A Decade-Long Voyage of Gender Inclusion Research: A Bibliometric Analysis

Nisha Gandhi¹, Usha Arora¹ and Shabnam Saxena¹

Abstract

During the past decade, the concept of diversity and inclusion has gained immense scope for the growth of organisations and the development of countries, thus attracting the attention of researchers and academicians. The purpose of this article is to better understand the concept of gender inclusion and provide a comprehensive review of the available literature from the past decade in this domain. The present study followed a bibliometric approach to draw inferences from 206 articles published in English over the time span of 2013–2023, retrieved from Scopus. The research methodology comprises four steps: data collection, data analysis, data visualisation and data interpretation. The research on gender inclusion has significantly increased from 2018 to 2023. The findings show the top contributing authors, prominent journals, significant keywords and dominating sectors in the research area. Despite the growing academic interest, the research in this area is still in its infancy and requires attention from researchers. The key constraint of the study is that it is based on the Scopus database, and the relevant studies that are not published in Scopus are being eliminated. This article provides useful information for managers as well as policymakers to make gender inclusion a key component while framing policies and practices. The article will provide insight on equality and sustainable goals.

Keywords

Gender inclusion, gender equality, women inclusion, systematic literature review, bibliometric analysis, India

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Introduction

Gender inequality has become a well-recognised and irrefutable concept around the world. According to the World Bank’s ‘Women, Business and the Law 2022’ report, approximately 2.4 billion women around the world do not have the same economic rights as men (World Bank, 2022). The facts are even worse for India. India is ranked 135th out of 146 nations in the Global Gender Gap 2022 report for gender parity and 143rd for economic opportunity and participation. The report also maintains that now it will take 132 years to reach gender parity, compared to 100 years earlier (World Economic Forum, 2019).

Gender discrepancies persisted in India for many years. Despite the equality rights guaranteed by the constitution and women having more education and credentials than men, they have consistently faced prejudice (Duppati et al., 2020). Women’s ability to experience self-concept fit, goal fit or social fit is undermined by these gender norms (Schmader, 2023). Discrimination, marginalisation, harassment, social exclusion and other forms of social closure are obstacles for women in male-dominated areas. Sadly, it is obscure how these obstacles can be removed (Bridges et al., 2023). The development of a country cannot be achieved while ignoring its large pool of talent. According to the McKinsey report ‘Women Matter’, even a 10% increase in women’s participation could add $770 to India’s GDP (Desvaux et al., 2017). In addition, gender equality is the fifth aim among the 17 sustainable development goals adopted by the United Nations to be achieved by 2030 (Asongu & Odhiambo, 2020). As the gender inclusive environment around the world has developed, this gender disparity has become a growing concern for Indian organisations. Intangible resources are made available by gender inclusion (Ali et al., 2015), and also the organisation’s prestige in the public sphere is enhanced (Singh & Pandey, 2019). Despite facts claiming gender inclusion is beneficial for organisations and society, under-representation of women in India is a sad reality. According to the Deloitte 2022 report, only 17.1% of board seats are occupied by Indian women, and only 3.6% are board chairs (Deloitte, 2022). Currently, this 17.1% female representation is essentially the result of a corporate law mandate. Now it is high time organisations voluntarily go beyond numbers and affirmative actions to promote gender inclusion. The aim of the study is to conduct a comprehensive evaluation of past studies pertaining to the gender inclusion concept. The authors describe an advanced and up-to-date framework for the area and offer guidance for future study in the domain. The primary objective of this study is to amalgamate the research domain and address specific inquiries.

Historically, literature reviews have been characterised by subjectivity and a qualitative approach. However, the bibliometric method enables scholars to obtain quantitative information regarding authors, journals, countries, citation counts and latest trend. When this information is interconnected and processed effectively, it can facilitate the mapping of the development of any study discipline. To begin, we offer a comprehensive analysis of the current evaluations in order to provide context and justify the importance of conducting this study. The subsequent sections of this document will delve into the methodology, present the findings and conclude the review by providing suggestions for future research endeavours.
Gender Inclusion

Inclusion is the psychological state of feeling like an insider and receiving preferential treatment at work while still maintaining one’s individual identity (Shore et al., 2018). Gender inclusion is defined as organisations developing a fair and equitable culture in which women employees contribute their full potential (Khosla, 2014). It is the process of reviewing and restructuring policies and practices to ensure women’s participation in organisations. These activities should help the organisations recruit, motivate, retain and develop female talent (Singh, 2012). A workplace considering gender inclusion must protect working mothers’ rights by eliminating unconscious bias, providing flexible work hours and ensuring gender-equal laws and practices (Kaur & Arora, 2020). Women employees are unlikely to succeed or retain in organisations that are considered to be less gender inclusive (Kossek et al., 2017). The author suggests that organisations should not only concentrate on hiring more women, but also improve and maintain the quality of their gender inclusion measures (Adamson et al., 2016).

Research on inclusion has mainly focused on visible minorities in terms of race or gender; however, the invisible minorities such as lesbian, gay, bisexual or transgender employees are often neglected (Priola et al., 2014). The transgender workers are hiding their sexual identity at workplaces, so they are less prone to discrimination (Alexandra Beauregard et al., 2018).

Even though gender inclusion is frequently discussed in practice, it is still being developed in research (Kuknor & Bhattacharya, 2021; Perryman et al., 2016). To close this research gap, the present study provides a systematic overview of gender inclusion scholarship that will aid in the advancement of future research directions in subsequent research. This study is not limited to any region or subject field, thus providing wider coverage. The purpose of this study is to accomplish the following research objectives:

**RQ1:** To gain knowledge about the publication trends in gender inclusion during the last decade.

**RQ2:** To identify the prolific writers, the most influential journals and the country-wise contribution.

**RQ3:** To identify the significant subjects, keyword occurrences and hotspot areas of the research field.

**RQ4:** To identify the sector-wise contribution in the subject field.

To identify and display the most relevant research on the subject, we performed a bibliometric analysis. Literature evaluations are often subjective and qualitative; however, the bibliometric method enables researchers to have access to quantitative information about authors, journals, affiliations, citation counts and country-wise contributions. In the following sections, the methodology is explained, the findings are displayed, the results are shown and future research directions are suggested.
Methodology

An academic technique known as ‘bibliometric analysis’ has been utilised to address the research concerns. Bibliometric analysis is a widely used and rigorous technique for investigating and analysing huge amounts of scientific data. It allows us to explore the evolution of a particular research field and suggests a new research frontier (Donthu et al., 2021). Earlier, bibliometric tools were used in library science only, but now they have become a more prevalent method of analysis in social science as well. The research process endorsed comprises four steps: data collection, data analysis, data visualisation and data interpretation, as described below.

Data Collection

The information was exclusively gathered from the Scopus database, which contains citations and abstracts from more than 20,000 peer-reviewed journals in the social sciences, the humanities and technology (Fahimnia et al., 2015). The keyword used for the database search string was TITLE-ABS-KEY ‘Gender Inclusion’. The bibliographic data selected was saved in BibTex and CSV formats and included information such as the paper’s title, authors, source, affiliations, citations, keywords and references.

Data Analyses and Visualisation

To conduct thorough analyses of the data and accomplish our research objectives, we apply the widely accepted scientific procedures and rationales for systematic literature reviews (SPAR-4-SLR) methodology (Paul et al., 2021), as shown in Figure 1. We have used the R-based tool known as ‘Biblioshiny’ to draw inferences from a database (Aria & Cuccurullo, 2017) and VOSviewer software to visualise the relationship among researchers, publications and countries. VOSviewer is a popular tool for visualising geographic networks that display the number of co-authorship and co-occurrence networks (Van Eck & Waltman, 2017).

Data Interpretation

Finally, the data extracted were interpreted with the help of the software used and available information. The results are analysed and interpreted in detail in the next section.

Findings and Interpretations

This section presents the required information to answer the above-stated research objectives.
Trend Analysis

Descriptive analysis (see Table 1) presents the main information about the number of documents, sources and authors. The data reveals that between 2013 and 2023, the search yielded 206 documents from 653 authors published in English. The document comprises 125 articles, 25 conference papers, 6 books and 13 review papers published in 184 journals.
Table 1. Key Details Regarding the Documents Extracted from Scopus.

<table>
<thead>
<tr>
<th>Description</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main information about data</td>
<td></td>
</tr>
<tr>
<td>Timespan</td>
<td>2013–2023</td>
</tr>
<tr>
<td>Sources (journals, books and so on)</td>
<td>184</td>
</tr>
<tr>
<td>Documents</td>
<td>206</td>
</tr>
<tr>
<td>Annual growth rate (%)</td>
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</tr>
<tr>
<td>Document types</td>
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<tr>
<td>Article</td>
<td>125</td>
</tr>
<tr>
<td>Book</td>
<td>06</td>
</tr>
<tr>
<td>Book chapter</td>
<td>36</td>
</tr>
<tr>
<td>Conference paper</td>
<td>25</td>
</tr>
<tr>
<td>Review</td>
<td>14</td>
</tr>
<tr>
<td>Authors</td>
<td>653</td>
</tr>
</tbody>
</table>

Figure 2. Publication Trend.

Figure 2 shows the publication trend over the years on the topic ‘Gender Inclusion’. It is evident from the figure that there has been a significant increase in the number of articles published from the year 2019 \((n = 11)\) to 2023 \((n = 54)\).

Sources

This section explores the second research question concerning the most prominent journals contributing to the field of gender inclusion. Figure 3 describes the 10 most impactful sources. After analysing the figure, it is observed that *Gender, Work and Organization, African Journal of Economic and Management Studies, Equality, Diversity and Inclusion, Gender and Education* and *Sustainability* were among the top five productive journals contributing to this research area.
The h-index is a quantitative statistic that uses publications and citations to analyse publishing data to generate ‘an estimate of the importance, significance, and broad impact of a scientist’s cumulative research contributions’ (Hirsch, 2005). Also, it is evident from Figure 3 that the Journal of Gender, Work and Organization is the most influential one, having h-index of 4, 34 citations and producing the maximum number of articles on gender inclusion. Figure 4 displays the source dynamics of gender inclusion research. It is evident from the figure that Gender and Education is the consistent journal contributing to the field of gender inclusion research from 2013 to 2023, while Gender, Work and Organization and Equality, Diversity and Inclusion publishing from 2018 onwards shows positive trends.

**Most Impactful Authors**

This section provides information regarding the most impactful authors in the research area of gender inclusion. From Figure 5, it is evident that S. A. Asongu, D. Bridges, S. B. Marine and N. M. Odhiambo are the most leading authors in gender inclusion research area.
Table 2 presents findings from the most frequently cited documents. The results indicate that the article authored by Kossek in the *Journal of Management* has the highest number of citations. The author described the factors contributing to women’s career equality and explained the situations in which women opt for or are pushed out of leadership positions in organisations. In addition to this, articles by Kang (2019), Asongu (2018) and Festing (2015) are the most cited articles that have contributed to this field.

**Country-Wise Contribution**

This segment explores the country-wise production of research articles on gender inclusion research. It is evident from Figure 6 that the USA has contributed the maximum number of articles, followed by Australia, the UK, Canada and India. In addition to this, Figure 7 shows the most cited countries. It is clear from the figure that the USA has received the most citations overall in this scenario as well. Thus, it can be interpreted that the USA has placed a greater emphasis on gender inclusion research.

**International Collaboration.**

Using VOSviewer software, a full-counting co-authorship network of countries has been calculated based on the data. Figure 8 illustrates the network of cooperation between nations that publish more than five publications. The largest group of linked nations consists of 14 countries organised into 3 clusters. Colour-coordinated nations constitute a group. The cluster 1 formed by Australia, Ireland, Italy, Spain and the UK, represents authors from these nations is connected by the red colour. Cluster 2 (green colour) represents collaboration between Canada, Japan, Nigeria and South Africa, and cluster 3 (blue colour) represents collaboration between Netherlands, India and the USA.

**Affiliation Analysis.**

Table 3 displays the top 10 organisations that publish articles on gender inclusion based on the affiliation of the authors. It shows that 'University of Texas' from the
<table>
<thead>
<tr>
<th>Title</th>
<th>Author's Name</th>
<th>Journal</th>
<th>Country</th>
<th>Total Citations</th>
<th>TC per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Opting out’ or ‘pushed out’? Integrating perspectives on women’s career equality for gender inclusion and interventions</td>
<td>Kossek, 2017</td>
<td><em>Journal of Management</em></td>
<td>United States</td>
<td>173</td>
<td>24.71</td>
</tr>
<tr>
<td>‘Working toward gender diversity and inclusion in medicine: Myths and solutions’</td>
<td>Kang, 2019</td>
<td><em>The Lancet</em></td>
<td>Canada</td>
<td>119</td>
<td>23.80</td>
</tr>
<tr>
<td>‘How enhancing gender inclusion affects inequality: thresholds of complementary policies for sustainable development’</td>
<td>Asongu, 2020</td>
<td><em>Sustainable Development</em></td>
<td>South Africa</td>
<td>42</td>
<td>10.50</td>
</tr>
<tr>
<td>‘Inclusive management through gender consideration in small-scale fisheries: The why and the how’</td>
<td>de la Torre-Castro, 2019</td>
<td><em>Frontiers in Marine Science</em></td>
<td>Sweden</td>
<td>34</td>
<td>6.80</td>
</tr>
<tr>
<td>‘Culture of safety and gender inclusion in cardiothoracic surgery’</td>
<td>Backhus, 2018</td>
<td><em>Annals of Thoracic Surgery</em></td>
<td>United States</td>
<td>27</td>
<td>4.50</td>
</tr>
</tbody>
</table>
USA has published the highest number of articles, that is, 11, followed by ‘Charles Sturt University’ from Australia with 8, ‘University of South Africa’ from Africa with 8 and ‘Academic Medical Center’ from the Netherlands with 7 articles, which are the four leading institutions contributing to research on gender inclusion.

**Author’s Keyword Analysis**

This section provides details to answer our third objective regarding significant or related words in the research field. In the 206 documents, researchers have
incorporated 694 keywords identified with the help of VOSviewer software. Keyword analysis shows the hotspot themes in this research domain. It is necessary to conduct an analysis of these keywords to understand the connection among them to identify any gaps and observe future research directions. Figure 9 shows the tree map of these keywords created with the help of Biblioshiny software to see the relative frequency. From the relative frequency, ‘gender’ is the most occurring keyword with a density of 30% and 19% utilisation in all articles, followed by ‘inclusion’, ‘gender inclusion’, ‘diversity’ and ‘gender equality’.

Figure 10 depicts the WordCloud to see the available combinations of these keywords. The connection among the most repetitive keywords confirms that our research is going in the right direction.

A reliable method of determining the degree of relationship between keywords is density visualisation (Bahuguna et al., 2021). VOSviewer software was used to build a density map since it provides a strong graphical user interface (Cobo & Herrera, 2011). The keyword co-occurrence heat map of gender inclusion (see Figure 11) uses various colours to represent various densities. The topic or keyword that is used most frequently is indicated by a higher density of yellow colour. For example, gender is the main keyword in the highest yellow density colour. Intriguingly, relative to this term, the higher density yellow colour is also found in the terms ‘inclusion’ and ‘gender inclusion’.

The keyword co-occurrence networks can be used to determine the knowledge structure and research themes. Using a co-occurrence network, publications can be characterised according to their keyword contents. Figure 12 shows the co-occurrence data for the author’s keywords in VOSviewer to identify the hotspots in the gender inclusion research field. Out of the 694 identified keywords, the researcher set a minimum threshold of five occurrences to produce systematic results. The researcher identified 13 keywords as per the limit. From the figure, four clusters emerge prominently. The first cluster in red includes ‘Diversity’, ‘Equity’, ‘Inclusion’ and ‘Leadership’. The second cluster (green) comprises the keywords ‘Africa’, ‘Gender Equality’, ‘Gender Mainstreaming’ and ‘Sustainable Development’. In the third cluster (blue), ‘COVID-19’, ‘Gender’ and ‘Women’ are the emerging themes. Finally, in the fourth cluster (yellow), themes are ‘Gender Inclusion’ and ‘Transgender’.

<table>
<thead>
<tr>
<th>Affiliation</th>
<th>Country</th>
<th>Articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Texas</td>
<td>United States</td>
<td>11</td>
</tr>
<tr>
<td>Charles Sturt University</td>
<td>Australia</td>
<td>8</td>
</tr>
<tr>
<td>University of South Africa</td>
<td>South Africa</td>
<td>8</td>
</tr>
<tr>
<td>Academic Medical Center</td>
<td>Netherlands</td>
<td>7</td>
</tr>
<tr>
<td>Athens</td>
<td>Greece</td>
<td>6</td>
</tr>
<tr>
<td>Oslo University Hospital</td>
<td>Norway</td>
<td>6</td>
</tr>
<tr>
<td>London School of Hygiene and Tropical Medicine</td>
<td>United Kingdom</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 3. Most Contributing Organisations.
Sectors Contributing in ‘Gender Inclusion’ Research

The information in this part relates to our fourth research objective, which is to identify the industries in which the subject of gender inclusion has been studied. Figure 13 shows the sectors and their percentage contributions after carefully evaluating the data from the Scopus database. It is apparent from the figure that gender inclusion has been extensively researched in the education sector with 20% (Mozelius & Humble, 2023; Warren et al., 2021), followed by medical and health with 12% (Castro-Aldrete et al., 2023; Davies, 2018; James & Salahou, 2021), business organisations with 12% (Kossek & Buzzanell, 2018; Kulkarni, 2018; Van Beekum, 2020), entertainment and sports with 8% (McConarty & Rose, 2017; Zanin et al., 2023), constitution planning and policy implementation with 7% (Ashe, 2022; Bradshaw et al., 2019; George et al., 2021), forestry and fishery department with 7% (Mangubhai & Lawless, 2021; Pandey & Pokhrel, 2021), economic growth and financial participation with 5% (Asongu & Nting,
Figure 11. Density Visualisation.

Figure 12. Keyword Co-occurrence Network of Gender Inclusion.

2021; Cabeza-Garcia et al., 2018; Shabir & Ali, 2022), army, defence and military with 5% (Munshi, 2018; Woodruff & Kelty, 2017), sustainable development (Asongu & Odhiambo, 2020; Khalikova et al., 2021), media and consultancy with 3% and ICT (Information and Communication Technology) with 2% (Asongu et al., 2018; Festing & Knappert, 2014). The data have some miscellaneous research areas like gender inclusiveness in climate change policy, gender equality,
COVID-19, mining, conflict resolution, civil war peace agreements and so on (Bridges et al., 2021; Iftakhar, 2022; Kansake et al., 2021; Olson Lounsbery et al., 2024; Rai et al., 2021). This information was useful to identify under-researched areas of the field and to suggest possibilities for future research directions.

**Findings**

The research adds to and improves gender inclusion literature by highlighting the current research trends, promising sources, influential authors and country-wise contributions. Regarding to RQ1, the authors discovered that research on gender inclusion gained momentum from 2016 onwards, marking the year 2023 with the highest number of publications. This is possible because of growing concern about gender parity and initiatives taken by different countries. Findings from RQ2 reveal that S. A. Asongu, D. Bridges, S. B. Marine and N. Odhiambo are the most impactful authors, whereas articles published by Ernest Kossek have received maximum citations. Also, the most productive journals in this field are *Gender, Work and Organization; African Journal of Management; Equality, Diversity and Inclusion; Gender and Education* and *Sustainability*. An analysis of affiliations and countries’ productions reveals that the University of Texas, Austin, has published the highest number of articles, and country-wise, the USA secures the first position by producing 30 articles and 353 citations. About RQ3, the existing literature shows that Gender Inclusion, Inclusion and Gender are the most occurring keywords in this domain. The findings of RQ4, that is, sector-wise contribution to gender inclusion research, reveal that the topic has been explored more in the education and medical fields. The findings of the data helped us frame some future research directions in this research domain.
Contributions and Implications

The article enhances the existing literature available on gender inclusion by providing information on the most valuable authors, prominent journals, significant keywords, core countries and dominant sectors. In addition to this, the article will provide insight for the top management and managers to frame gender-inclusive practices. An atmosphere that promotes gender progressiveness in the workplace, together with a more inclusive approach to problem-solving, can complement the study of gender issues by introducing new methods to promote gender equality. The topic holds significance as it aids firms in cultivating and safeguarding their competitive edge while simultaneously empowering women. Gender inequality remains a persistent obstacle preventing women from attaining the highest leadership positions in the economic realm. Owing to the existence of this phenomenon, Indian women in the workforce are at a higher risk of experiencing a decline in their career progression, missing out on decision-making roles and facing barriers to advancement in the corporate hierarchy.

The article offers valuable insights for managers and policymakers to enhance their comprehension of the gender issue and the challenges that women encounter in the professional environment. Consequently, it is important to prioritise the workplace, gender, transgender, gender identity, discrimination and a variety of gender differences in order to address these issues effectively. Additionally, these results can serve as a guide for the researchers as they examine gender inclusion in more detail. In the next section, the article will also provide future research directions for the researchers.

Future Directions

The author may suggest the following future study objectives after carefully reviewing the available databases:

1. The idea of gender inclusion is still in its infancy, as there were only 221 articles in the database; hence, more studies are required to support appealing literature.
2. From the selective database, it can be inferred that there are few studies on the effect of HR practices on gender inclusion related to retention, recruitment and talent management (Dutta & Mishra, 2021; Scholten & Witmer, 2017; Shore et al., 2018), while more research can be done considering other HR practices.
3. While underscoring the advantages of gender inclusion, authors have found only eight articles from India in the selective database. This shows most of the research has been done in western countries. Future researchers can explore this field in India to get different perspectives.
4. Finally, the sector-specific contribution shows that the manufacturing industry needs more research. There are not many studies in the corporate sector either; hence, additional work on organisational dynamics can be done.
Limitations

This section reminds me of Stephen Hawking saying, ‘exist’. First off, despite being extensive, this analysis is not exhaustive. Authors have studied the Scopus database only, while researchers can explore the same while using different databases. In addition, the author has identified the sector-wise contributions in a broad manner. A thorough analysis is advised, looking into the manufacturing and service sectors. The authors conducted a thorough and exact search on the topic, omitting a range of other possible keywords used by different authors.

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