

Mapping the Landscape of Women Leadership in Academia: A Bibliometric Analysis of Scopus Indexed Literature

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Received: 2nd Feb, 2026; Revised: 30th Mar, 2026; Accepted: 8th Apr, 2026; Available online: 15th Apr, 2026

Abstract

This study analyses the trends in women's leadership in administrative roles within higher education by examining the bibliographic records obtained from the Scopus database for the period 2010 to 2025. The data search generates a total of 288 papers pertinent to the subject to elucidate the evolution of the area. Bibliometric tools and techniques were employed to analyze the publication trends, influential authors, leading journals, leading institutions, countries' contributions, emerging thematic areas and citation analysis along with keyword co-occurrence analysis within the domain of women's leadership in academia. The findings reveal a significant growth in scholarly output, particularly after 2018, indicating increasing global attention toward gender inclusivity and leadership for women leaders in academia. This study shows that despite an increment in the participation of women in administrative roles in academia over recent decades, the gender differences in academic leadership responsibilities within these institutions exist consistently. Obstacles hinder women's access to these roles due to workplace culture and individual factors. The examination demonstrates the significance of the field in the contemporary environment of academia. Despite growing research interest, gaps remain in region-specific studies and empirical investigations in developing countries. This study makes a significant output to the extant literature by offering a systematic overview of the evolution and intellectual structure of women leadership status in academia. This paper outlines solutions to bridge the gap of barriers to women leaders and establish pathways for women in academia, strongly advocating for their promotion and empowerment to promote social equality and justice. It provides significant contribution for researchers, policymakers, and professionals to promote inclusive leadership and gender equality in academic institutions.

Keywords: *women, women leaders, leadership, academic leadership, gender, higher education*

Introduction

Women's leadership is rooted in the framework of women's advancement, which support for augmented self-reliance, exposure, and avenues for women (Akbar et al., 2023). Even in developed nations, the enduring gender gaps in higher educational management, particularly in leadership positions, remain unresolved. In international university rankings 2024, women hold leadership positions at 25% of the top 200 universities. However, compared to their male counterparts, women are significantly underrepresented in positions of responsibility (Times Higher Education, 2024). Global trends imply a major expansion in the higher education industry, driven by women's amazing participation worldwide, as evidenced by increased enrolment in academic programs and a rise in female educators (Olson-Strom & Rao, 2020). Numerous mentorship programs have aimed to enhance policies regarding women's leadership in higher education institutions; however, issues of discrimination and equality persist (Ardoin et al., 2019). Research indicates that there is no prominent difference in leadership capabilities between male and female (Paustian-Underdahl et al., 2014; Gorondutse et al., 2019; Farhan, 2022). Women are capable of leading and managing academic institutions; however, they remain underrepresented. Higher education institutions necessitate effective leadership to advance and elevate the institution

through the varied leadership styles of women. Women leaders possessing particular expertise and skills would contribute positively to higher education institutions and the socio-economic development of the country (Maheshwari et al., 2021). There is a substantial shift in the gender gaps in higher education leadership, marked by a rise in female participation. The concept of "the female advantage" has resulted in broader roles and obligations for women academics (Niemi, 2017). This is attributable to competence of women, which have demonstrated their importance in the development of higher education institutions (European Commission, 2018; Afzal et al., 2023). Research from around the world shows that a company's financial success, economic well-being, innovation, social responsiveness, and charity all are positively correlated with women's leadership (Chisholm-Burns et al., 2017; Torchia et al., 2011). Women are more capable of transformational leadership and management, which can have a substantial influence on person, group and institutional outcomes (Bass & Avolio, 1994; Eagly, 2007). Women are still underrepresented in leadership positions in the global higher education sector (Glass & Cook, 2016). Females are marginalized in management roles in academic institutions (Chard, R., 2013; Morley, 2013). Around the world, women have significant minority presence in executive leadership positions in higher education (Cheung, 2021). Gender disparity prevents women from rising to senior positions in businesses by creating a "glass ceiling effect" and sustaining gendered thinking (Akbar et al., 2023). But there are indications of improvement also, women currently lead 39 of the top 200 universities worldwide (19.5%), which is high from the 34 universities (17%) that had female leaders in 2019 (Bothwell, 2020). In several nations, such as the US, Sweden, the Netherlands, and the UK, the figures for universities ranked in the top 200 are considerably more encouraging in context of women leadership (Bothwell, 2020). The narrative gets more complicated, though, when the statistics are further broken down.

Women leaders in higher education leadership are disproportionate in comparison to men especially in South Asian nations like Bangladesh, Sri Lanka, India, and Pakistan (Morley & Crossouard, 2015). The leading national or public universities in South Korea, Hong Kong, and Japan that have risen in global rankings do not have female presidents (Cheung, 2021). Women in Hong Kong accounted for less than 15% of senior academic posts; of the 34 pro-vice-chancellors, just four were female, and there were no women in vice-chancellor positions (Morley, 2014). Saudi Arabia limits women's leadership chances despite its affluence and high female education rates (Alghofaily, 2019). Research output on women's academic leadership remains underexplored from a bibliometric perspective, with only a handful of studies. This limited evidence base restricts a comprehensive understanding of global research trends, collaboration patterns and thematic development. Hence, a more extensive bibliometric analysis is required to systematically map this emerging field. The authors used the bibliometric function in R Studio to learn about the fundamental issues of the investigation and important contributions in the field. The following research questions define the enquiries we intend to address on women leaders in academia

RQ 1. Analyze the patterns in publications associated to the women's leadership in higher education from 2010-2025.

RQ 2. Identify the key writers, organizations, journals, and nations that have made substantial contributions on this topic.

RQ 3. Which documents have the highest citations and impact in the domain of women's leadership in higher education?

RQ 4. What are the global collaborative networks and partnerships?

RQ 5. Analyze the intellectual structure of keywords in this field.

RQ 6. Identify the prevailing stereotypes and barriers that restrict women's advancement into leadership roles?

Related Research Work

The leaders are treated as role models who possess special potentials such as high competencies for leadership, team management and need to have good knowledge of culture related things. The influential leaders come with harmony of culture and solidarity in the Institutions. The scarcity of flexible work arrangements and supportive institutional frameworks further intensifies these pressures, making it challenging for women to maintain

sustained careers in leadership roles (Sperandio, 2015). Within educational institutions, organizational cultures can present additional obstacles, as many remain influenced by patriarchal norms that privilege male leadership styles and perspectives (Blackmore, 2013). Such environments may marginalize women leaders, restricting their authority and capacity for decision-making (Lumby & Azaola, 2020). Moreover, the lack of career guidance and skill training programs particularly designed for women constitutes a notable barrier. Evidence suggests that mentorship significantly facilitates career progression, yet women frequently have limited access to these networks and support structures compared to their male counterparts (Madsen et al., 2020). To empower women in academic leadership policymakers should relax conditions and make flexible working arrangement for them, both challenges of endogenous and exogenous conditions are not allowing women to enter into academic positions of higher rankings (Alsubaihi 2016; Boohene et al., 2012). The literature survey elaborates the trend of academic leadership for women and shows actual requirements that help to improve outcomes of the education and put forward regional challenges globally for the same. To reach the position of leadership, candidates need to cope- up with challenges such as political, economic and cultural setbacks (Odhiambo, 2014). Institutional and governmental gender equity policies offer frameworks to address systemic obstacles and promote inclusive practices (Lumby & Azaola, 2020; Afzal et al., 2024). The strategic thinking is necessary to lead and maintain healthy work cultures among the teammates. The academic leaders are the key role models for encouraging new comers, intimate for future dangers, redesigned conditions for executives (Seale & Cross, 2018). The transformational and transactional leadership manages these challenges and problems in higher education through the styles of prevalent leaderships (Altynbassov et al., 2024). The inadequate literacy rates and lack of knowledge are significant drivers associated with the limited participation of women in leadership roles in higher education. According to (S. Sandberg, 2015), women are increasingly earning higher salaries and pursuing higher education than males, but many of them choose not to aspire for leadership roles because they don't have the necessary personal and professional support. Women often avoid professional networking and socializing to prioritize family responsibilities, but networking effectively is essential for achieving leadership roles. Only 110 (9.55%) of the 1151 higher academic institutions in India are run by women, 1031 (89.57%) by men, and 10 (0.86%) do not have leadership data available (Banker, 2023). Table 1 illustrates a comparative analysis of women's academic leadership presence in the Indian higher education institutions, as identified by various research, from 2015 to 2021 at three-year intervals. "Unrevealed" denotes the no. of institutions where identity of administrative heads is not revealed.

Table 1: Female leadership position in Indian academic institutions since 2015

Year	Number of academic Institutions	Male leaders	Female leaders	Unrevealed
2015	810	725 (89.50%)	54 (6.67%)	31 (3.83%)
2018	1008	934 (92.65%)	63 (6.25%)	11 (1.09%)
2021	1151	1031 (89.57%)	110 (9.55%)	10 (0.87%)

Source: Banker, 2023

Table 2: Procedure implemented in literature search for topic

Step	Details
Step 1: Inclusion and exclusion criteria for evaluating the existing literature	Peer-reviewed journals publications on women's leaders in academia selected for analysis while excluding dissertations, reports, case studies and book reviews are excluded.

Step 2: Study on existing literature	Scopus database Terminology: “women,” “women leaders,” “women's leadership,” “leadership,” “academic leadership,” “academic leaders,” “gender equity, “higher education,” “Education,” “challenges”
Step 3: Refine the selection of literature studies	Analysis: Emphasize the exclusion of articles that are not pertinent to the leadership of women in higher education. The final sample of articles is 288.
Step 4: Limiting scope of the sample of study.	The refinement process involved excluding studies that failed to meet the established inclusion criteria, including those that did not directly address leadership challenges or that concentrated solely on theoretical perspectives without actual evidence. The concluding premise of the bibliometric investigation consisted of 288 distinct sources.
Step 5: Examination of selected publications	The selected articles were subjected to a systematic analysis using bibliometric methodologies, with an emphasis on authorship patterns, keyword frequency, and publication trends.
Step 6: Presentation of the Results	The findings pinpointed essential research domains: the impact of cultural and organizational biases, structural barriers impeding women's career progression, and the effectiveness of mentorship programs and inclusive policies on promoting gender diversity in leadership roles.

Research Approach

This study conducts a bibliometric examination of the existing literature from scopus database for the years 2010 to 2025 related to women in academic leadership positions. The timeframe of 2010-2025 has been selected to capture the most significant and contemporary developments in women’s academic leadership within higher education. The year 2010 represents a pivotal point marked by the establishment of United Nations Entity for Gender Equality and the Empowerment of Women, to be known as UN- women, which strengthened global advocacy and research on gender equality and leadership. Furthermore, the adoption of the Sustainable Development Goals, particularly Goal 5 (Gender Equality), intensified academic and policy focus on women’s representation in leadership roles in higher education institutions. The endpoint of 2025 is selected to include the most up-to-date publications, thereby enabling a comprehensive assessment of recent trends, emerging theme, and evolving research patterns in the domain. This 15-year period is sufficiently extensive to identify longitudinal developments while remaining focused on contemporary scholarly contributions. We examine publication patterns to ascertain the most prevalent subjects and research inquiries in this domain. The results of our study improve knowledge of the variables affecting women's participation in academic leadership roles and establish a foundation for future academic research and practical implications in gender equality advocacy. We utilize the Scopus database for data collection, defining suitable keywords and search parameters to refine the selection of the most significant papers. The retrieved information is accessed in BibTeX format for following investigation. After selecting database, the authors employ the Biblioshiny software to evaluate the eligibility of the publications. We then use the same tools to analyze the data. A methodical strategy to assessing the literature on women's leadership in higher education is described in Table 2. It starts by defining inclusion and exclusion criteria, with an emphasis on peer-reviewed publications about women in leadership and exclusion of

dissertations, book reviews, and case studies. The Scopus database was then used to perform a literature search using keywords mentioned in table 3. A final sample of 288 articles was obtained by refining the selection procedure by eliminating articles that had nothing to do with women's leadership in management. Bibliometric techniques were used to carefully evaluate the chosen papers in order to find authorship patterns, publishing trends and keyword frequency. Stereotypes in society, institutional obstacles, and initiatives to support women in leadership roles were among the major issues that surfaced.

Search Strategy and Data Extraction

The authors performed the search in the Scopus database in February 2026. This is the most dominant bibliographic database (Zhu and Liu, 2020). A detailed search string was used to identify related publications in the literature based on “women leadership” and higher education”.

Table 3: Keywords String

Keywords	Justification
((“leader” OR “leaders”) AND (“higher education” OR “universities” OR “university” OR “college” OR “colleges”) AND (“women”))	To collect relevant literature on women’s leadership in higher education

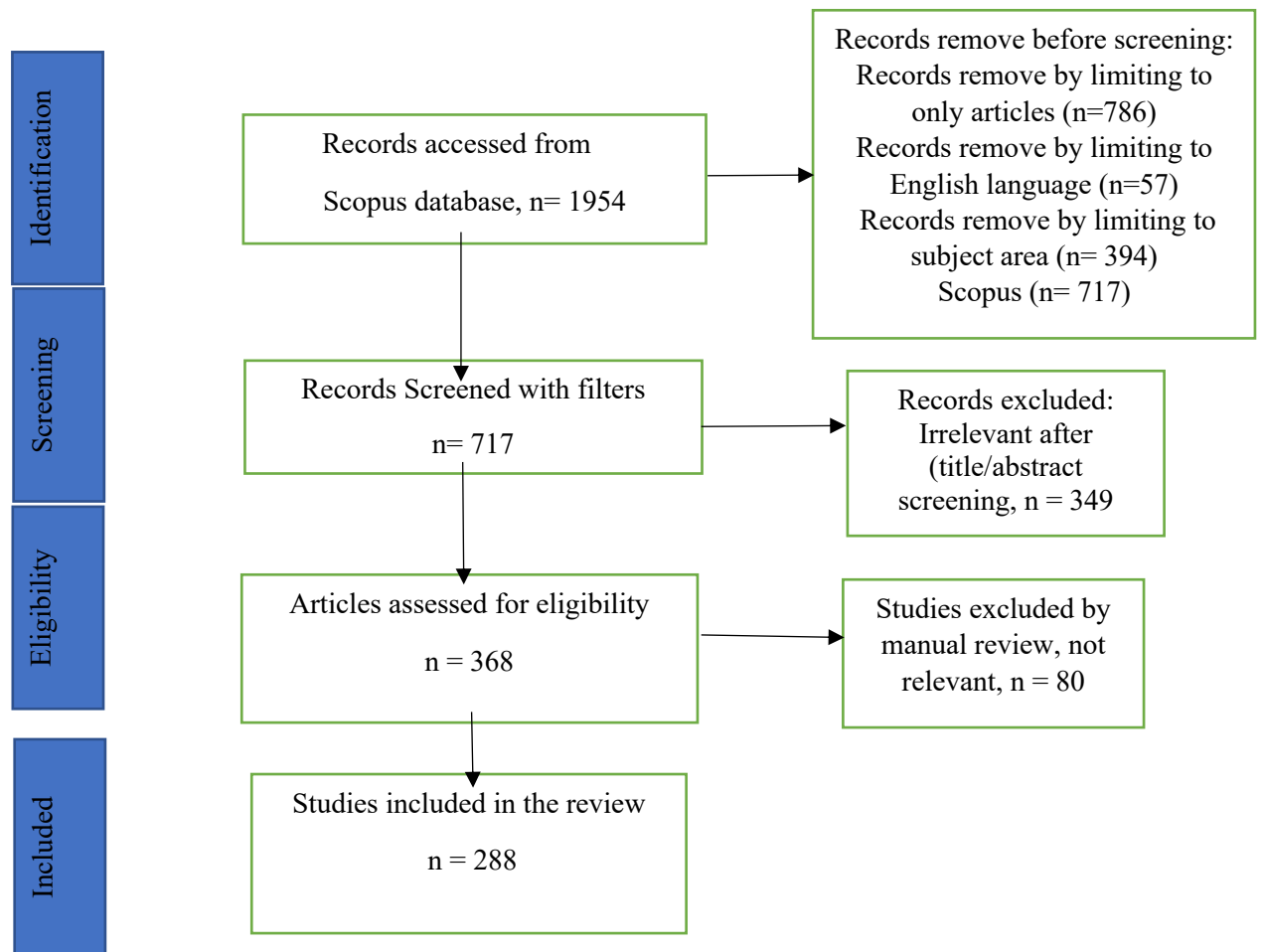


Fig. I: PRISMA flow diagram for documents selection

Data Analysis and Discussion

The study offers a statistical overview of scholarly works published between 2010 and 2025 as stated in Table 4. It has 288 documents, 165 sources, with 8.91% yearly growth rate. Each paper contains an average of 17.17 citations, totalling 2190 references, 693 authors that contributed in total. Collaboration reveals 13.89% worldwide co-authorship and 84 sole-authored research articles.

Table 4: Data Summary

Description	Results
Timeline	2010:2025
Data Sources	165
Documents	288
Annual Growth Rate (%)	8.91
Average number of citations per doc	17.17
References in 288 articles	2190
Author's Keywords	698
Authors	693
Single authored documents	84
Global co-authorships %	13.89

Source: Author compilation

Yearly Research Trends and Average Citation Pattern

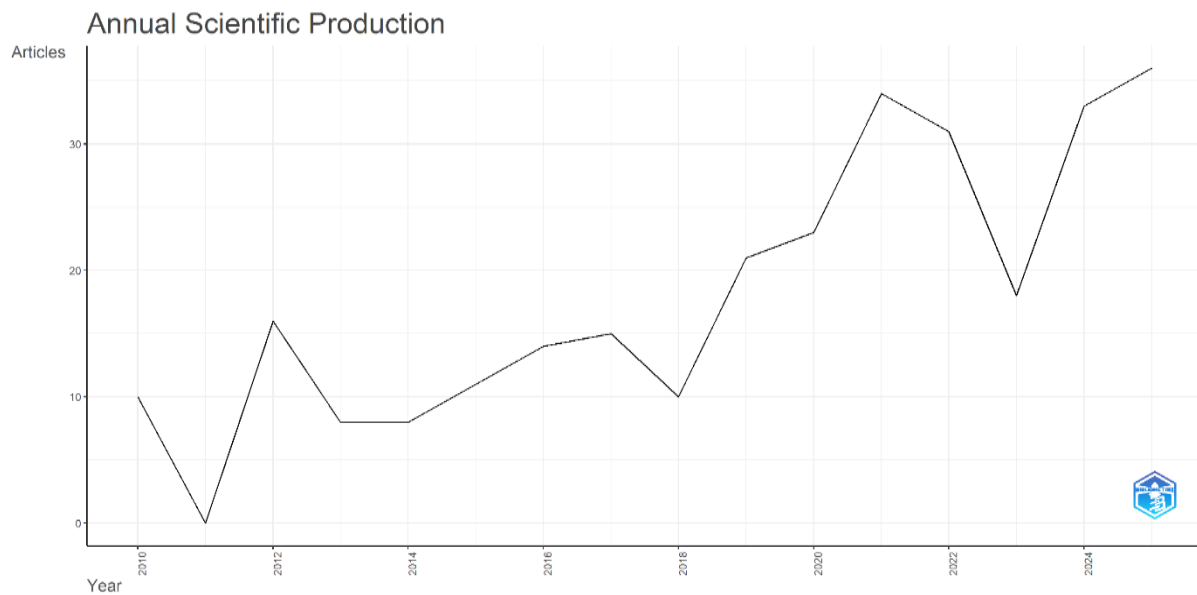


Figure II: Annual scientific production

Source: Author compilation

The annual variations in the quantity of publications produced between 2010 and 2025 is shown in the figure II. According to the data, publications increased overall and peaked in 2021 before declining in 2023. This pattern points to fluctuations in research findings throughout time. In this research, authors investigated the causes of these variations, paying special attention to organizational and cultural issues that might have impacted the

output of studies on women in academic leadership positions in higher education field. The objective is to investigate if these patterns are indicative of more general shifts in women's leadership issues in higher education.

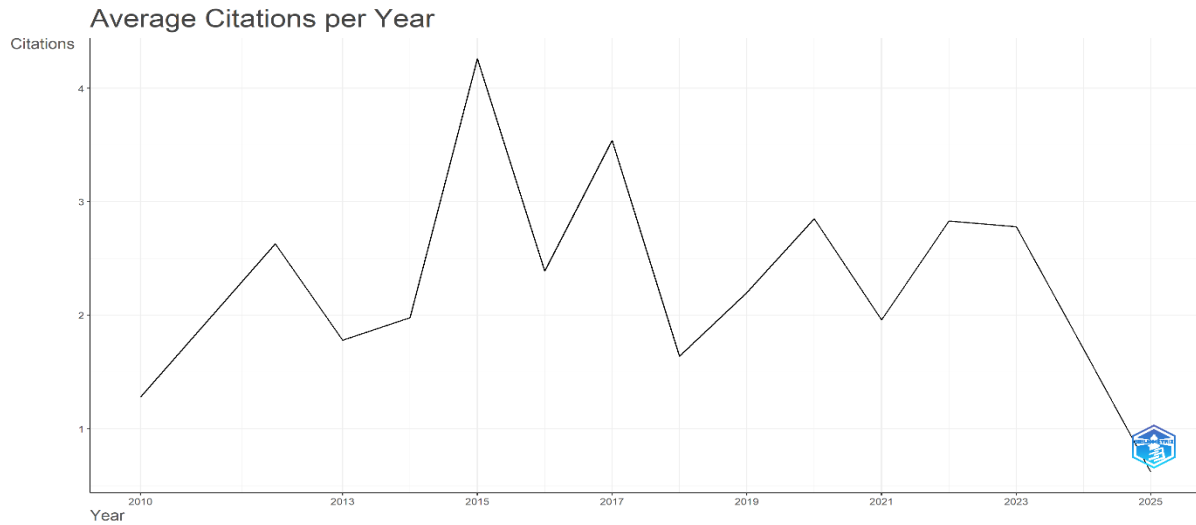


Figure III: Yearly citation rate

Source: Author compilation

Figure III reveals that scientific citations have generally increased over time, with an average growth rate of 8.91%. Interestingly, the largest citation peak is seen around 2015, indicating that the field was receiving a lot of scholarly interest during that time. Following this high, there are sporadic increases and decreases over the ensuing years. This data set's average annual citations, which indicate how frequently these publications were cited by other academics over time, serve as a measure of their intellectual impact. Citations typically follow a pattern of intermittent activity in previous years, increasing substantially in 2015 and then experiencing another smaller surge in 2017, as illustrated in Fig. III. Following a downturn in 2018 and 2021, there is another peak in 2023 and a further steep decrease in 2025. The graph sheds information on the scholarly impact of publications over time, emphasizing times when research received more attention. The possible fall in recent years may be due to a decrease in the field's overall research output or to the slower accumulation of citations for more recent articles.

Most Contributing Authors and Local Impact Index of Authors

The study identified leading scholars in the field based on their publication frequency, as illustrated in Table 5. The primary contributor regarding publication count is Karen A Longman, with a total of 5 publications. Subsequently, Rabia Ali, Greeni Maheshwari and Kate White followed with 4 publications each.

Table 5: Leading Authors

Rank	Author	Articles	TC
1	Karen A Longman	5	97
2	Rabia Ali	4	82
3	Greeni Maheshwari	4	137
4	Kate White	4	60
5	Aisha Bhatti	3	51
6	Jolyn E Dahlvig	3	47
7	Aida Idris	3	119

8	Susan R. Madsen	3	71
9	Leslie Zenk	3	178
10	Mohammad Abdullah	2	127

Source: Author compilation

Table 6 assesses prominent writers based on their research impact, including measures like the M-Index, G-Index, H-Index, Total Citations (TC), Number of Publications (NP), and the year of their initial writing in the field. Author Karen A Longman has the greatest local impact, as reflected by both an H-Index and G-Index of 5, and emerges as the top figure with an M-Index of 0.294.

Table 6: Local Impact of Author by Index

Author start	H index	G index	M index	TC	NP	PY
Karen A Longman	5	5	0.294	97	5	2010
Rabia Ali	4	4	0.667	82	4	2021
Greeni Maheshwari	4	4	0.8	137	4	2022
Kate White	4	4	0.267	60	4	2012
Aisha Bhatti	3	3	0.5	51	3	2021
Jolyn E Dahlvig	3	3	0.176	47	3	2010
Susan R. Madsen	3	3	0.2	119	2	2012
Ainur Almukhambetova	2	2	0.2	71	2	2017
Molly Carnes	2	2	0.133	178	2	2012
Nuchelle L Chance	2	2	0.333	127	2	2021

Source: Author compilation

Karen A Longman has a significant number of influential publications, as indicated by this high index value. Despite having fewer publications overall Rabia Ali (NP=4), Greeni Maheshwari (NP=4), and Kate White (NP=4) continue to have a considerable impact, as shown by their H-Index, G-Index, and M-Index further demonstrating their contribution in the field. Overall, these indicators show prominent authors who have made major contributions through their influential publications and high citation counts.

Countries of the Corresponding Author

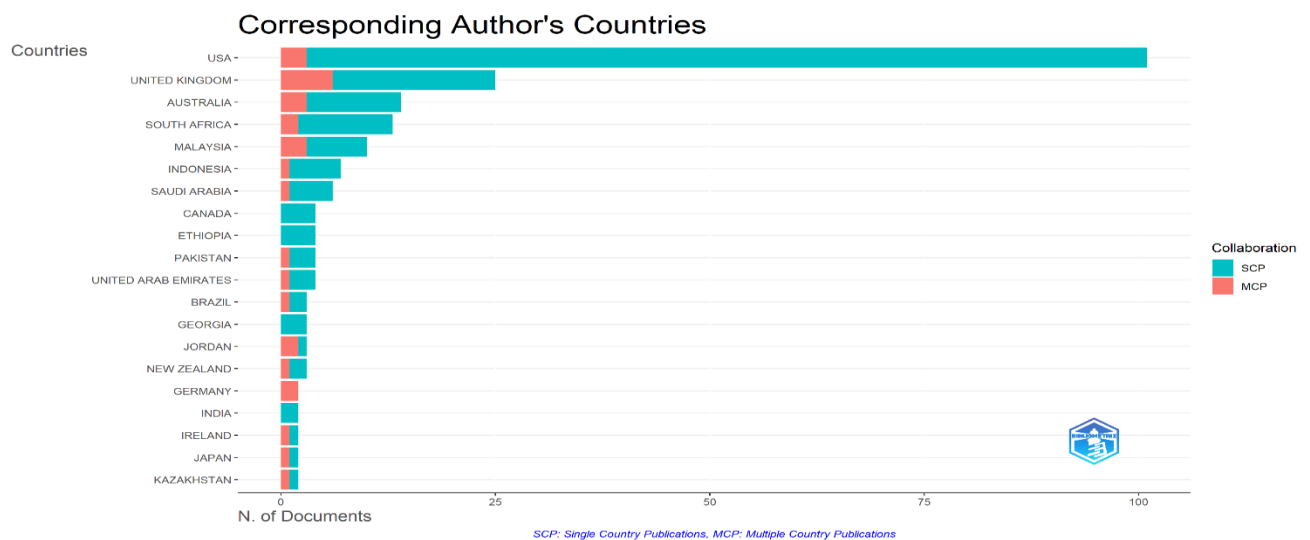


Figure IV: Corresponding Author Countries

Source: Author compilation

The examination of global involvement by the nations of corresponding authors indicates a significant regional diversity of research endeavours, as illustrated in figure IV, with the USA emerging as the foremost contributor with 101 publications, succeeded by the U.K. with 25 and Australia with 14. This distribution emphasizes the countries that foster women leaders in academia.

Table 7: MCP and SCP Country wise

Country	Articles %	MCP	Articles	SCP	MCP
Usa	35.1	3	101	98	3
United Kingdom	8.7	6	25	19	24
Australia	4.9	3	14	11	21.4
South Africa	4.5	2	13	11	15.4
Malaysia	3.5	3	10	7	30
Indonesia	2.4	1	7	6	14.3
Saudi Arabia	2.1	1	6	5	16.7
Canada	1.4	0	4	4	0
Ethiopia	1.4	0	4	4	0
Pakistan	1.4	1	4	3	25

Source: Author compilation

In table 7, the United States has the highest no. of publications (101 articles), with a dominant share of “Single country publications (SCP=98)” and very few “Multiple Country Publications (MCP =3)”, indicating strong domestic research productivity but relatively lower international collaboration. The United Kingdom demonstrates a higher level of international collaboration, with 6 MCP out of 25 total articles (24%), suggesting active global research partnerships. Countries like Australia (21.4% MCP) and Malaysia (30% MCP) also show notable international collaboration trends.

Leading Journals by Number of Publications

Table 8: Most Relevant Sources

Sources	Articles
Advances in Developing Human Resources	15
Advancing Women in Leadership Journal	10
Educational Management Administration and Leadership	8
Frontiers in Education	7
Gender and Education	6
Gender in Management	6
International Journal of Leadership in Education	6
Social Sciences	6
Christian Higher Education	5
Higher Education Research and Development	5

Source: Author compilation

Table 8 findings indicate, *Advances in Developing Human Resources* as the most prominent source, dominating in publication output (15 articles), and next is *Advancing Women in Leadership Journal* (10 articles), which specifically focuses on gender and leadership issues. Other notable sources include *Educational Management Administration and Leadership* (8 articles) and *Frontiers in Education* (7 articles), both of which emphasize leadership practices and educational administration.

Most relevant global cited documents

In order to assess each publication's impact in the field under study, this analysis also looked at how frequently it was cited. Based on their total global citations, our research resulted in the selection of the 10 significant documents in the research field, shown in Table 9. Citations per Year (TC/Y) and Total Citations (TC) are used to describe each publication. Among the listed studies, the work by Howe-Walsh (2016) published in *Studies in Higher Education* stands out as the most highly cited document, with highest 285 total citations and the highest citations per year (25.91), indicating its strong and sustained impact in the field. Similarly, the study by Hernandez Kathy (2015) in the *International Journal of Qualitative Studies in Education* demonstrates significant influence with 179 total citations. Other notable contributions include Burgess (2012), Shepherd (2017), and Thomas (2015), each reflecting substantial scholarly recognition through consistent performance.

Table 9: Citations No. of Global cited documents

Paper	TC	TC per Year	Normalized TC
Howe-Walsh l, 2016, <i>Studies in Higher Education</i>	285	25.91	10.84
Hernandez, Kathy-ann c, 2015, <i>International Journal of Qualitative Studies in Education</i> Volume	179	14.92	3.50
Diane J. burgess, 2012, <i>Academic Medicine</i>	133	8.87	3.37
Sue Shepherd, 2017, <i>Management in Education</i>	115	11.50	3.25
Nimisha thomas, 2015, <i>Innovative Higher Education</i>	94	7.83	1.84
Nina l. Chance, 2022, <i>Journal of Humanistic Psychology</i>	91	18.20	6.43
Mary V. Alfred, 2019, <i>Advance in Developing Human Resources</i>	83	10.38	4.71
Thi l. H. Nguyen, 2013, <i>Higher Education</i>	80	5.71	3.22
Cyrill Walters, 2022, <i>Research Policy</i>	76	15.20	5.37
Gunjan Maheshwari, 2022, <i>Educational Management Administration Leadership</i>	73	14.60	5.15

Source: Author compilation

Analysis of Trending Research Themes

The dynamics of trend subjects in research publications concerning the problems experienced by women leaders in academia depicted in Figure V. It indicates that the primary concerns and subjects surrounding women's leadership have gained increased attention in recent years. For instance, since 2020, subjects like women,

gender, leadership, and higher education, diversity, career and barriers experienced by women leaders have been debated frequently.

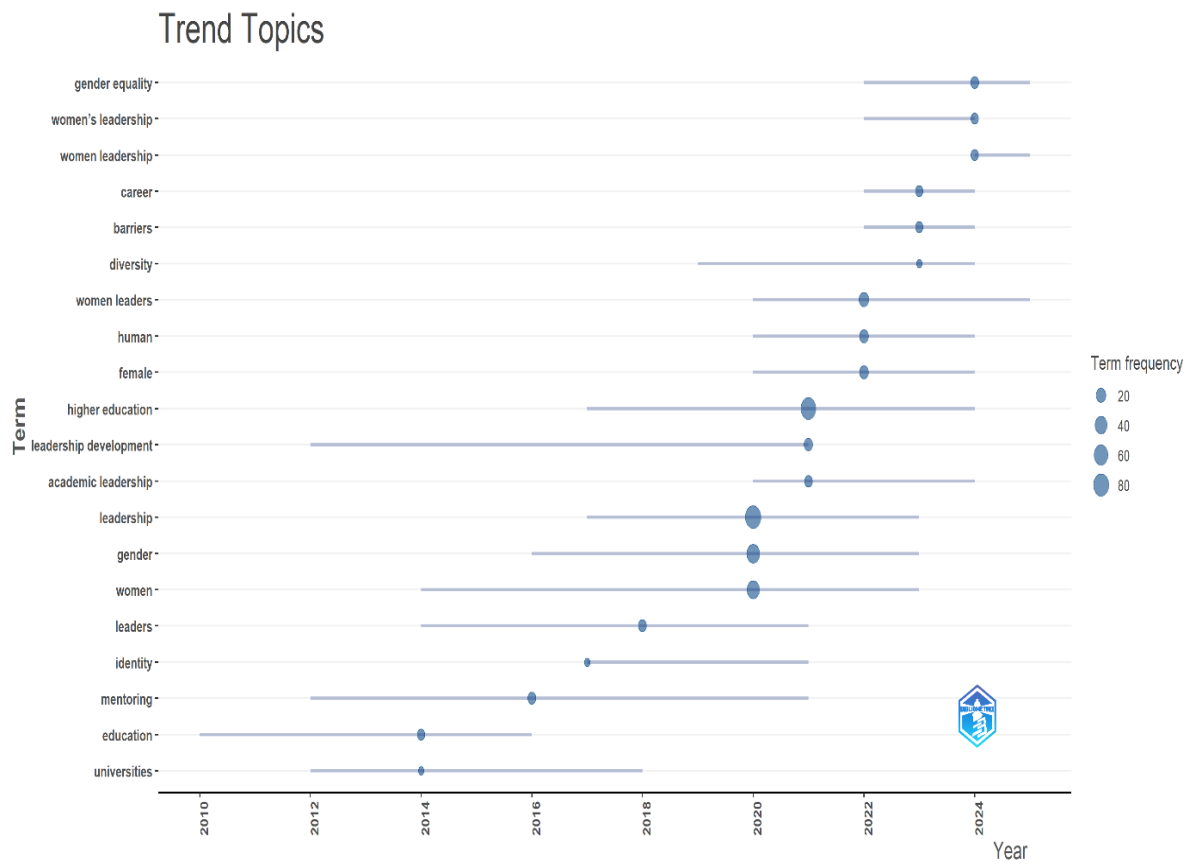


Figure V: Trend Topics

Source: Author compilation

Leading publishing most cited countries

As shown in table 10, the USA tops in the list of nations with the highest contributions (255 articles), followed by the UK (40 articles) and South Africa (28 articles), each of which has a significantly larger volume of research publications. The USA, the U.K, and South Africa are among the countries with the highest levels of productivity, according to the data in the table X. The importance of the research issue is demonstrated by the large number of research articles published from numerous countries worldwide.

Table 10: Country Production

Country	Freq
USA	255
UK	40
South Africa	28
Australia	25
Indonesia	18
Malaysia	18
Canada	14

Pakistan	11
Ethiopia	8
Saudi Arabia	8

Source: Author compilation

In case of leading citations, USA is the leading most cited country with total no. of citations count of 1900, followed by U.K with a count of 748 citations in this domain. Australia is third ranked country which also hold enough no. of citations record count with 409 as depicted in table 11.

Table 11: Citation Statistics Country wise

Country	TC	Average Article Citation
USA	1900	18.80
UK	748	29.90
Australia	409	29.20
South Africa	199	15.30
Canada	87	21.80
Malaysia	86	8.60
Pakistan	83	20.80
Ireland	78	39.00
Kazakhstan	71	35.50
New Zealand	67	22.30

Source: Author compilation

Leading ten Global and Local cited articles

The global citation indicates how frequently other academic publications and disciplines cite an article from the database. Table 12 illustrates that Howe-Walsh & Turnbull, 2016 holds the ‘highest global citation’ count of 285; study indicates the perceived barriers to women leadership like organisational influences, male dominated networks, intimidation and harassment, as well as individual influences such as lack of confidence. The second highest global citations were received by Hernandez and Ngunjiri, 2015 with a count of 179. It focused on experience as faculty and leaders by women academic staff examining the evolution of three powerful and transformative navigational tactics employed to lead in U.S. academic system, The third highest global citations, with a count of 133, by Burges, Joseph, Van Ryn, & Carnes, 2012 argued about various stereotypes faced by female leaders in academia.

Table 12: Analysis of citation networks

Sr. No.	Articles	Authors	Source	Publication Year	Global Citations	Local citations
1	Barriers to women leaders in academia: tales from science and technology	L Howe-Walsh, S Turnbull	Studies in Higher Education	2016	285	0
2	Exploiting the margins in higher education: A collaborative autoethnography of three foreign-born female faculty of color	KAC Hernandez, FW Ngunjiri, H Chang	International Journal of Qualitative Studies in Education,	2015	179	0
3	Does stereotype threat affect women in academic medicine?	DJ Burgess, A Joseph, M Van Ryn, M Carnes	Academic Medicine	2012	133	1
4	Why are there so few female leaders in higher education: A case of structure or agency?	S Shepherd	Management in Education	2017	115	0
5	Changing institutional culture through peer mentoring of women STEM faculty	N Thomas, J Bystydzienski, A Desai	Innovative Higher Education	2015	94	0
6	Resilient leadership: A phenomenological exploration into how Black women in higher education leadership navigate cultural adversity	NL Chance	Journal of Humanistic Psychology	2022	91	0
7	Advancing women of color in STEM: An imperative for US global competitiveness	MV Alfred, SM Ray, MA Johnson	Advances in Developing Human Resources	2019	83	1
8	Barriers to and facilitators of female Deans' career advancement in higher education: an exploratory study in Vietnam	TLH Nguyen	Higher education	2013	80	0
9	The impact of the pandemic-enforced lockdown on the scholarly productivity of women academics in South Africa	C Walters, GG Mehl, P Piraino, JD Jansen, S Kriger	Research Policy	2022	76	0
10	Women leadership in Vietnamese higher education institutions: An exploratory study on barriers and enablers for career enhancement	G Maheshwari, R Nayak	Educational Management Administration & Leadership	2022	73	0

Source: Author compilation

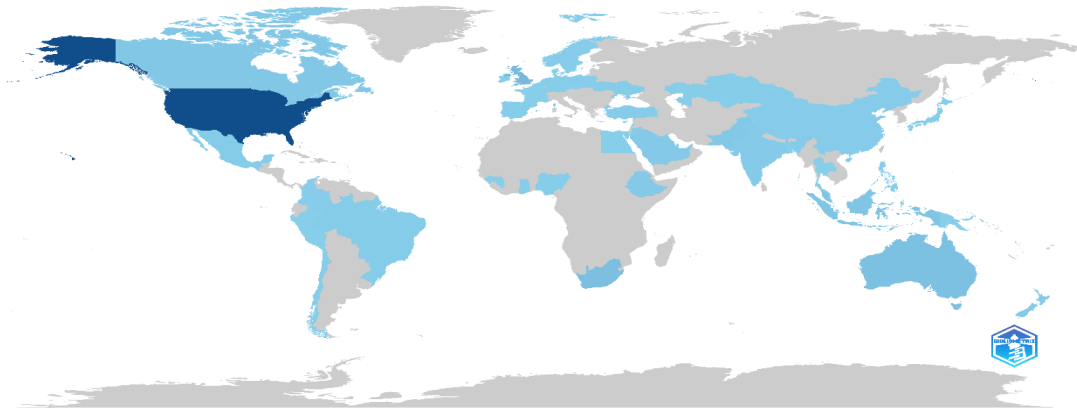


Figure VI: Geographical distribution countrywise

Source: Author compilation

The map shown in figure VI illustrates the geographical distribution of research findings on women leaders, highlighting the nations with the highest publishing output. The USA, UK, and South Africa are the leading countries, as denoted by the dark hues, which also reflect a substantial volume of publications. In other regions of the world, including Ethiopia and Saudi Arabia, where relatively few publications were issued, the map also indicates a scarcity of publications.

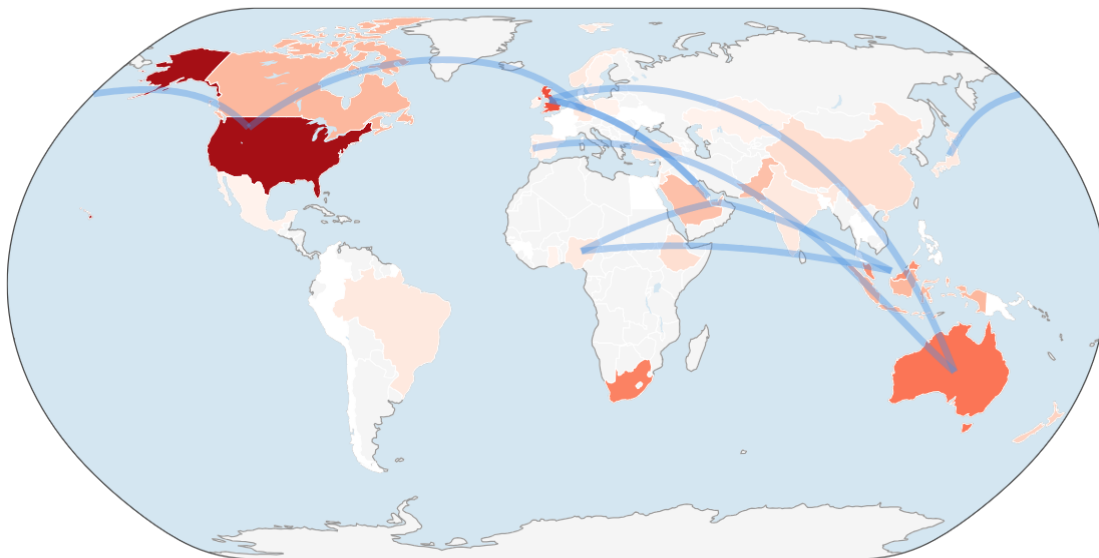


Figure VII: Country Collaboration World Map

Source: Author compilation

In Country co-authorship as shown in figure VII. USA, UK and Australia have the most collaborations with other countries in academic publications in this domain.

Table 14: Relevant Keywords occurrences

Words	Occurrences
leadership	86
higher education	77
gender	50
women	44
women leaders	20
female	15
human	15
article	13
leadership development	13
leaders	11

Source: Author compilation

The most commonly used phrase is "leadership" (86 occurrences), followed by "higher education" (77 occurrences), "gender" (50 occurrences), and "women" (44) showing a strong emphasis on women's representation in academic leadership including the gender differences in academic leadership roles. Other important phrases that highlight themes in academic contexts are "female" (15) and "women leaders" (20).

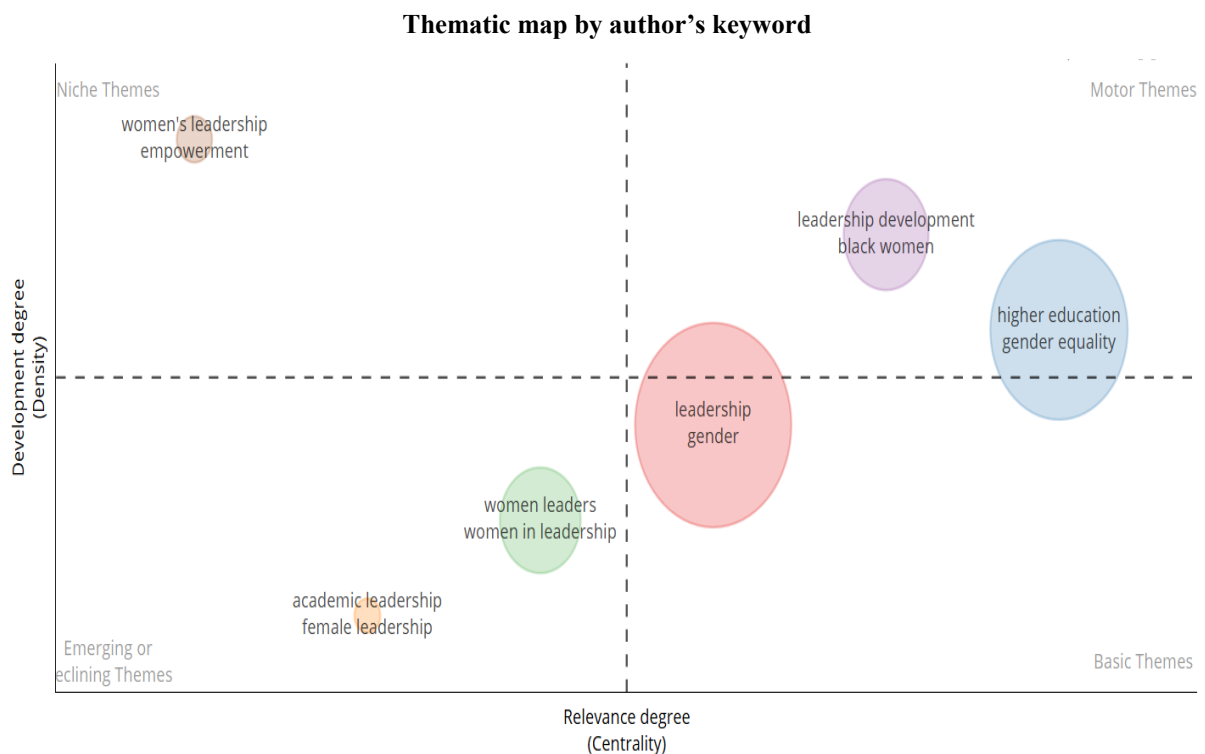


Figure X: Thematic Map

source: Author compilation

The thematic map in figure X illustrates the core themes in the domain. The map is bivariate, with Density on y-axis (degree of Development) and Centrality on x-axis (degree of Relevance). Thematic map classifies many

themes divided into four quadrants based on their importance: Motor Themes, Niche Themes, Basic Themes, and Emerging/Declining Themes (Lizano-Mora et al., 2021). This methodology relies on strategic mapping to outline the evolving connections among recurring themes in research outputs (Callon et al., 1983). The study reveals various prominent clusters, along with primary topics encompassing gender, women, faculty, leadership, and science. The thematic map reveals distinct clusters with varying degrees of centrality and density, reflecting their importance and development within the research domain. Themes such as “*leadership development*” and “*black women*” (Cluster 1), along with “*higher education*” and “*gender equality*” (Cluster 2), demonstrate high centrality and density, thereby classifying them as motor themes that drive the intellectual structure of the field. In contrast, “*women leadership empowerment*” emerges as a niche theme, indicating its specialized yet well-developed nature with limited integration into the broader research framework. Furthermore, themes including “*female leadership*” and “*academic leadership*” (Cluster 1), as well as “*women leaders*” and “*women in leadership*” (Cluster 2), are positioned within the declining quadrant, characterized by low centrality and low density. This positioning suggests that these themes are either underdeveloped or experiencing a decline in scholarly attention, highlighting a degree of thematic volatility within the field. The basic themes, located in the lower-right quadrant, encompass clusters such as “*leadership*” and “*gender*”, which are fundamental to the research domain. Although these themes exhibit high relevance, their relatively low density indicates that they remain underdeveloped, thereby offering significant opportunities for further theoretical advancement and empirical exploration. Overall, the thematic map underscores that core areas, particularly women’s leadership engagement in higher education administration, constitute a vital component of the research landscape. Simultaneously, the presence of basic and declining themes reveals substantial gaps and potential avenues for future research, emphasizing the need for deeper conceptual and empirical investigation.

Theoretical Findings

Category	Key Factors	Description
Societal Stereotypes	Gender role expectations Stereotype of limited authority	Societal expectations frequently position family obligations above career progression for women, which limits their pursuit of leadership roles. Women’s leadership legitimacy is often questioned compared to male counterparts
Organisational Stereotypes	Male-dominated Leadership norms Bias in recruitment and promotion	Leadership models are based on masculine traits, disadvantaging women. Implicit biases influence hiring and advancement decisions.
Institutional Barriers	Work life imbalance Lack of mentorship	Inadequate institutional support for balancing professional and personal roles Limited access to senior mentors hinders career progression

Structural barriers	Glass ceiling effect Resource inequality	Invisible barriers restrict women from advancing in top leadership positions. Women often receive fewer resources and lower compensation.
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Research Gaps

Own elaboration from Scopus database

Existing Research Focus	Key Findings in Literature (2010–2025)	Identified Gap	How our Bibliometric Study Addresses the Gap
Conceptual and qualitative studies on women’s leadership	Studies focus on barriers, glass ceiling, gender bias, and leadership styles	Lack of large-scale quantitative synthesis of global research output	Provides systematic bibliometric mapping of global scholarly production
Regional or country-specific studies	Many studies concentrate on single countries (USA, UK, Australia, etc.)	Limited comprehensive worldwide comparative analysis	Offers global-level bibliometric analysis across countries
Leadership roles analysis	Focus mainly on senior leadership (Vice-Chancellors, Presidents)	Underrepresentation of mid-level and emerging leadership roles	Identifies thematic clusters covering diverse leadership roles
Policy and gender equity discussions	Emphasis on gender equity frameworks and Sustainable Development Goals	Lack of trend analysis showing evolution of research themes over time	Conducts longitudinal trend analysis (2010–2025)
Theoretical frameworks	Focus on feminist theory, transformational leadership	Limited exploration of interdisciplinary linkages	Identifies cross-disciplinary research connections

Conclusion

The conclusions about trends in women's leadership within higher education present noteworthy findings. This bibliometric analysis finds the ‘top contributors’ using Rstudio. Finally, 288 Scopus articles were considered. There has been a significant rise in academic output on this subject in recent years, particularly in 2021, indicating a growing acknowledgment of the significance of women's leadership in academia. Citation trends exhibit significant peak around 2015, reflecting heightened academic interest and impactful publications during that period. The theme progression of literature has been significant, transitioning from an emphasis on professional stress in earlier periods to current concerns like ethical leadership and self-leadership. Thematic shifts illustrate the adaptation of research to evolving requirements and difficulties for contemporary academic

women leaders, emphasizing critical keywords for fostering robust and ethical women leadership. Notable figures in the field have been identified, including the top contributing writers Karen A Longman, Green Maheshwari, and Kate White, as well as esteemed scholarly publications like “Educational Management Administration and Leadership”, “Advancing Women in Leadership Journal”, and “Advances in Developing Human Resources”. As a sign of their dedication to the topic, the US, UK, and South Africa are spearheading studies on women’s academic leadership in higher education. New ideas like "diversity," "inclusion," and "transformational leadership" suggest interesting directions for further study. When combined, these results demonstrate the expansion, variety of sources, and thematic development of the study of women's leadership in higher education field, along with potential directions for further investigation. The distribution of cited countries reveals a strong dominance of the United States, which accounts for the highest total citations, indicating its leading role in this research domain. The United Kingdom and Australia follow as significant contributors, reflecting their active engagement and influence. Core themes such as gender, leadership, and higher education have consistently remained central to the investigation. In contemporary research, there has been a noticeable progression toward topics like gender equality, career advancement, and leadership barriers. The increasing frequency of these keywords since 2020 indicates growing scholarly attention to challenges faced by women leaders. The analysis of affiliations indicates that Montana State University is the most prominent contributor, followed by Azusa Pacific University and the University of Michigan are based in the United States, emphasizing its dominance in research output. Investigation emphasizes training methods to break down barriers, advocate for women in leadership roles and promote the vocational development of female leaders. It also highlights the significance of inclusive diversity in academic policies and strategies for institutions, organizations, and governments in a constantly evolving academic environment. Future studies on women's leadership in higher education should concentrate on resolving particular obstacles that women have while rising to positions of leadership, creating successful promotion plans, and promoting gender diversity in these roles. Furthermore, there is a demand to continue the professional development and training of women academic administrators, as well as to incorporate content on women academic leaders into academic programs and investigate the outcome of women leaders in crisis situations.

Strategic Approach for overcoming barriers in women’s leadership

To bridge the persistent gap in academic leadership, institutions must adopt a multi-level and inclusive approach that addresses structural, cultural, and individual barriers faced by women leaders. Sheryl Sandberg (2013) opines that professional ambition in women is not culturally cultivated in our society. Despite the fact that women are progressively making more money and earning better degrees than males, many of them are unable to pursue leadership roles due to a lack of professional and personal support and mentoring. Women sometimes eschew professional networking and socializing in order to fulfil their family responsibilities, but the appropriate kind of professional connections is crucial for career advancement to leadership positions. According to Sen (2007), women will need to work toward a career plan and take their professions more seriously. A concentrated strategy is required to advance to leadership roles, with the proper combination of instruction, research, administration, and evidence-based work completed at each level to fairly support their claim. To keep and empower women in leadership positions, supportive policies like flexible work schedules, the creation of official mentorship and sponsorship programs, leadership development programs, and work-life balance measures are crucial.

Theoretical implications

This bibliometric analysis provides significant theoretical contributions by systematically revealing the evolution of research outputs on women's academic leadership in higher education. By mapping key themes, influential works, and co-citation patterns, the study consolidates fragmented literature into organised knowledge base, thereby enhancing conceptual clarity in this domain. The findings align with Gender Role theory, suggesting social expectations continue to shape the representation and advancement of women in academic leadership. Similarly, Social Role theory explains the concentration of research around gendered roles and leadership barriers, reflecting how institutional norms influence women’s career trajectories. Furthermore, the prominence of leadership-related themes supports Transformational Leadership Theory, indicating that

women leaders are frequently linked with participative and transformational leadership approaches that positively impact institutional outcomes. This indicates a need to expand existing theoretical models by incorporating diverse socio-cultural and institutional contexts, particularly from underrepresented regions. Furthermore, the identification of thematic clusters and emerging research fronts contributes to theory-building by outlining the interconnections among leadership styles, gender dynamics, and organizational outcomes. The study also advances the understanding of knowledge production by demonstrating the progression of scholarly discourse over time, thereby offering a meta-theoretical perspective on the field. Overall, the analysis not only strengthens the theoretical foundation of women's leadership research but also provides direction for the development of more inclusive, multidimensional, and contextually grounded theoretical frameworks in higher education.

Practical Implications

The present bibliometric analysis offers several important practical implications by systematically analyzing the intellectual structure, thematic evolution, and collaboration patterns in women's academic leadership in higher education. By identifying dominant research themes, influential publications and evolving research areas, the study provides a valuable roadmap for scholars to explore under-researched dimensions such as intersectionality, regional disparities, and context-specific leadership challenges, particularly in developing countries. The findings will also be assisting policymakers and funding agencies in recognizing critical gaps in the literature, thereby enabling more targeted allocation of resources and the formulation of evidence-based gender equity policies. Furthermore, academic institutions and university administrators can utilize these insights to align their research priorities with global trends and promote initiatives that strengthen women's leadership development. The analysis of co-authorship networks and international collaborations highlights opportunities for enhanced scholarly partnerships and knowledge exchange across regions. Additionally, journal editors and publishers may use these insights to encourage focused scholarly contributions through special issues, thereby advancing discourse in this domain. Overall, the study contributes to bridging the gap between knowledge production and policy action, promoting a more integrative and research-informed approach to women's leadership in higher education.

Limitations and Future Research Agenda

This study employs bibliometric techniques to review the existing literature. Despite efforts to establish the reliability and validity of the results, multiple limitations remain. The methodology is inherently susceptible to biases associated with database selection, sampling procedures, and publication trends. One major drawback is the dependence on a single database, mainly Scopus, which may have resulted in the exclusion of pertinent studies indexed in other reliable sources like Google Scholar, Publish or Perish, Web of Science, and ERIC despite being acknowledged for its broad coverage of high-quality, peer-reviewed journals. Future research incorporating databases linked to SCI, SSCI, and ABDC rankings could provide a more comprehensive understanding of high-impact scholarly contributions. Additionally, the study is limited to English-language publications, which may introduce language bias and exclude significant contributions from non-English or regional journals. The deliberate exclusion of grey literature—such as conference proceedings, book chapters, and dissertations—was intended to maintain consistency in quality; however, this decision may skew the findings toward research produced in English-speaking regions or well-established publication networks, potentially overlooking valuable insights from other regions. Consequently, the omission of non-English sources may restrict the inclusion of context-specific perspectives that could refine or challenge existing theoretical frameworks. Future studies should consider integrating multilingual sources and grey literature to enhance the global scope and comprehensiveness of analysis. Furthermore, citation-based metrics may be affected by time-lag bias, as recently published studies may not yet have accumulated sufficient citations. Although the study employed a comprehensive set of keywords and covered a defined time frame from 2010 to 2025 certain methodological limitations inherent to bibliometric analysis persist. These include issues such as author name ambiguity, inconsistencies in institutional affiliations, and lack of standardisation in keywords, all of which may

influence the precision of co-authorship and collaboration network analyses. The outcomes of this bibliometric analysis open multiple pathways for further research agenda in the domain of women's academic leadership in higher education sector. However, the existing literature is concentrated around established themes such as leadership styles, gender disparities, and organizational outcomes, yet remains significant scope to explore under-researched areas, particularly the role of intersectionality, cultural contexts, and region-specific challenges in shaping women's leadership experiences. Future studies should prioritize comparative and cross-national analyses to better understand variations across developed and developing countries. Additionally, there is a need for longitudinal research to assess the evolving nature of women's leadership trajectories over time. Limited integration of interdisciplinary perspectives suggests that future research could benefit from incorporating insights from sociology, psychology, and public policy to develop more holistic frameworks. Moreover, emerging themes such as digital leadership, work-life integration in post-pandemic academic environments, and the impact of institutional reforms warrant deeper investigation. Expanding collaboration networks and increasing contributions from underrepresented regions can further enrich the global discourse. Overall, future research should aim to move beyond descriptive analyses toward more theory-driven and contextually grounded studies that advance both academic understanding and practical relevance in this area.

Conflict of Interest Statement

No potential conflicts of interest in relation to this study was declared by the authors

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