual Report We-Fi (2021), 17% of women entrepreneurs and another 35% intend to establish a business in low- and middle-income nations. This market has more than half of women entrepreneurs or wannabe entrepreneurs, compared to 25% in high-income countries. For many women, particularly in low-income and unstable nations, entrepreneurship represents a path out of poverty and toward prosperity.

In nations with a more significant public sector, women are less likely to engage in entrepreneurial activity. However, the rule of law typically has no gender-specific effects. However, the more specific institutional components of discrimination against women, most notably restrictions on women's freedom of movement away from home, make it less likely for women to have high entrepreneurial aspirations in terms of employment growth, even if they engage in entrepreneurial activities (Estrin & Mickiewicz, 2011).

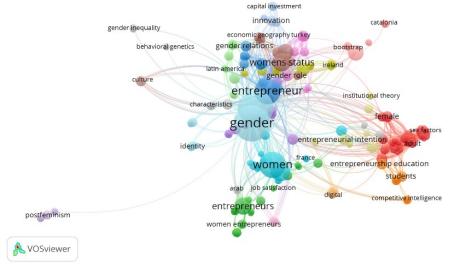
There are numerous barriers and problems, one of which is gender bias, which makes it difficult for women entrepreneurs to obtain financing, receive publicity, and grow their firms. In addition to being restricted in terms of capital due to a lack of guarantees for securing capital and a lack of entrepreneurial skills in an era of technology, market access, bureaucracy, and legalization, women entrepreneurs' managerial abilities and access to information technology limits business for women entrepreneurs (Setini et al., 2020). Additionally, the current pandemic's economic uncertainties may cast doubt on the future of female businesses (We-Fi, 2021).

According to the 2016 Report of the United Nations Secretary-High-Level General's Panel on Women's Economic Empowerment, women trail behind males in terms of female company owners, the size of women-owned enterprises, and access to economic resources (Fatah Yasin et al. al., 2020). Naturally, this is a difficulty, as is the requirement for innovation to address existing problems and obstacles. It is not only about capitalizing on new opportunities but also about increasing productivity, creating jobs, and addressing some of society's most serious issues, such as the United Nations' Sustainable Development Goals (SDGs). This will eventually result in beneficial consequences such as job creation and increased well-being, contributing to achieving the SDGs' goals.

As a result, it will take a strong commitment from a variety of stakeholders, including interested parties such as policymakers, to create an appropriate economic, social, political, cultural, and legal environment for women in which they can enter and run businesses freely and voluntarily to promote women's economic empowerment and entrepreneurship.

As a result of this context, the relevance of the phenomena of women's entrepreneurship prompted us to do sentiment analysis on the evolution of 98 Scopus-indexed articles on women's entrepreneurship over the previous 32 years, from 1987 to 2019.

Literature Review



Source: Created with VOSviewer and Scopus data

Figure 1. A map representing the topical interests of scientific papers published from 1987 to 2019

The interaction between words and the division of word groupings that demonstrate word links based on the cluster division indicate an increase in conversation, indicating a high academic interest in women's entrepreneurship development. At the very least, in Figure 1, five big clusters were discovered using publishing analysis. The cluster is distributed in the following manner:

- Cluster 1 in red is the largest and encompasses 33 items. Studies have been devoted to decision-making, with a special emphasis on entrepreneurship. The red cluster is related to career intentions, risk-taking, self-concept, career choice, self-efficacy, psychological aspect, social psychology, stereotype activation, stereotype assimilation, stereotype contrast, stereotyping, etc.
- Cluster 2 in green consists of 21 items and includes the entrepreneurs' works between businesses. Publications in this cluster focus more on business development, business formation, entrepreneurial orientation, international satisfaction, and management capabilities.
- Cluster 3 in blue consists of 16 items is dedicated to gender issues on entrepreneurs. Publications in this cluster focus more on gender identity, gender relations, gender practices, and more.
- Cluster 4 in orange, 13 items contain papers dedicated to papers exploring the relationship between entrepreneurship education through curricula, field experiments, competitive intelligence, board effectiveness, social science, etc.
- Cluster 5 in peach consists of 8 items is, one of the smallest clusters related to digital enterprise, digital, internet, intersectionality, online business, online entrepreneurship, etc.

Entrepreneurship is a process, the form of a sequence of activities that end with the development either by one or more individuals with relevant competencies and from a business idea or idea to solve a problem faced by a segment of society (Cabrera & Mauricio, 2017; Quagrainie et al., 2021).

Entrepreneurship is present as an important driver of economic growth. The presence of women's entrepreneurship is crucial for economic growth and job creation (Kaciak & Welsh, 2020). Specifically, women's entrepreneurship is a significant driver of economic growth in developing countries because it plays a significant role in creating productive jobs, achieving gender equality, and reducing poverty; therefore, an analysis of its key characteristics can be useful for developing effective entrepreneurship-related policies and for assessing a country's competitiveness and growth potential (De Vita et al., 2014).

Entrepreneurship is a fast-expanding field of study on a global scale nowadays. Women own a majority of 30% (6.7 million) of all private enterprises in the United States and at least 50% of the remaining 46% (10.1 million) (Kuas et al., 2009). Additionally, according to the 2020 GEM study, 274 million women are expected to be active in business startups globally, 139 million women who are established business owners/managers and 144 million women who are informal investors (GEM, 2021).

Women entrepreneurs are one of the fastest-growing divisions of the entrepreneurial community, making major contributions to global economies through innovation, employment, and wealth creation. Women entrepreneurs are defined as individuals or groups who develop, organize and run a business (Mohiuddin, 2016). In several countries, entrepreneurship has gained prominence as a source of employment for women. However, women's entrepreneurial participation remains far lower than men's (Langowitz & Minniti, 2007).

Gender concerns continue to be the most puzzling component of dealing with womenowned businesses. Individualism posits an equivalence of biological sex and gender to the extent that gender is researched only in respect to female entrepreneurs (Muntean & Ozkazanc-Pan, 2015). The issue of gender disparity influences whether women's entrepreneurial activity is boosted or stifled. For example, women's participation in entrepreneurial activities may increase due to their higher labour market participation (Baughnn et al., 2006).

Additionally, gender inequities persist in the community, limiting women-owned small companies' access to business development services such as external financing (Wellalage & Locke, 2017). Additionally, women entrepreneurs routinely start inventions; nevertheless, they are

frequently hurt by gender bias, which impairs their ability to obtain finance, generate exposure, and grow their business (We-Fi, 2021).

Meanwhile, SMEs continue to require full business management help, notably ownership, funding, and profitability. This coaching is crucial for SMEs to have a well-structured approach to planning, organizing, activating, and regulating their operations. SME owners must be completely committed to adhering to modern business ideals in all facets of their operations, including separating business and personal or family funds (Setini et al., 2020).

The G20 Leaders' Summit in Italy and the Generation Equality Forum gave gender equality a global forum in response to this issue. The G20 reaffirmed its commitment to gender equality and women's entrepreneurship, highlighting We-essential Fi's role in aiding women-led SMEs (We-Fi, 2021). Thus, one technique for enhancing women's entrepreneurial intentions and fostering female entrepreneurship may be to challenge gender preconceptions in entrepreneurship.

Islam is obvious as a way of life that integrates material and spiritual aspects into daily life when viewed through the Islamic perspective. As the Khalifah fi al-Ardh, Islam encourages Muslims to take positive activities that unite and benefit the entire cosmos (Fatah Yasin et al., 2020). Additionally, the author discusses the role of women in business. This supports Mohiuddin's (2016) argument that women participated in various economic activities in pre-and medieval Islamic societies, including agriculture, handicraft and textile manufacture, livestock husbandry, and trading. Indeed, many women labor in economic sectors that provide essential goods and produce revenue, most notably agriculture and trade. Occasionally, women are involved in large-scale commodity trade. The Prophet Muhammad's first wife, Khadijah, is an example of a notable and prosperous businesswoman who serves as a significant role model for Muslim women.

This means that gender issues are not obstacles for women in starting a business. But, currently, there are still many obstacles and other challenges that make women still under men in business. Rudhumbu et al. (2020), in their research, discusses the education factor as a challenge faced today in improving the quality of women entrepreneurship. The findings of the study revealed that women entrepreneurs face a complex network of obstacles, including access to financing, a lack of training leading to a lack of technical skills, an inadequate knowledge about funding sources and technical support, rising market competition, women's marginalization, and a lack of marketing strategy knowledge.

From this explanation, it can be said that the lack of a business background is not a coincidence which is also an effective barrier for the entry of other women into business ownership. Therefore, the need for the role of the education system and improvement of employment practices is expected to foster enthusiasm so that women entrepreneurs can improve their knowledge and technical skills (Fielden & Davidson, 2005).

In addition, there are few chances for women entrepreneurs in the capital due to the lack of capital-access guarantees. In the technological era, global trade, regulation, and legalization, the absence of entrepreneurial skills, managerial skills, and access to information technology at least limits the business opportunities for women entrepreneurs (Setini et al., 2020).

Excerpted from the Annual Report: Pivoting Toward a Resilient Future (2021), digital technology and access to digital markets and financial services are invaluable in facilitating the survival of women-led businesses and, in some cases, especially their growth and success during the pandemic. Hence the need to provide more access to innovation, digital skills and technology, and financing to tackle the COVID-19 recovery for women entrepreneurs. Women entrepreneurs have an important role in promoting economic recovery and growth. Women entrepreneurs are seizing new opportunities by embracing new digital technologies, products, services and business models (We-FI, 2021).

Thus, policymakers and the government urgently need to encourage more women to engage in entrepreneurial endeavors by using social innovation and social capital potential. Women entrepreneurs must be protected from gender stereotypes and harassment. Ultimately, this will enable women to contribute completely to resolving social issues like as poverty and enhancing their families' well-being (Osei & Zhuang, 2020).

Research Methods

This study analyzes data from research journals and other research publications on women's entrepreneurship development published between 1987 and 2019. These journals can be obtained or accessed online from those published on women's entrepreneurship development over the previous 32 years and metadata from Scopus. The methodology utilized in this study is a qualitative approach combined with descriptive statistics from 98 articles on the development of women's entrepreneurship.

This study employs qualitative research methods. This research approach is founded on post-positivist philosophy. It is used to study the state of natural objects (in contrast to experimentation), with the researcher serving as the primary instrument. Triangulation (mixed) data collecting is used, inductive/qualitative data analysis is used, and qualitative research outcomes stress meaning rather than generalization (Sugiyono, 2010).

On the other hand, Qualitative research is a subclass of descriptive research. The discipline of descriptive statistics focuses on gathering, assembling, and presenting summaries of research data. The collected data is not used to verify the theory (if any). Instead of numerical numbers or correlation coefficients, the outcomes of study can be expressed as a description of visual symptoms (As-salafiyah et al., 2021).

This study used a non-probability purposive sampling technique. Purposive samples are those taken with the intent of comprehending certain information. This sample can be classified as a decision sample (judgment), which selects sample members based on notes or research objectives, and a quota sample, which is a sample picked based on a certain quota or category that specifies the population's dimensions (proportions) (Wijaya, 2013).

Sentiment analysis or opinion development was used in this study. Sentiment analysis is frequently used to ascertain public sentiment toward a particular problem. The primary objective of sentiment analysis is to classify the text's polarity at the document, phrase, or feature and aspect level, determining whether the opinions conveyed in documents, sentences, and feature entities are positive, negative, or neutral. Simply said, text analysis is intended to process words, not numbers. Sentiment analysis is divided into three distinct subprocesses: Subjectivity Classification, Detection Orientation, and Holder Opinion and Target Detection. Most sentiment analysis research has been conducted in English, owing to the abundance of tools/resources available in that language. SentiWordNet and WordNet are two frequently used sources for sentiment analysis.

Microsoft Excel 2019 was used to analyze data in trends in the number of publications on the perception of women's entrepreneurship development and the top authors. They are the locations of research objects related to published articles. The researchers extensively used SentiStrength software in sentiment analysis research to calculate the sentiment map based on the women's entrepreneurship perception literature results. Additionally, sentiment analysis can be stated emotionally as sad, glad, or angry to generate a study that can serve as a reference for developing views about specific topics (Rusydiana & Marlina, 2020).

Results and Discussion

Meta-Analysis

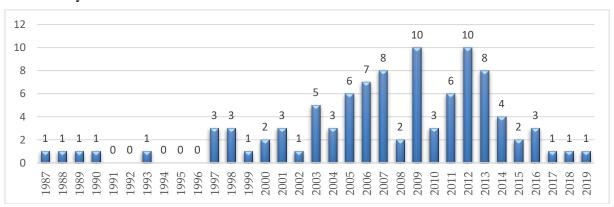


Figure 2. Number of publications per year

Figure 2 illustrates the number of publications on women's entrepreneurship development published in journals indexed by Scopus. There are 98 publications published throughout a 32-year observation period, from 1987 to 2019, ranging from 0 to 10. The most widely published women entrepreneurship development topic papers were in 2009 and 2012, with ten each, and the fewest in 1991, 1992, 1994, 1995, and 1996, when there was no index to the number of publications in those years.

Additionally, this part addresses the publication of articles based on journals from various national and international Scopus-indexed publications. Among the 98 studies, the following periodicals contain research on women's entrepreneurship development:

Focus StudyTotalEntrepreneurship Theory and Practice13Journal of Business Venturing10Entrepreneurship & Regional Development6International Journal of Gender and Entrepreneurship4International Journal of Entrepreneurial Behavior & Research4

Table 1. Journal classification

Based on the table above, there is a tendency to the disparity in contributions from journals in articles discussing women's entrepreneurship development. Multidisciplinary topics such as business, economics, sociology, psychology, and management are all areas of research that are interested in the role played by women entrepreneurs. Thus, various journals with various disciplines are presented in our data set, such as Entrepreneurship Theory and Practice, Journal of Business Venturing, Entrepreneurship & Regional Development, International Journal of Gender and Entrepreneurship, and International Journal of Entrepreneurial Behavior & Research. The number of papers is still possible to change and increase along with the development of science and the increasing trend of women entrepreneurship in the research world.

Authors	Number of Papers
Friederike Welter	6
Candida G. Brush	4
Maria Minniti	4
Susan Marlow	4
Gupta Vishal	4

Table 2. Top writers

Table 2 lists the five most prolific authors of articles on women's entrepreneurship published in the last 32 years. Friederike Welter has the most publications, with six, followed by Candida G. Brush, Maria Minniti, Susan Marlow, and Gupta Vishal, all of whom have four.

Welter & Garca (2011) published an essay titled "Gender identities and practices: Interpreting women entrepreneurs' narratives." This article addresses the notion that women's discourse is incompatible with entrepreneurial education. It finds that some women sense dissonance between women's classes and entrepreneurship, while others do not. This study's findings reveal various forms of gender identity building that result in gender practices: how women engage as entrepreneurs by "doing" and repeating gender. They also offer insight to individuals interested in supporting women's entrepreneurship by highlighting how gender practices are utilized as strategic business tools. This article examines the issue of women's discourse being considered incompatible with the entrepreneurial lesson. It offers solutions for how women construct their identities differently, discovering that some women experience dissonance between women's classes and entrepreneurship while others do not. The findings of this study demonstrate distinct modes of gender identity construction that result in gender practices: how women act as entrepreneurs by 'doing' and repeating gender. They also provide insights for those interested in promoting women's entrepreneurship by demonstrating how gender practices are used as strategic tools in the business.

The following table lists the ten publications with the highest citations in each journal, as determined by Scopus metadata. Chen et al. (1988) wrote the most cited study, "Does entrepreneurial self-efficacy distinguish entrepreneurs from managers?"

Citation	Paper Name	Year
1432	Does entrepreneurial self-efficacy distinguish entrepreneurs from managers?	1998
1361	The mediating role of self-efficacy in the development of entrepreneurial intentions	
990	Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education	2007
955	Why research on women entrepreneurs needs new directions	
668	Women directors on corporate boards: A review and research agenda	2009
552	The entrepreneurial propensity of women	2007
530	The role of gender stereotypes in perceptions of entrepreneurs and intentions to become an entrepreneur	
526	A theoretical overview and extension of research on sex, gender, and entrepreneurship	
493	Women's organizational exodus to entrepreneurship: Self-reported motivations and correlates with success	1997
461	A gender-aware framework for women's entrepreneurship	2009

Sentiment Analysis

Following that, the author attempts to assess sentiment on the topic of women's entrepreneurship development using Scopus-indexed papers. Sentiment analysis is research frequently used to ascertain public sentiment about a particular subject. SentiStrength was utilized to process the data in this study. As data sources, 98 specific papers were chosen from articles and periodicals devoted to developing women entrepreneurs. The following figure illustrates the results of the sentiment analysis on women's entrepreneurial development:

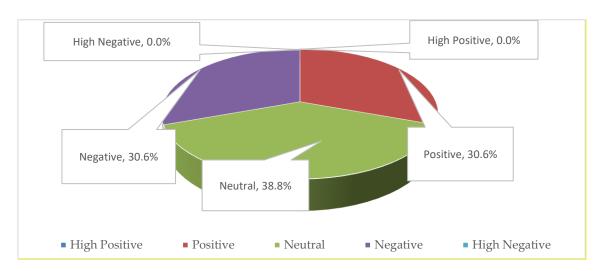


Figure 3. Sentiment analysis of women entrepreneurship development

The sentiment scores are derived from the titles and abstracts of Scopus articles. The results are sorted from extremely negative (-5) to extremely positive (-5) intervals, with 0 neutral. The score is calculated by multiplying the sentiment scores assigned to each word in SentiStrength.

As illustrated above, women's entrepreneurial development has a high proportion of positive (positive) attitudes, a low ratio of negative (negative) sentiments, and a high proportion of neutral sentiments (neutral) 38.8%. That is, the majority of writing on women's entrepreneurship is apolitical.

Positive sentiment is an abstract sentiment derived from related literature that is positive and optimistic in response to the development of women's entrepreneurship in various worlds by

agreeing on the importance of gender equality in entrepreneurship for women and supporting women's entrepreneurship opportunities.

Meanwhile, poor (negative) sentiment is an abstract sentiment derived from related literature that is gloomy and negative in response to female entrepreneurship, which frequently faces prejudice and demonstrates that entrepreneurship and entrepreneurship are notions inherent in men. Apart from gender, the article discusses education and women's ability to succeed in entrepreneurship, concluding that women's entrepreneurship cannot be fully equalized with male entrepreneurship for a variety of reasons.

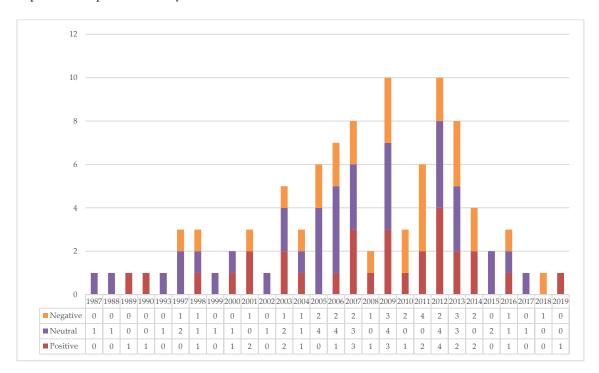


Figure 4. Intertemporal Sentiment Analysis of Women Entrepreneurship Development

As illustrated in Figure 4, the world of research on women's entrepreneurship has evolved. With the advent of studies on women's entrepreneurship, positive feelings about these studies vary from year to year. This implies that this subject is frequently discussed in the literature, and it's fascinating to observe the evolution of emotion toward it.

Meanwhile, the highest number of positive sentiments occurred in 2014. One of the papers with positive sentiments was the paper written by De Vita et al. (2014) with the title "Women entrepreneurs in and from developing countries: Evidences from the literature". This study examines the significance of the role and contribution of women in the field of entrepreneurship, which plays a significant part in the global economic development. This research examines the characteristics of women entrepreneurs in developing nations and the significance of immigrant women entrepreneurs in industrialized nations who have been published in international journals. Due to the importance of these two challenges for economic development, there are still gaps in the systematization of theoretical and empirical findings.

Furthermore, we can see from 1997-2018 showing a fluctuating curve towards negative sentiment on the theme of women entrepreneurship development. The peak of the highest number of negative sentiments occurred in 2011. One of the papers that had negative sentiments was the paper written by Estrin & Mickiewicz (2011) entitled "Institutions and Female Entrepreneurship". This study explores the effects of institutions on men's and women's decisions to establish new enterprises between 2001 and 2006. In countries with a larger state sector, women are less likely to participate in entrepreneurial activities, according to the study. In general, however, the rule of law has not observed to have gender-specific consequences. Nevertheless, the more complex institutional components of discrimination against women, including constraints on freedom of

mobility away from home, reduce women's likelihood of having strong entrepreneurial expectations about employment advancement.

In Figure 4, if we look at the stacked column, shows a neutral sentiment distribution from 1987 to 2017. And the peak of the highest number of neutral sentiments occurred in 2012. One of the papers with neutral sentiment was the paper written by Hughes et al. (2012) with the title "Extending Women's Entrepreneurship Research in New Directions". This paper discusses the expansion of scientific interest and activity in women's entrepreneurship has done much to correct the historical lack of attention paid to women entrepreneurs and their initiatives. This study concludes the need for the role of academics to research and take their research in new directions and the need for an introduction to this special issue, arguing that efforts not only address the criticisms raised to date but also in generating a richer and more robust understanding of women's entrepreneurship.

Findings

This study discovered that women entrepreneurs had been extensively discussed in various published articles. The statistics demonstrate that women's entrepreneurship contributes significantly to economic progress and communal welfare. The role of women entrepreneurs in the economy also aligns with the eighth goal of the Sustainable Development Goals (SDGs), namely decent work and economic growth, by creating job opportunities that not only generate decent work but also strengthen the economy, make it more inclusive, and help alleviate poverty. Thus, a positive circle benefits the economy and the community and promotes sustainable development.

Additionally, the findings of this study revealed the level of sentiment analysis from a variety of articles published in a variety of journals analyzing perceptions toward women's entrepreneurship. With a percentage yield of 38.8%, neutral sentiment dominates. This demonstrates that there is still a knowledge gap regarding women's entrepreneurship, and it is a challenge for various stakeholders in the field, including academics, government, and others, to explain and provide a more robust and robust understanding of women's entrepreneurship (Hughes et al., 2012).

According to the sentiment analysis undertaken, positive sentiment is found in 30.6% of journal publications. This demonstrates the critical importance and contribution of women in entrepreneurship, which plays a critical part in global economic development. As a result, it is vital to encourage more women to engage in entrepreneurial activities through social innovation and social capital. This will enable women to fully contribute to resolving social problems like poverty and enhancing their families' welfare (Osei & Zhuang, 2020).

According to the study (Bock, 2004), women entrepreneurs' success and performance should be evaluated in light of their other motives, goals, and aspirations. Although numerous studies have demonstrated that the success and growth of women-owned businesses can have a positive impact on employment and income and contribute significantly to economic growth and community well-being (Buttner & Rosen, 1988; De Vita et al., 2014; Kaciak & Welsh, 2020), there is evidence that women face numerous barriers and obstacles when attempting to start and grow new businesses, limiting their opportunities and development (Bock, 2004; We-Fi, 2021). When internal factors such as motivation and business type are considered, women entrepreneurs are more likely to be associated with small businesses (Cooper et al., 1989; McElwee & Al-Riyami, 2003) that require little capital and frequently require part-time work to accommodate women's work and family responsibilities. Additionally, the unfavourable sentiment is 30.6. more concerned with self-satisfaction and the ability to balance job and family responsibilities (Bock, 2004; Heilman & Chen, 2003). This is also corroborated by prior research by Cromie (1987), who found that women in entrepreneurship are more unsatisfied with their professions and view entrepreneurship as a way to balance their work and child-rearing responsibilities concurrently.

Another impediment comes in the shape of external circumstances, such as the question of entrepreneurship education. Many women continue to lack or lack access to relevant education, and only those with reasonably strong rights in this area attempt to start a business (Fischer et al., 1993). Not only that, but gender inequalities still pervade the community, limiting women-owned

small businesses' access to business development services such as external finance (Wellalage & Locke, 2017). Meanwhile, WSMEs continue to require intense assistance in business management, particularly ownership, finance, and earnings (Fielden & Davidson, 2005). Additionally, women entrepreneurs' capital opportunities are severely limited due to a lack of guarantees for capital acquisition and a lack of entrepreneurial skills in an era of technology, market access, bureaucracy, legalization, managerial abilities, and access to information technology, all of which limit business opportunities for women entrepreneurs (Setini et al., 2020).

Thus, to overcome current barriers, such as increasing access to capital for women entrepreneurs, it is required to expand loan availability, facilitate investment, and spread digital finance. Additionally, increasing market access for women entrepreneurs can be accomplished through the provision of e-commerce, which enables access to new markets and opportunities via digital solutions. Additionally, accelerated training and networking efforts bolster women entrepreneurs' efforts to strengthen business resilience in weak economies (We-Fi, 2021).

Finally, it is hoped that these efforts will eliminate existing barriers. Policymakers and the government will play a critical role in supporting and strengthening the women entrepreneurship ecosystem to advance economic empowerment and women's entrepreneurship.

Conclusion

This study aims to determine the extent to which the scholarly literature has evolved around the issue of female entrepreneurship. The findings indicate that throughout the last 32 years, from 1987 to 2019, there have been many paper publications on the subject of women entrepreneurship, with 98 research equipped with a Scopus-indexed Digital-Object-Identifier (DOI).

Additionally, this review includes a sentiment analysis of a thorough evaluation of interdisciplinary research on women entrepreneurs' growth since 1987. In terms of sentiment analysis, the global assessment of women's entrepreneurship development has a positive sentiment of 30.6%, a negative sentiment of 30.6%, and a neutral attitude of 38.8%. This demonstrates that disagreements between specialists in the scientific literature on women's entrepreneurship continue to fluctuate, with neutral sentiment dominating, positive and negative sentiments.

It should be mentioned that while the objective of this study is to provide an overview of global perceptions of women entrepreneurs, the study is limited to publications published in the last 32 years. While the research utilized specific meta-analytical indicators and sentiment analysis to provide readers with a broad overview of the most significant facts, the presented results are dynamic. They may alter over time as new trends emerge or variables increase.

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Author contributions

Conceptualization: Aam Slamet Rusydiana

Data curation: Nadia Nurul Izza Formal analysis: Nadia Nurul Izza Investigation: Nadia Nurul Izza Methodology: Nadia Nurul Izza

Project administration: Nadia Nurul Izza Supervision: Aam Slamet Rusydiana Validation: Aam Slamet Rusydiana Visualization: Nadia Nurul Izza

Writing - original draft: Nadia Nurul Izza

Writing - review & editing: Aam Slamet Rusydiana

References

- Ahl, H. (2006). Why research on women entrepreneurs needs new directions. *Entrepreneurship Theory and Practice*, 30(5), 595–621. https://doi.org/10.1111/j.1540-6520.2006.00138.x
- As-salafiyah, A., Rusydiana, A. S., & Mustafa, M. I. (2021). Meta analysis on mosque economics. *Library Philosophy and Practice* (e-Journal). 5084. https://digitalcommons.unl.edu/libphilprac/5084
- Baughnn, C. C., Chua, B.-L., & Neupert, K. E. (2006). The normative context for women's participation in entrepreneurship: A multicountry study. *Entrepreneurship Theory and Practice*, 30(5), 687–708. https://doi.org/10.1111/j.1540-6520.2006.00142.x
- Bock, B. B. (2004). Fitting in and multi-tasking: Dutch farm women's strategies in rural entrepreneurship. *Sociologia Ruralis*, 44(3), 245–260. https://doi.org/10.1111/j.1467-9523.2004.00274.x
- Bruin, A. de, Brush, C. G., & Welter, F. (2007). Advancing a framework for coherent research on women's entrepreneurship. *Entrepreneurship Theory and Practice*, 31(3), 323–339. https://doi.org/10.1111/j.1540-6520.2007.00176.x
- Buttner, E. H., & Rosen, B. (1988). Bank loan officers' perceptions of the characteristics of men, women, and successful entrepreneurs. *Journal of Business Venturing*, 3(3), 249–258. https://doi.org/10.1016/0883-9026(88)90018-3
- Brush, C. G., de Bruin, A., & Welter, F. (2009). A gender-aware framework for women's entrepreneurship. *International Journal of Gender and Entrepreneurship*, 1(1), 8–24. https://doi.org/10.1108/17566260910942318
- Cabrera, E. M., & Mauricio, D. (2017). Factors affecting the success of women's entrepreneurship: a review of literature. *International Journal of Gender and Entrepreneurship*, 9(1), 31–65. https://doi.org/10.1108/IJGE-01-2016-0001
- Chen, C. C., Greene, P. G., & Crick, A. (1988). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? Proceedings, Sixth IAGOD Symposium, 13(4), 295–316. https://doi.org/https://doi.org/10.1016/S0883-9026(97)00029-3
- Datta, P. B., & Gailey, R. (2012). Empowering women through social entrepreneurship: Case study of a women's cooperative in India. *Entrepreneurship: Theory and Practice*, 36(3), 569–587. https://doi.org/10.1111/j.1540-6520.2012.00505.x
- De Vita, L., Mari, M., & Poggesi, S. (2014). Women entrepreneurs in and from developing countries: Evidences from the literature. *European Management Journal*, 32(3), 451–460. https://doi.org/10.1016/j.emj.2013.07.009
- Estrin, S., & Mickiewicz, T. (2011). Institutions and female entrepreneurship. *Small Business Economics*, 37(4), 397–415. https://doi.org/10.1007/s11187-011-9373-0
- Fatah Yasin, R. F., Mahmud, M. W., & Diniyya, A. A. (2020). Significance of financial literacy among women entrepreneur on halal business. *Journal of Halal Industry & Services*, 3, 1–9. https://doi.org/10.36877/jhis.a0000076
- Fielden, S. L., & Davidson, M. J. (2005). *International handbook of women and small business entrepreneurship*. Edward Elgar Publishing.
- Fischer, E. M., Reuber, A. R., & Dyke, L. S. (1993). A theoretical overview and extension of research on sex, gender, and entrepreneurship. *Journal of Business Venturing*, 8(2), 151–168. https://doi.org/10.1016/0883-9026(93)90017-Y
- Hughes, K. D., Jennings, J. E., Brush, C., Carter, S., & Welter, F. (2012). Extending women's entrepreneurship research in new directions. *Entrepreneurship: Theory and Practice*, 36(3), 429–442. https://doi.org/10.1111/j.1540-6520.2012.00504.x

- Kaciak, E., & Welsh, D. H. B. (2020). Women entrepreneurs and work–life interface: The impact of sustainable economies on success. *Journal of Business Research*, 112, 281–290. https://doi.org/10.1016/j.jbusres.2019.11.073
- Langowitz, N., & Minniti, M. (2007). The entrepreneurial propensity of women. *Entrepreneurship Theory and Practice*, 31(3), 341–364. https://doi.org/https://doi.org/10.1111/j.1540-6520.2007.00177.x
- Maden, C. (2015). A gendered lens on entrepreneurship: Women entrepreneurship in Turkey. *Gender in Management: An International Journal*, 30(4), 312–331. https://doi.org/http://dx.doi.org/10.1108/GM-11-2013-0131
- Mohiuddin, M. Q. (2016). Role of a women entrepreneur in AGGC (Arab Gulf Cooperation Council) women empowerment. *AU EJournal of Interdisciplinary Research*, 1(2), 1–15. http://www.assumptionjournal.au.edu/index.php/eJIR/article/view/4273
- Muntean, S. C., & Ozkazanc-Pan, B. (2015). A gender integrative conceptualization of entrepreneurship. *Journal of Entrepreneurship*, 18(1), 27–40. https://doi.org/https://doi.org/10.1108/NEJE-18-01-2015-B002
- Osei, C. D., & Zhuang, J. (2020). Rural poverty alleviation strategies and social capital link: The mediation role of women entrepreneurship and social innovation. SAGE Open, 10(2), 1–11. https://doi.org/10.1177/2158244020925504
- Pivoting Toward a Resilient Future. (2021). Annual Report 2021. https://we-fi.org/wp-content/uploads/2022/03/We-fi-2021-Annual-Report.pdf
- Quagrainie, F. A., Adams, S., Kabalan, A. A. M., & Dankwa, A. D. (2021). Micro-entrepreneurship, sustainable development goal one and cultural expectations of Ghanaian women. *Journal of Entrepreneurship in Emerging Economies*, 13(1), 86–106. https://doi.org/10.1108/JEEE-11-2019-0174
- Rudhumbu, N., du Plessis, E. (Elize), & Maphosa, C. (2020). Challenges and opportunities for women entrepreneurs in Botswana: Revisiting the role of entrepreneurship education. *Journal of International Education in Business*, 13(2), 183–201. https://doi.org/10.1108/JIEB-12-2019-0058
- Rusydiana, A. S., & Marlina, L. (2020). Analisis sentimen terkait sertifikasi halal. *Journal of Economics and Business Aseanomics (JEBA)*, 5(1), 69–85. https://doi.org/10.33476/j.e.b.a.v5i1.1405
- Setini, M., Nyoman, N., Yasa, K., Supartha, I. W. G., Ayu, I. G., & Giantari, K. (2020). The passway of women entrepreneurship: Starting-from social capital with open innovation, through to knowledge sharing and innovative performance. *Journal of Open Innovation Technology Market and Complexity*, 6 (2), 1-14. https://doi.org/10.3390/joitmc6020025
- Sugiyono. (2010). Metode penelitian kuantitatif dan kualitatif dan R&D. Bandung: Alfabeta
- Wellalage, N., & Locke, S. (2017). Access to credit by SMEs in South Asia: Do women entrepreneurs face discrimination. Research in International Business and Finance, 41, 336–346. https://doi.org/10.1016/j.ribaf.2017.04.053
- Welter, F., & García, M. C. D. (2011). Gender identities and practices: Interpreting women entrepreneurs' narratives. *International Small Business Journal*, 31(4), 384–404. https://doi.org/10.1177/0266242611422829
- https://www.worldbank.org/ja/programs/women-entrepreneurs#1
- https://we-fi.org/wp-content/uploads/2022/03/We-fi-2021-Annual-Report.pdf
- https://we-fi.org/mission/
- https://sdgs.bappenas.go.id/