

The Paradox of Gender Equality: Bibliometric Analysis Based on Web of Science (WoS) Data (1994-2025)

Toplumsal Cinsiyet Eşitliği Paradoksu: Web of Science (WoS) Verilerine Dayalı Bibliyometrik Analiz (1994-2025)

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ABSTRACT

Gender equality has become an increasingly important issue in terms of social development and welfare. However, some paradoxes related to gender equality complicate progress in this area. The aim of this study is to understand the gender equality paradox and to determine the most influential articles, most productive researchers, prominent journals, countries and universities on the gender equality paradox by conducting a bibliometric analysis of the research conducted in this field. A search for “gender equality and paradox” was conducted in English from the Web of Science database and the data was analyzed. The VOSviewer (1.6.19) program was used in the bibliometric analysis of the data. After a general evaluation of 150 articles published in the WoS database between 1994 and 2025, bibliometric mapping was performed in the field of gender equality using the VOSviewer program using citation analysis, co-citation analysis and common word analysis methods. The research findings show that Van Reijmersdal, Eva A. and Boerman, Sophie C. are the most cited authors and the prominent university is Missouri University. When an evaluation is made in terms of countries, it is seen that the USA, England and Sweden are active in terms of the number of publications. The majority of the studies focus on raising awareness about gender equality, changing gender roles, gender equality in the labor market and combating gender-based discrimination.

JEL Codes: J160

Keywords: Gender equality, Gender equality paradox, Gender Studies

Öz

Toplumsal cinsiyet eşitliği, toplumsal gelişim ve refah açısından giderek daha fazla önem kazanan bir konu haline gelmiştir. Ancak, cinsiyet eşitliği ile ilgili yaşanan bazı paradokslar, bu alandaki ilerlemeyi karmaşık hale getirmektedir. Bu çalışmanın amacı, toplumsal cinsiyet eşitliği paradoksunu anlamak ve bu alanda yapılan araştırmaların bibliyometrik analizini gerçekleştirerek, cinsiyet eşitliği paradoksu üzerine en etkili makaleleri, en üretken araştırmacıları, öne çıkan dergileri, ülkeleri ve üniversiteleri belirlemektir. Web of Science veri tabanından İngilizce olarak “toplumsal cinsiyet eşitliği ve paradoks” araması yapılmış ve veriler analiz edilmiştir. Verilerin bibliyometrik analizinde VOSviewer (1.6.19) programından yararlanılmıştır. 1994-2025 yılları arasında WoS veri tabanında yayımlanan 150 makale üzerinden yapılan genel bir değerlendirme sonrası, VOSviewer programı kullanılarak atıf analizi, ortak atıf analizi ve ortak kelime analizi yöntemleriyle cinsiyet eşitliği alanında bibliyometrik haritalama yapılmıştır. Araştırma bulguları Van Reijmersdal, Eva A. ve Boerman, Sophie C. en çok atıf alınan yazarlar olduğunu ve öne çıkan üniversitenin Missouri University olduğunu göstermektedir. Ülkeler açısından bir değerlendirme yapıldığında ABD, İngiltere ve İsveç’in yayın sayıları itibarıyla yayınlarda aktif oldukları görülmektedir. Çalışmaların büyük kısmı, cinsiyet eşitliği ile ilgili farkındalık yaratma, toplumsal cinsiyet rollerinin değişimi, iş gücü piyasasında cinsiyet eşitliği ve toplumsal cinsiyet temelli ayrımcılıkla mücadele konularında yoğunlaşmaktadır.

JEL Kodları: J160

Anahtar Kelimeler: Toplumsal cinsiyet eşitliği, Toplumsal cinsiyet eşitliği paradoksu, Toplumsal cinsiyet çalışmaları

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Introduction

Since the first world conference on gender equality organized by the United Nations in 1975, the subject has had an important place in many disciplines (United Nations, 1975). Although certain goals have been achieved in gender equality issues in the last 50 years, occupational discrimination based on gender continues to be a controversial issue in the labor market. Many studies, trainings and programs are being conducted on achieving equality by creating differences in gender perception. Gender is related to the values, expectations, judgments and roles related to how society sees, perceives, thinks and expects women and men to behave (Dökmen, 2010). The subject of gender equality emphasizes the provision of equal opportunities and rights to individuals regardless of gender. It is stated that sexist approaches lead to gender discrimination and that women are more exposed to this discrimination (Glick & Fiske, 1996, p. 491). Discriminatory behaviors are not only negative attitudes and behaviors, but also the lack of equality in the distribution of power and property (Parrillo, 2005). Gender discrimination in organizations is the treatment of employees differently because of their gender. Individuals who are subject to gender discrimination think that their own gender is more disadvantaged at work than the other gender. This discrimination is based solely on gender, regardless of the person's competence or job performance (Hirsh & Kornrich, 2008).

The results of studies conducted on gender discrimination have shown that men are promoted more frequently and quickly than women of equal qualifications (Mihail, 2006, p.682).

According to the Turkish Language Association's definition, affirmative action is defined as "supporting certain groups deemed to be under equal conditions with others in society by providing various privileges" (TDK). In affirmative action, privileges are granted to individuals or groups deemed disadvantaged through legal and practical means. This approach aims to improve the opportunities of historically marginalized or excluded groups, with the aim of eliminating social inequalities and creating a more equitable society (Noon, 2010). Affirmative action refers to policies that include temporary measures and rights that will ensure long-term equality by paving the way for underrepresented groups in economic, social, and political spheres (Bell, 2007).

Gender inequality underlies the structural barriers women face in the workplace, negatively impacting both individual career development and economic development. Decision-makers in managerial positions often grant women with equivalent qualifications less promotion potential than men, while men in the same profession earn higher wages, with this wage gap particularly pronounced in high-paying professions (Stamarski & Son Hing, 2015). Women's fertility decisions are a determining factor in their participation in the workforce and their educational attainment, and the fact that women are predominantly responsible for family care and responsibilities limits their full participation in the workforce (Santos Silva & Klasen, 2021). Research in the hospitality sector demonstrates that gender stereotypes toward women—for example, "women are caring, men are leaders"—are influential in the context of leadership perceptions, the legitimization of the social order, and ambivalent sexism (Je et al., 2025). Restrictions on women's access to education, employment, healthcare, and decision-making, combined with social and cultural barriers, position women as a disadvantaged group. This prevents women from fully realizing their potential and poses a significant barrier to economic growth (Santos Silva & Klasen, 2021). Furthermore, while mistakes made by female employees and lower-level employees are perceived more negatively, mistakes made by men and those in higher-level positions are either less criticized or opportunities to learn from them are more actively seized (Kucharska & Szeluga-Romańska, 2025).

In order to achieve gender equality, the concept of positive discrimination emerges. In positive discrimination, privilege is granted to individuals or groups considered disadvantaged through legal and practical means. This approach aims to improve the opportunities of historically marginalized or excluded groups in order to eliminate social inequalities and create a more just society (Noon, 2010).

Many strategies have been developed to increase female representation in business life. Some of these strategies are as follows: establishing support groups for female employees, organizing diversity workshops, anonymizing resumes in order to be gender-blind in recruitment processes and adding additional criteria to promotion processes, offering parental leave policies and flexible working hours. Gender discrimination affects not only women but also men. For example, men who are successful in stereotypically feminine tasks are thought to be less respected and less deserving of advancement. In

addition, it is stated that men do not face more employment discrimination than women in professions where the majority of women are women (Cheryan & Markus, 2020).

Previous studies have shown that organizational policies aimed at reducing gender inequalities do not work (e.g., Dobbin et al., 1993; Edelman & Petterson, 1999).

As explained above, the concept of gender equality is still one of the concepts that has not lost its importance. In this context, it is seen that the literature on gender equality has also developed. This study has attempted to reveal the current status and development levels of studies on the gender equality paradox.

Bibliometric analysis is a technique that makes it possible to provide an overview of the literature by using a fairly large amount of data (Van Nunen et al., 2018). It is thought that bibliometric analysis will provide an overview of the gender equality paradox literature. These analyses can help understand how effective research methodologies and approaches are. For example, the prevalence of methods used in management research (e.g. quantitative research, surveys, case studies) can indicate which topics these methods are more efficient in. It also provides insights into how certain methods can be developed or used more effectively in different areas. In this way, it can contribute to the development of more effective management strategies in both the academic and business worlds by making management research more efficient.

According to the literature review, it was seen that although the gender equality paradox is a popular and developing field, it has not been comprehensively addressed with a bibliometric analysis. Since no bibliometric study has been found on this concept, it is thought that the study to be conducted will fill the gap in the literature and contribute to future studies by presenting the theoretical framework. In this direction, the research questions of the study are as follows;

Research Question 1: What is the current status of the studies and literature on the concepts of gender equality and paradox?

Research Question 2: Which authors, countries, and institutions are there common connections between in the studies conducted on the concepts of gender equality and paradox?

Research Question 3: What are the variables that are

commonly studied on the concepts of gender equality and paradox?

Research Question 4: What is the current status of citations based on articles, journals, authors, institutions and countries in studies conducted on the concepts of gender equality and paradox?

Research Question 5: Are there any connections between articles, journals and authors in studies conducted on the concepts of gender equality and paradox?

Research Question 6: Are there similarities in terms of articles, journals and authors in studies conducted on the concepts of gender equality and paradox?

Research Question 7: What are the possible research areas and variables for future studies on the concepts of gender equality and paradox?

Conceptual framework

The Gender Equality Paradox

Despite all efforts and implemented policies to ensure gender equality, women are still represented at low rates in business life. In this context, despite women being offered more opportunities, the fact that these opportunities are not distributed equally in a male-dominated culture and the inequality of social norms (Cheryan & Markus, 2020) brings the gender equality paradox to the agenda. It is stated that the roadmap determined to achieve gender equality creates a paradox by revealing gender differences (Lorber, 2018). In the study of Stoet and Geary (2018), the gender equality paradox states that in more egalitarian societies, that is, in countries where women have more opportunities and rights in education, the workforce and social life, women's interest in STEM (Science, Technology, Engineering, Mathematics) fields is lower and they are less involved in these fields than men. On the other hand, in societies where gender equality is lower, the rate of women's participation in STEM fields is generally higher. In countries with high gender inequality, women's participation in STEM fields may be higher because STEM may have less social normative pressure in these societies and women may find more opportunities in these fields (Richardson et al., 2020). In societies with increasing gender equality, women may be more encouraged to pursue STEM fields, but social stereotypes and clichés about women's scientific achievements may persist. Women may not feel competent in STEM fields compared to men, which may

negatively affect their interest in STEM fields and their sense of self-efficacy (Mann & DiPrete, 2016)

Regulations made for the purpose of empowering women can sometimes cause women to face more workload, which leads to contradictory outcomes regarding gender equality (Van den Brink, 2005; Crosby et al., 2014). The paradox of support that emerges when implementing gender equality programs; It often refers to the emergence of oppositions, resistance and obstacles in the later stages of the process, which begins with a search for strong support (Sincharoen, 2005; Van den Brink & Stobbe, 2014).

The paradox is emphasized as the reason for women's inability to be active in this process. Butler et al.'s (2016) studies show that women may not behave in a resistant manner and sometimes lead to attitudes of throwing their vulnerabilities on others. In other words, women may suppress their vulnerabilities in order to comply with the norms accepted in society and male-dominated power structures.

According to Cutcher et al. (2022), these behaviors of women may emerge as an attempt to escape from normative gender roles, and this may limit the ways women cope with vulnerabilities. According to another view, it is observed that women prefer individual success instead of collective solidarity and struggle by entering into processes such as othering while trying to overcome their own vulnerabilities in order to cope with gender-based difficulties (Franken et al., 2024).

The reasons that pave the way for the formation of the paradox are; Inadequate implementation of equality policies, their implementation independently of each other, making the minority group a special focus, encountering open or hidden resistance, going beyond the existing merit-based system (Van den Brink & Stobbe, 2014). This paradox reveals that equality goals alone are generally not sufficient, and that individual, social and cultural factors should also be taken into account (Balducci et al., 2024). In order to prevent the emergence of the gender equality paradox, it is recommended that gender norms be reshaped rather than suppressed (England & Mishel, 2020; Richardson et al., 2020).

While women and men are forced to conform to the normative gender roles imposed by society, any attempt to deviate from these roles creates significant tensions at both the individual and societal levels. As Cutcher et al.

(2022) point out, the behaviors women develop in defiance of these norms can sometimes be considered an escape from traditional roles. However, this escape can manifest as suppressing their vulnerabilities and pursuing individual success. Franken et al. (2024) argue that this situation can alienate women from collective struggle and solidarity, pushing them into processes of marginalization at the expense of suppressing their own internal vulnerabilities. Similarly, men can face negative reactions from their social circles when they deviate from normative roles expected to be "strong, unemotional, and independent" (Levant & Richmond, 2007). Men's adoption of traditionally feminine roles, such as "gentle" or "caregiver," often results in exclusion or disdain. This creates a significant social barrier to men expressing their own vulnerabilities. As Addis and Mahalik (2003) emphasize, stereotypes of strength, independence, and emotional inhibition expected of men lead them to code their help-seeking behavior as "weakness." Consequently, gender norms play a repressive role for both parties, depriving not only women but also men of their potential space for expression.

While affirmative action policies aim to increase equal opportunities in education and employment, the effects of these practices are complex and multifaceted. While university quotas reserved for students of color and low-income students facilitate access to higher education for disadvantaged groups, they create a significant trade-off by leading to a decline in post-graduation incomes for high-scoring and elite students (Machado et al., 2023). Furthermore, widespread discriminatory attitudes toward students admitted to higher education through affirmative action, combined with prejudices, particularly against upper-caste students, lead to stigmatization and discrimination (Deshpande, 2019). While policies aimed at increasing diversity and inclusion in higher education increase student access, they also lead to heterogeneous outcomes in academic performance and graduation rates. While some studies observe increases in career earnings for students admitted through affirmative action, they also report that this effect is limited or temporary (Soares et al., 2022). While affirmative action is advocated for overcoming systemic barriers and promoting social equality, opposing views criticize the meritocracy principle, reverse discrimination, and the cosmetic implementation of policies. Some research suggests that these practices can deepen prejudices and threaten individual success (Teshome, 2024). Similarly, affirmative action in hiring minority candidates may not yield the expected positive effects due to uncertainties in the

evaluation process and may even have harmful consequences (Fershtman & Pavan, 2021).

There is evidence that well-designed affirmative action practices not only increase representation rates but also contribute positively to talent, job quality, and social justice (Sunam et al., 2022). However, cognitive barriers such as beliefs in meritocracy and ambivalent sexist attitudes lead to the real impact of these policies being overlooked, thus necessitating not only formal implementation but also overcoming these cognitive and structural barriers (Je et al., 2025). In this context, critically questioning the current system and prejudices is a fundamental condition for the effectiveness of positive discrimination and equality policies.

Material and Methods

Purpose of the Study

The purpose of this study is to present studies that can be associated with the concept of gender equality paradox from a holistic perspective and to reveal their current status. In addition, another purpose is to be able to make inferences regarding future studies in terms of literature.

The study in which bibliometric analysis will be conducted will serve as a resource at this point and will be able to assist and provide information in terms of the comprehensibility of the concept of gender equality paradox in future studies. Variables that are frequently studied together in the literature will be understood.

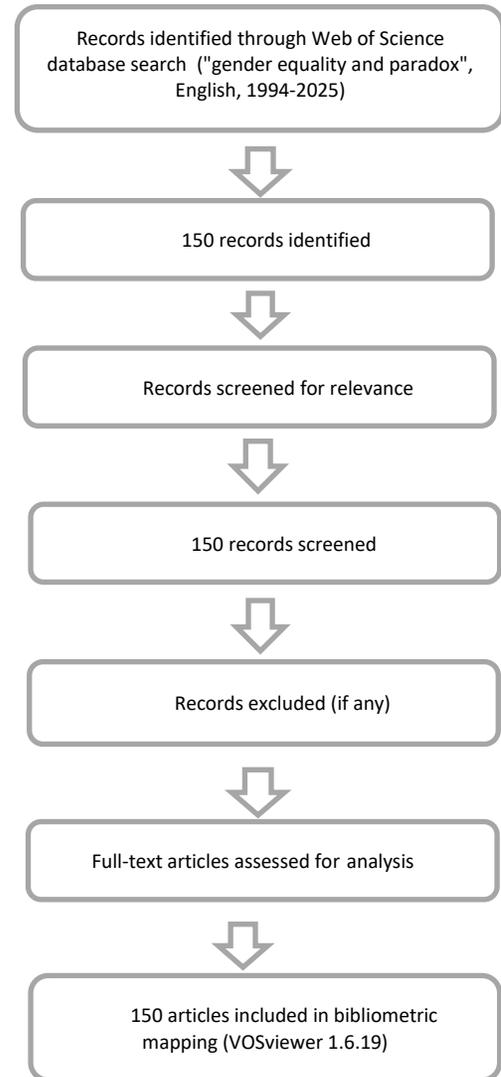
Analysis of Data

VOSviewer software was preferred in the study because it has superior functional features. It is thought to provide significant convenience to researchers in order to discover developments, connections and new concepts in the literature. In addition, it allows detailed analysis of data sets as it provides the opportunity for visualization, mapping and multi-dimensional analysis.

The Web of Science database was used for the data to be used in the study. Web of Science is one of the most widely used among the existing indexes. The reason for choosing the Web of Science database within the scope of the study is that it provides extensive literature support, allows for fast and advanced keyword searches, and allows for general and cited source searches (Falagas et al., 2008). On February 15, 2025, a comprehensive search of the Web of Science database using the keywords "gender equality" and "paradox" was conducted, yielding a total of 197 records. The PRISMA flow diagram presented below

systematically illustrates the stages of identifying, eliminating, and including records for analysis during the literature search process. The literature review process of the research is presented with the PRISMA flow diagram in Figure 1.

Figure 1.
PRISMA flow diagram in



In the year range 1994-2025, 171 articles, 24 book chapters, 11 editorial content, 10 early access, and 6 presentations from different disciplines were revealed as a result of the search. Studies in terms of disciplines are presented in Table 1.

In terms of disciplines, the majority of the studies are in women's studies (48), political science (34), and sociology (21). The data obtained were examined through author-citation-journal-country-institution and keyword analyses. The content indexed in the Web of Science database was taken as a criterion. First, the year-based distribution of

studies on "gender equality" and "paradox" is shown below. Studies on the concept in the Web of Science database cover the years 1994 -2025.

Table 1.

Categories of Studies on Gender Equality and Paradox in Web of Science by Discipline

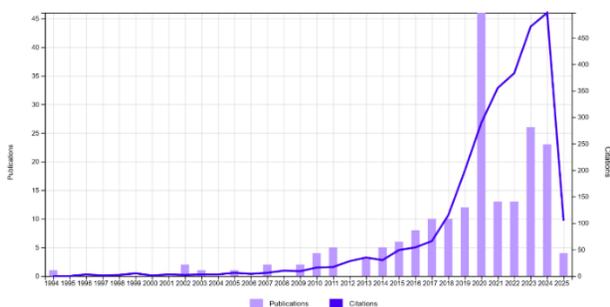
Women's Studies	48
Political Science	34
Sociology	21
Psychology multidisciplinary	19
Area studies	15
Management	15
History	14
Social psychology	14
Educational research	11
Social issues	8
Business	7
Economics	7
Public environment occupational health	7
Public administration	6
Anthropology	5
Industrial labor relations	5
Social Sciences Biomedical	5
Demography	4
Hospitality, Entertainment, Sports Tourism	4
International Relations	4
Law	4
Developmental Psychology	4
Social Sciences Interdisciplinary	4
Multidisciplinary Sciences	3
Communication	2

Figure 2 shows the distribution of studies on "gender equality" and "paradox" by year.

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Figure 2.

Distribution of Studies on "Gender Equality" and "Paradox" by Year



Source: Web of Science
Trends in Business and Economics

Results

Data Analysis

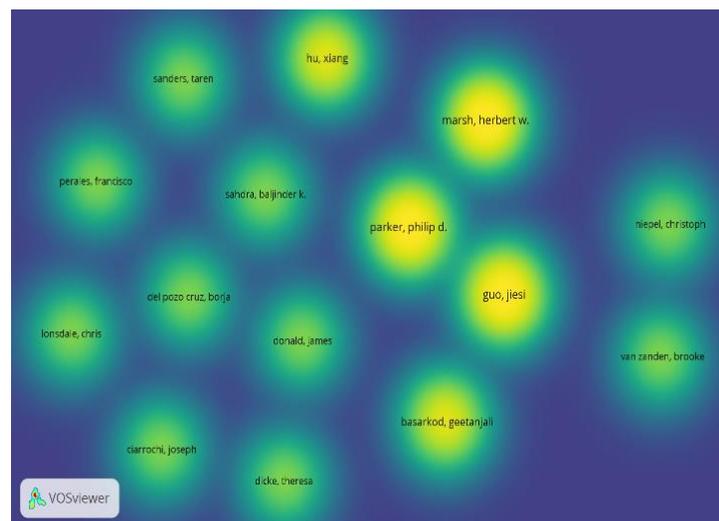
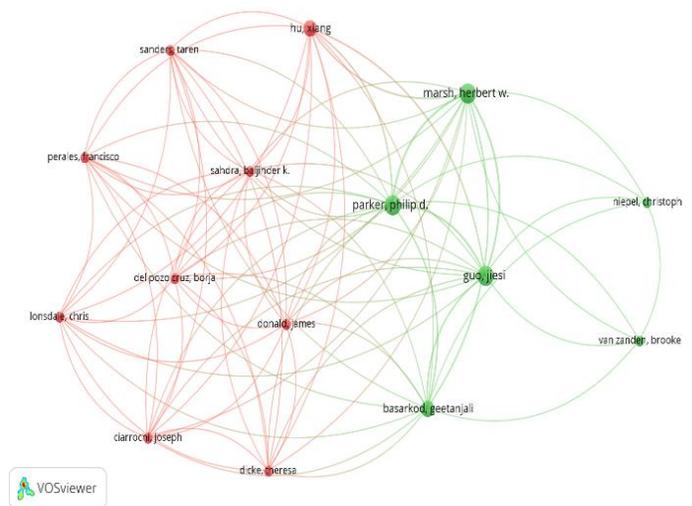
Co-Authorship Analysis

According to the co-authorship analysis of the authors, a network map was created by determining the criteria of at least 1 publication and at least 1 citation in order to identify the most connected and collaborating authors. According to the analysis made among the authors with the highest number of connections, 15 authors are united in 2 clusters and a total of 87 connections are seen. The total connection strength is 99.

Figure 3 shows the co-authorship analysis network map of authors.

Figure 3.

Co-Authorship Analysis Network Map of Authors



After the Co-Author Analysis of the authors, in the

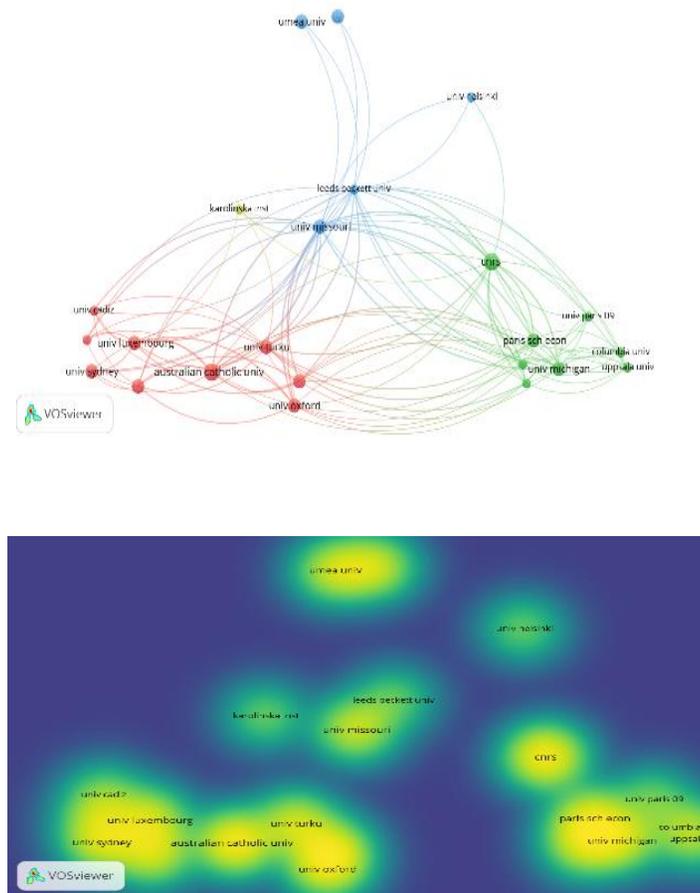
context of “gender equality” and “paradox”; Guo, Jiesi with 3 articles, Parker, Philip with 3 articles, Marsh, Herbert W. with 3 articles stand out as the authors with the highest connection between them.

Citation Analysis of Organizations

In order to create a network map regarding citations between institutions, an analysis was conducted on 23 observation units that were related to each other within the scope of the criteria of at least 1 work published and 1 citation received by an institution. The institutions with the most cited publications were Missouri University (527 citations), Leeds Beckett University (527 citations). In total, 4 clusters, 117 connections and a total connection strength of 184 were determined.

Figure 4 shows the citation links of institutions.

Figure 4.
Citation Links of Institutions



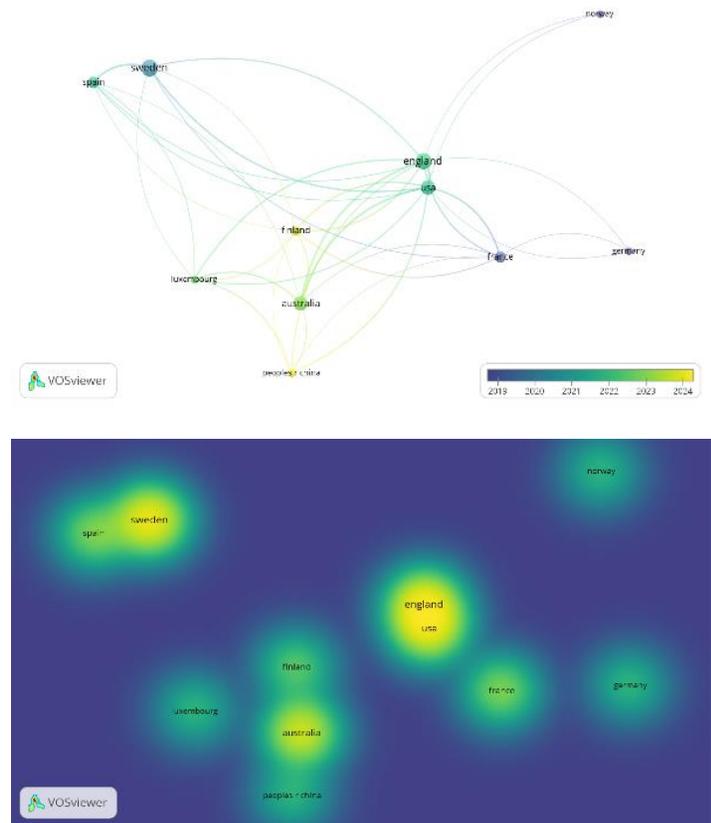
Citation Analysis of Countries

In order to create a network map regarding the citations received by the publications according to their countries of origin, an analysis was conducted on 11

observation units that were related to each other within the scope of the criteria of at least 1 work published and 1 citation received by a country. 3 clusters, 36 connections and 121 total connection strengths were determined. The countries that received the most citations were the USA (576 citations), the UK (597 citations) and Sweden (251 citations). These countries are in the top three in terms of total connection strength. In terms of the number of works, the ranking is as follows: USA (10 publications), UK (8 publications) and Sweden (9 publications).

Figure 5 shows the citation links of countries.

Figure 5.
Citation Links of Countries



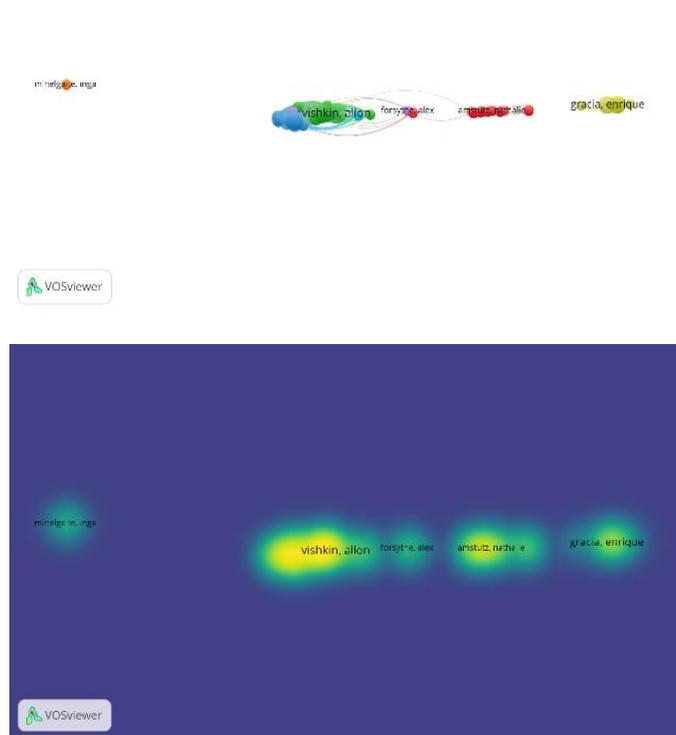
Common Keyword Analysis

The dataset obtained from the Web of Science database was examined within the scope of common keyword analysis. The frequency of occurrence of a keyword was determined as 2 with the fractional counting method in terms of the concept of “gender equality” and “paradox”. As a result of the analysis, it is seen that the keywords “gender equality” (45), “gender- social gender” (32), “gender inequality” (8), “woman” (8) came to the fore. . As a result of the analysis conducted with 376 observation units that were seen at least 2 times and had

Figure 8 shows the *authors' bibliographic matching links*.

Figure 8.

Authors' Bibliographic Matching Links



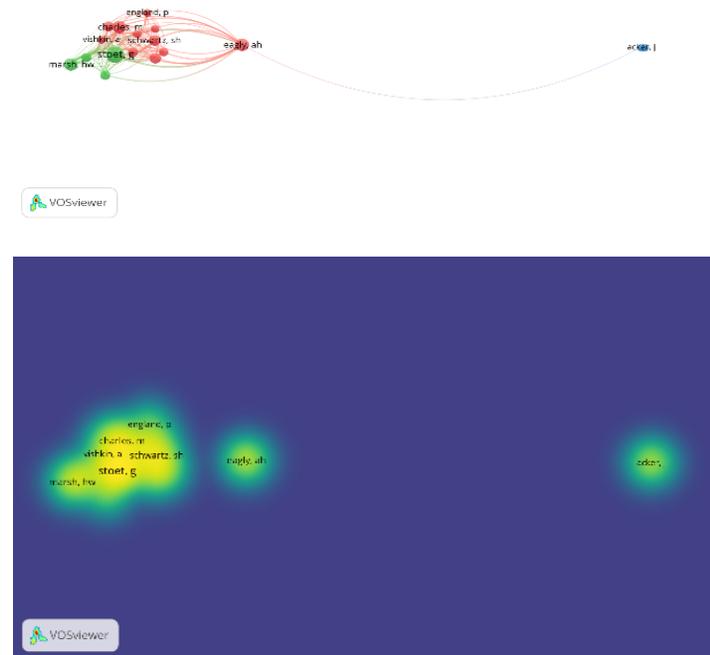
Co-citation of Co-authors

Different sources cited in a publication are called co-citations. By selecting a minimum of 10 citations, a total of 3 clusters, 107 connections and a total connection strength of 1872 were identified based on the analysis conducted on 17 units. The authors with the highest number of co-citations were identified as Stoet (44), Marsh (25) and Eagly (25).

Figure 9 shows the links between co-cited authors.

Figure 9.

Links between Co-Cited Authors

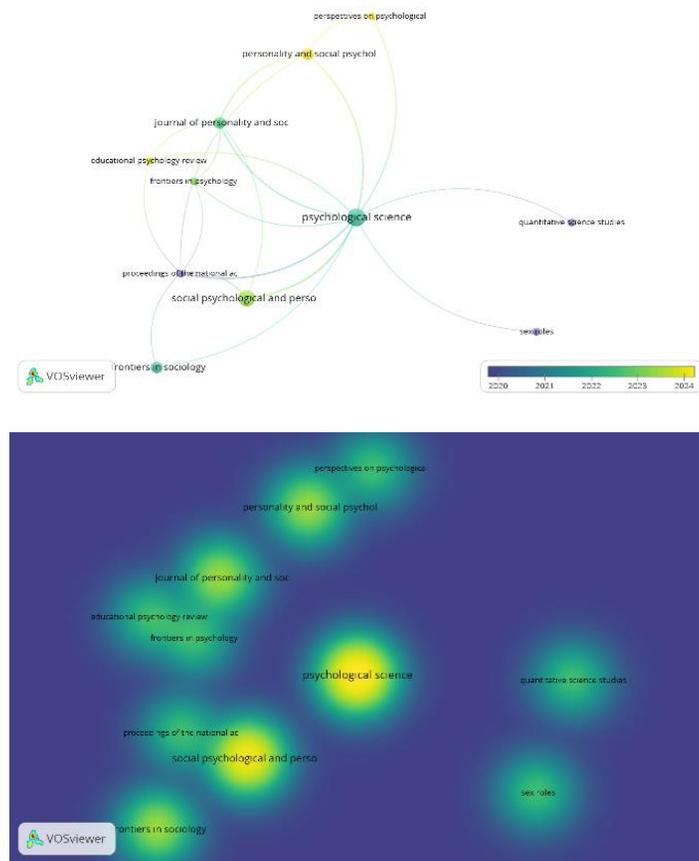


Citation Analysis of Journals (Citation of Sources)

In order to create a network map regarding the citations received by the journals, an analysis was conducted on 11 observation units that were related to each other within the scope of the criteria of at least 1 work published by a journal and 1 citation received. The most cited journals were Psychological Science (5 publications - 539 citations), Social Science and Medicine (1 publication - 121 citations), Proceedings of the National Academy (1 publication - 105 citations). A total of 5 clusters, 20 connections and a total connection strength of 39 were identified.

Figure 10 shows the citation analysis of journals.

Figure 10.
Citation Analysis of Journals



Discussion

The concept of gender equality paradox is a concept that has been gaining awareness in recent years and has developed in many fields and disciplines, especially in working life. The broad nature of the concept provides a foundation for studies conducted in different disciplines, while also revealing new areas for future studies. Therefore, two basic inferences can be made regarding studies conducted and to be conducted on “gender equality and paradox”; First, it is anticipated that studies conducted on the concept will increase, and second, it will be the focus of attention of researchers in different disciplines.

The general results are as follows; after the co-author analysis of the authors, in the context of “gender equality” and “paradox”; Guo, Jiesi stand out as the authors with the highest level of connection with 3 articles, Parker, Philip 3, Marsh, Herbert W. 3 articles. Van Reijmersdal, Eva A.;

Boerman, Sophie C.; Hudders, Liselot are the authors with the highest level of connection with each other. The ranking is similar for Van Reijmersdal, Eva A. and Boerman, Sophie C. in terms of “most cited authors”, but then the authors and citation numbers vary. When an evaluation is made in terms of countries, it is seen that the USA, England and Sweden are active in terms of publication numbers. However, when an evaluation is made based on institutions, it is determined that Missouri University and Leeds Beckett University are the institutions with the highest number of publications and connections. After the analysis, it is seen that the common keyword and text-based mapping methods in terms of “gender equality paradox” are working together with the keywords “gender equality”, “gender- social gender”, “gender inequality”, “woman”.

Academic research on the gender equality paradox has the potential to contribute to the understanding of the phenomenon, the analysis of its social effects, the development of strategic approaches and the creation of prevention/intervention strategies. The gender equality paradox creates negative effects in terms of justice, economy, social peace and individual development by continuing inequalities between women and men. Resolving this paradox ensures respect for basic human rights, economic development, social harmony and the realization of women's potential. In addition, gender equality contributes to the achievement of global goals and creates a psychologically healthier society. Therefore, achieving gender equality is essential for a fair and sustainable society. This study aims to help produce solution proposals.

Conclusion and Recommendations

Considering the heated debates and uncertainties in the literature regarding the causes of the paradox, the large-scale evidence presented by this study is valuable in terms of theoretical clarity. In particular, the contradictory findings that emerged in previous studies conducted with fragmented data or limited country samples were addressed in a more holistic framework thanks to this study. The results obtained confirm the existence and persistence of the gender equality paradox in the light of current and comprehensive data, and theoretically confirm that this phenomenon is real and needs to be explained. Moreover, our study makes an interdisciplinary contribution by bringing together different approaches in the literature (such as evolutionary, bio-social, cultural and economic explanations) within a single analysis

framework. For example, evaluating the paradox through both educational preferences and academic publication trends made the possible connections between these two areas visible. In this respect, our research develops a theoretical perspective that treats the gender equality paradox not as an exception specific to a single field, but as a more general social phenomenon. As a result, the study advances theoretical knowledge by bringing together scattered views in the literature with a systematic analysis.

The findings obtained from the study also contain remarkable messages in terms of policies and practices. First of all, it is understood that structural equality policies alone (such as providing equal opportunities in education or the workforce) may not be sufficient to eliminate imbalances in gender distribution on their own. The fact that women's participation in fields such as STEM remains low even in societies with high levels of equality indicates that the problem may have deeper cultural and psychological dimensions. Indeed, research has shown that gender stereotypes continue strongly even in developed countries and can be influential in women's career choices. In this context, policy makers and educational institutions should develop role model programs, mentoring opportunities and campaigns aimed at breaking prejudices against STEM fields for girls and young women. In particular, the transformation of implicit beliefs such as "mathematics is a man's job" or "women are more successful in humanitarian fields" may contribute to the balancing of gender gaps in the long term.

Our findings also suggest that countries need to develop strategies specific to their own conditions. In developed and egalitarian societies, it is thought that factors originating from identity and social norms rather than financial concerns are more decisive in women's withdrawal from STEM. For example, in affluent countries, women may place more importance on pursuing "socially useful" or socially approved professions; however, entering fields such as STEM creates additional identity costs due to the norms that exist in these countries such as "women should be caring". Therefore, practical solutions in places such as the Scandinavian countries should focus more on cultural transformation, guidance in school curricula, and making workplaces attractive to women. In contrast, in developing countries or in less affluent societies, economic incentives, scholarship programs, and family support mechanisms may be more effective in increasing women's participation in STEM. In short, the trends revealed by our research highlight the inadequacy of the "one-size-fits-all" approach and emphasize the

importance of policies tailored to the country and culture. Finally, the existence of the gender equality paradox suggests that what appears to be a paradox of preference in women's orientation to certain fields may actually be a reflection of socio-economic structures. Therefore, institutions that aim for diversity in the business world and academia should not only remove official barriers to women, but also proactively address the invisible barriers (such as prejudices, cultural messages, work-life balance issues) that deter them from moving towards certain professions.

While gender equality policies are often designed with good intentions, they can fall short of achieving the expected transformation in practice. Van den Brink and Stobbe (2014) argue that this inadequacy stems from factors such as superficial and fragmented implementation of policies, the "othering" of minority groups, institutional resistance, and the failure to question existing merit systems. This situation raises the issue of the gender equality paradox, which is the emergence of new social and individual injustices while aiming for equality. Balducci et al. (2024) emphasize that this paradox cannot be resolved solely through structural measures; the process must also include the transformation of individual attitudes, cultural norms, and societal values. This paradox affects not only women but also men, causing men who deviate from traditional gender roles to be subjected to social exclusion and prejudice; this suppresses men's emotional expression and help-seeking behaviors (Addis & Mahalik, 2003; Levant & Richmond, 2007). In this context, gender equality is no longer a right granted solely to women; it is also a necessity for men to freely develop their identities. Solutions include reshaping gender norms rather than suppressing them, and adopting an inclusive approach that allows for individual diversity by stretching the roles imposed on both women and men (England & Mishel, 2020; Richardson et al., 2020). Furthermore, awareness-raising training against gender-based biases and the creation of safe communication environments that encourage the sharing of mistakes are necessary (Kucharska & Szeluga-Romańska, 2025). At the corporate level, diversity policies, equitable appointments, and inclusive training programs should be developed to increase female representation and strengthen organizational capital. Lin et al. (2025) show that as female representation on boards increases, companies' organizational capital investments also increase, and that gender diversity contributes to more inclusive and long-term strategic decision-making.

Although our research uses extensive data, there are some methodological limitations that should be taken into account when interpreting the findings. First, the study is based primarily on bibliometric data and correlation analyses, which makes it difficult to establish causal relationships. A significant relationship between two variables does not mean that one directly causes the other. Indeed, as emphasized in the literature, it is risky to draw causal inferences based on cross-sectional data across countries, and it may be a hasty interpretation to say that “equality makes a difference” without following the course of the observed relationship over time. Since our study reflects general trends for a specific period, not changes over the years, it cannot provide a definitive answer to the question of whether increasing gender equality or other socio-economic dynamics affect gender differences.

Another limitation is that the analysis is limited to English articles in the Web of Science database, which excludes important studies in other databases and in different languages. In addition, some relevant publications may have been missed due to the search terms used. This study relies solely on data from the Web of Science database, which may exclude relevant literature indexed elsewhere. Additionally, the language restriction to English may introduce a bias by underrepresenting non-English scholarship.

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Genişletilmiş Özet

Amaç: Bu çalışmanın amacı, cinsiyet eşitliği paradoksunu anlamak ve bu alanda yapılan araştırmaların bibliyometrik analizini yaparak cinsiyet eşitliği paradoksu konusunda en etkili makaleleri, en üretken araştırmacıları, önde gelen dergileri, ülkeleri ve üniversiteleri belirlemektir.

Araştırma Sorusu: Cinsiyet eşitliği ve paradoksu üzerine yapılan çalışmaların ve literatürün mevcut durumu nedir?, Cinsiyet eşitliği ve paradoksu üzerine yapılan çalışmalarda hangi yazarlar, ülkeler ve kurumlar ortak bağlantılara sahiptir?, Cinsiyet eşitliği ve paradoksu üzerine yaygın olarak hangi değişkenler incelenmektedir?, Cinsiyet eşitliği ve paradoksu üzerine yapılan çalışmalarda makale, dergi, yazar, kurum ve ülkeye göre atıfların mevcut durumu nedir?, Cinsiyet eşitliği ve paradoksu üzerine yapılan çalışmalarda makaleler, dergiler ve yazarlar arasında bağlantılar var mıdır?, Cinsiyet eşitliği ve paradoksu üzerine yapılan çalışmalarda makaleler, dergiler ve yazarlar açısından benzerlikler var mıdır?, Cinsiyet eşitliği ve paradoksu üzerine yapılacak gelecekteki araştırmalar için olası araştırma alanları ve değişkenler nelerdir?

Literatür Özeti: Toplumsal cinsiyet eşitliğinin sağlanması için yapılan tüm çabalara ve uygulanan politikalara rağmen kadınlar iş hayatında hala düşük oranlarda temsil edilmektedir. Bu bağlamda kadınlara daha fazla fırsat sunulmasına rağmen bu fırsatlar erkek egemen bir kültürde eşit olarak dağıtılmamakta ve toplumsal normların eşitsizliği (Cheryan ve Markus, 2020) toplumsal cinsiyet eşitliği paradoksunu gündeme getirmektedir. Toplumsal cinsiyet eşitliğine ulaşmak için belirlenen yol haritasının toplumsal cinsiyet farklılıklarını ortaya koyarak bir paradoks yarattığı belirtilmektedir (Lorber, 2018). Stoet ve Geary (2018) tarafından yapılan çalışmada toplumsal cinsiyet eşitliği paradoksu, daha eşitlikçi toplumlarda, yani kadınların eğitimde, iş gücünde ve toplumsal yaşamda daha fazla fırsat ve hakka sahip olduğu ülkelerde, kadınların STEM (Fen, Teknoloji, Mühendislik, Matematik) alanlarına olan ilgisinin daha düşük olduğunu ve bu alanlarda erkeklere göre daha az yer aldıklarını belirtmektedir. Öte yandan toplumsal cinsiyet eşitliğinin daha düşük olduğu toplumlarda kadınların STEM alanlarına katılım oranı genel olarak daha yüksektir. Cinsiyet eşitsizliğinin yüksek olduğu ülkelerde, kadınların STEM alanlarına katılımı daha yüksek olabilir çünkü bu toplumlarda STEM daha az toplumsal normatif baskıya sahip olabilir ve kadınlar bu alanlarda daha fazla fırsat bulabilir (Richardson, Reiches, Bruch, Boulicault, Noll ve Shattuck-Heidorn, 2020).

Metodoloji: Web of Science veri tabanından İngilizce olarak “cinsiyet eşitliği ve paradoks” araması yapıldı ve veriler analiz edildi. Verilerin bibliyometrik analizinde VOSviewer (1.6.19) programı kullanıldı. 1994-2025 yılları arasında WoS veri tabanında yayınlanan 150 makalenin genel bir değerlendirmesi yapıldıktan sonra, atıf analizi, ortak atıf analizi ve yaygın kelime analizi yöntemleri kullanılarak cinsiyet eşitliği alanında bibliyometrik haritalama VOSviewer programı kullanılarak yapıldı.

Bulgular: Genel sonuçlar şu şekildedir; yazarların ortak yazar analizi sonrasında, “cinsiyet eşitliği” ve “paradoks” bağlamında; Guo, Jiesi 3 makale ile, Parker, Philip 3, Marsh, Herbert W. 3 makale ile en yüksek bağlantı düzeyine sahip yazarlar olarak öne çıkmaktadır. Van Rejimersdal, Eva A.; Boerman, Sophie C.; Hudders, Liselot birbirleri ile en yüksek bağlantı düzeyine sahip yazarlardır. Van Rejimersdal, Eva A. ve Boerman, Sophie C. için “en çok atıf alan yazarlar” açısından sıralama benzerdir, ancak daha sonra yazarlar ve atıf sayıları değişmektedir. Ülkeler bazında değerlendirme yapıldığında yayın sayıları açısından ABD, İngiltere ve İsveç’in aktif olduğu görülmektedir. Ancak kurumlar bazında değerlendirme yapıldığında en fazla yayın ve bağlantıya sahip kurumların Missouri Üniversitesi ve Leeds Beckett Üniversitesi olduğu tespit edilmiştir. Yapılan analizler sonucunda “toplumsal cinsiyet eşitliği paradoksu” açısından ortak anahtar kelime ve metin tabanlı eşleme yöntemlerinin “toplumsal cinsiyet eşitliği”, “cinsiyet-toplumsal cinsiyet”, “toplumsal cinsiyet eşitsizliği”, “kadın” anahtar kelimeleriyle birlikte çalıştığı görülmektedir.