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Gender, Creativity, and Sustainability: A Bibliometric Analysis of Women's Contributions in Creative Spaces

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Abstract

This study examines the intellectual landscape of women's participation in creative spaces in fostering innovation and advancements toward sustainabil-ity. A bibliometric analysis of 1,255 publications from WoS and Scopus pub-lished between 2000 and 2024 was conducted using ScientoPy and VOSviewer to analyze an intellectual territory map integrating gender, crea-tivity, and sustainability in understanding the nuances of women's contribu-tions in creative spaces. The findings reveal a clear thematic concentration around creativity and design. Strong collaboration is revealed within design subfields but lacks integration with gender-focused scholars. It indicates a critical need to elevate women's visibility in sustainability-oriented creative research. Recent scholarship has increasingly addressed contemporary issues such as COVID-19, mental health, and social justice, indicating the field's responsiveness to global challenges.However, sustainability-related terms appear peripheral. It suggests an oppor-tunity for greater integration of these concepts. It highlights the necessity of more targeted research and policy interventions that link women's creative contributions to sustainable development goals, potentially enhancing gen-der equity and innovation in the creative industries. Creative businesses should integrate gender, creativity, and sustainability scholarship into their operational strategies. Promoting mentorship networks of women leaders, creating women-centered creative environments that empower and support female creators, challenge gender stereotypes, and promote equitable organi-zational support. Women's perspectives are essential for advancing inclusive, diverse, and sustainable development in Creative Industries.

Keywords: *Creative Space, Gender, Creativity, Sustainability, Innovation, Bibliometric Analysis, Intersectionality.*

Introduction

Experts now regard creative areas as essential for promoting sustainability, creativity, and innovation. In these spaces, however, the women's contributions and roles are studied in academic conversations too little. It is critical to close this gap because winning the diversity-fueled innovation in the creative spaces is mandatory to reach sustainable development goals. This research intends to comprehensively map the corpus of work that intersects gender, creativity, and sustainability published between 2000-2024. This study aims to characterize salient research themes, collaborations, and gaps through bibliometric mapping of Web of Science and Scopus databases, thereby contributing to research and policy action.

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Literature Review

Creative Spaces as Platforms for Sustainable Innovation

The intersection of creativity and sustainability has become one of the most powerful tools to tackle global challenges. The creative spaces function as incubators for innovative practices toward sustainability, whether physical, digital, or conceptual. According to research, gendered stereotypes constrain the acknowledgment of women's creativity, limiting the range of ideas essential for sustainable innovation (Luksyte et al., 2017; Levick-Parkin, 2014).

Gendered Barriers to Recognition in Creative Innovation

The perception that men are inherently more creative than women continues to persist despite the evidence that there is no evidence as to why this is the case (Taylor et al., 2019 & 2020). Such biases undermine inclusion in innovation ecosystems by blocking the already scant pathways for women's creative leadership. Consequently, organizational cultures need to change to provide equal access and appreciation for different forms of creativity.

Role of Equity in Organizational and Creative Environments

Sustainable innovation flourishes in environments that value diversity. Integrating gender inclusivity into creative practices strengthens problem-solving capabilities and enhances organizational resilience (Duradoni & Fabio, 2019; He et al., 2019). Thus, addressing structural inequalities is fundamental to achieving sustainable development goals.

Methodology

Data Source

The study utilized bibliometric data from the WoS and Scopus databases to ensure a comprehensive and multidisciplinary analysis. The search strategy focused on the terms "women" AND "creative space" for publications from 2000 to 2024. The researcher initiated this data collection on 20 April 2025. Bibliometric is a type of systematic literature review in which quantitative and statistical methods are used in the bibliography to find patterns and trends (Mukherjee et al., 2022). ScientoPy performed the scientometric analysis. This tool effectively mitigates the biases associated with individual publications, allowing for a holistic appraisal (Ruiz-Rosero et al., 2019). VOSviewer generated the keyword co-occurrence and collaboration networks. Bibliometric approaches provide structural mapping but cannot fully capture the depth of qualitative contributions.

Data Cleaning: Duplicate Removal and Filtering

After the initial retrieval of 1,473 papers, document-type filtering, and duplicate management resulted in a final dataset of 1,255 papers. Table 1 presents the preliminary search results. WoS remains the predominant source (642 papers, 51.20%) as opposed to Scopus (613 papers, 48.80%). This meticulous process of refining the data provides a solid foundation for analyzing the evolving research landscape related to women and creative space.

Table 1. Initial Data Analysis Information.

Data Retrieval	Number	Percentage (%)
Loaded papers	1473	
Omitted papers by document type	197	13.40 %
Total papers after papers omission removal	1276	
Loaded papers from WoS	643	50.40 %
Loaded papers from Scopus	633	49.60 %
Duplicated papers found	21	1.60 %
Removed duplicated papers from WoS	1	0.20 %
Removed duplicated papers from Scopus	20	3.20 %
Duplicated documents with different cites by	7	
Total papers after duplicate removal	*1255*	33.30 %
Papers from WoS	*642*	51.20 %
Papers from Scopus	*613*	48.80 %

Results

Publication Trends

The research's breadth impacts at the intersection of gender, creativity, and sustainability (Table 2). The high citation counts and diverse subject matter reflect evolving discourse addressing cultural, technological, and social dimensions of women's participation in creative spaces. The most cited article garnered 726 citations, "Developing Creativity in Tourist Experiences: A Solution to the Serial Reproduction of Culture?" by Richards and Wilson (2006). It indicates a foundational influence on the study of creativity within cultural and tourism contexts. Similarly, Evans (2009) and Roussel et al. (2020) produced highly cited works reflecting sustained interest in creative cities, urban policy, and the integration of technological tools in creative analysis.

Table 2. Highly Cited Article Analysis Information.

No	Author	Title	Year	Cited by	Source
1	Richards G., Wilson J.	Developing creativity in tourist experiences: A solution to the serial reproduction of culture?	2006	726	Scopus
2	Evans G.	Creative cities, creative spaces, and urban policy	2009	638	Scopus
3	Roussel J.R., Auty D., Coops N.C., Tompalski P., Goodbody T.R.H., Meador A.S., Bourdon J.F., de Boissieu F., Achim A.	lidR: An R package for analysis of Airborne Laser Scanning (ALS) data	2020	593	Scopus
4	Essers, C., Benschop, Y.	Muslim businesswomen doing boundary work: The negotiation of Islam, gender, and ethnicity within entrepreneurial contexts	2009	310	WoS
5	Woods D., Doty D., Myhrvold C., Hui J., Zhou F., Yin P., Winfree E.	Diverse and robust molecular algorithms using reprogrammable DNA self-assembly	2019	229	Scopus
6	Bernal V.	Diaspora, cyberspace and political imagination: The Eritrean diaspora online	2006	221	Scopus
7	Woods P.A.	Democratic leadership: Drawing distinctions with distributed leadership	2004	186	Scopus
8	Lowndes V.	Something old, something new, something borrowed: How institutions change (and stay the same) in local governance	2005	169	Scopus
9	Rose, M.	The seductions of resistance: Power, politics, and a performative style of systems	2002	148	WoS
10	Fox, S., Ulgado, R.R., Rosner, D.K.	Hacking Culture, Not Devices: Access and Recognition in Feminist Hackerspaces	2015	133	WoS

Several articles focus explicitly on gendered experiences and diversity in innovative environments (Table 2). Essers and Benschop (2009) explore the negotiation of Islam, gender, and ethnicity among Muslim businesswomen, while Fox et al. (2015) address access and recognition in feminist hackspaces, both contributing to the understanding of intersectionality and inclusivity in creative spaces. Woods et al. (2019) and Lowndes (2005) further expand the thematic scope by examining diversity in algorithmic self-assembly and the role of leadership in local governance, respectively.

The publication trends among the most prolific authors in the field are illustrated in Figure 1. Thoring (2018; 2021) and Flores (2021) have produced a significant portion of their work after 2020 (36% and 80%, respectively), whereas Wierzbicki (2007; 2005) and Nakamori (2021), have not published in this area recently. The data indicate both continuity and renewal in scholarly leadership: established authors continue to contribute while new voices emerge, particularly in the wake of increased attention to gendered creativity and sustainability since 2020.

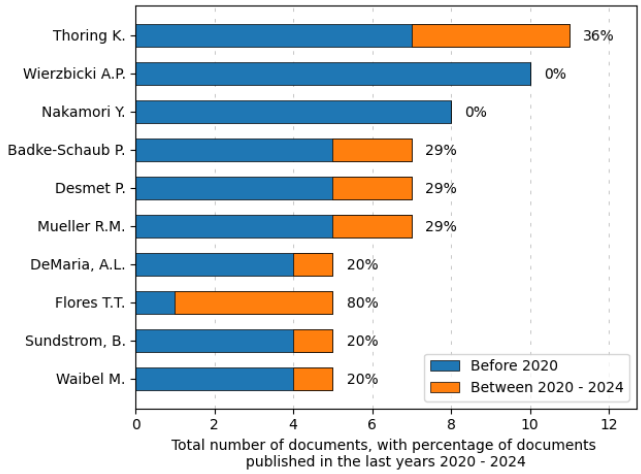

Fig. 1. The Top 10 Authors' Information.

The distribution of research output among leading institutions, segmented by the period before and after 2020, is presented in Figure 2. Newcastle University (UK) stands out, with 86% of its publications in this field produced between 2020 and 2024, indicating a recent surge in research activity. Other institutions, such as Goldsmiths University of London and the University of Auckland, also demonstrate high proportions of recent publications (67% and 80%, respectively), while universities like Toronto and Manchester show more balanced or earlier contributions. This pattern suggests that while some institutions have established a longstanding presence in this research area, others have rapidly intensified their focus in the past five years, reflecting evolving institutional priorities and possibly greater funding or strategic emphasis on gender and creativity studies.

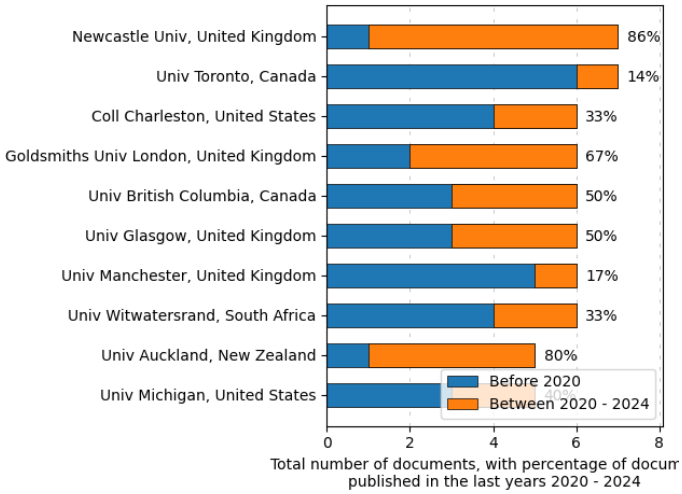

Fig. 2. The Top 10 Institutions with Countries' Information Bar Trend Graph.

Figure 3 illustrates the temporal evolution of publications across multiple disciplines relevant to gender, creativity, and sustainability. Notably, there is a pronounced increase in the number of documents published after 2010, with a sharp acceleration from 2018 onwards. Disciplines such as Women's Studies, Arts & Humanities, Social Sciences, and Education & Educational Research show the most substantial growth, reaching peaks of 8–10 publications per year by 2024. This trend

underscores a growing scholarly interest and multidisciplinary engagement with the intersection of gender and creativity, particularly in recent years.

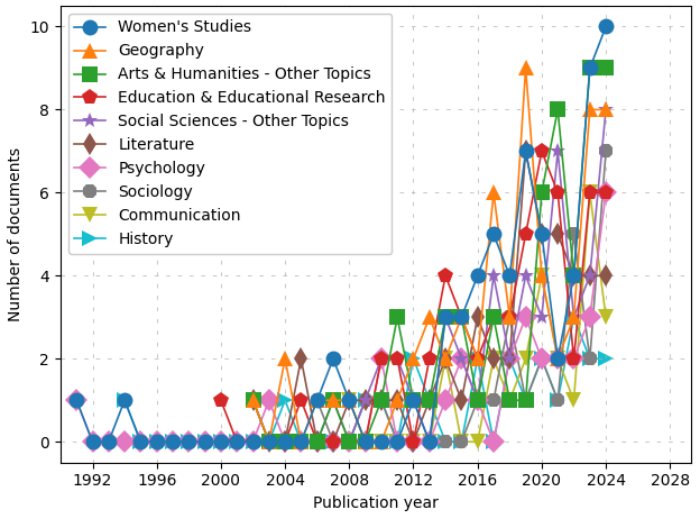

Fig. 3. The Subject Timeline Graph Information.

Author Keywords

The temporal evolution of author keywords (Figure 4) demonstrates a marked increase in scholarly output on topics such as gender, creativity, and creative spaces since 2010, with a particularly sharp rise from 2020 onwards. Notably, "gender" and "creativity" exhibit the highest cumulative document counts, indicating their centrality to the field. The right panel (Figure 4) further shows that, in the last five years (2020–2024), these topics account for the largest share of publications and maintain the highest average annual publication rates, underscoring their sustained research momentum.

The word cloud visualization (Figure 5) highlights the prominence and interrelation of key themes. "Creativity," "gender," "feminism," "creative spaces," and "women" emerge as the most frequently occurring keywords, reflecting the core focus areas within the literature. Surrounding terms such as "innovation," "identity," "art," "performance," and "community" suggest a multidisciplinary approach and the integration of social, cultural, and psychological dimensions in the study of gendered creativity.

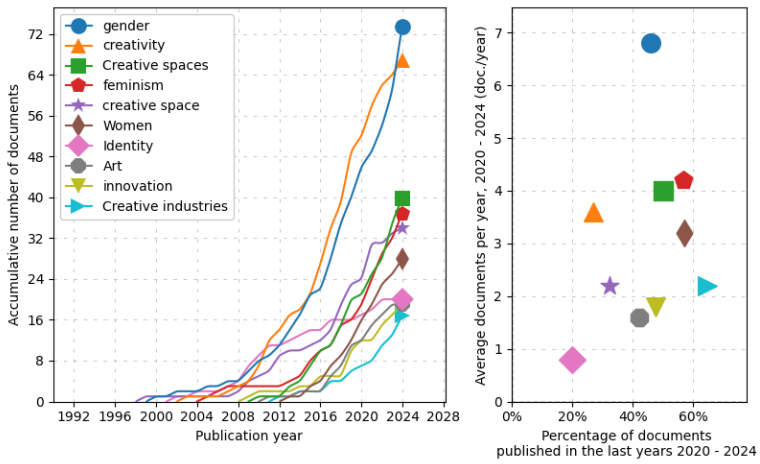

Fig. 4. The Top Author Keywords Evolution Information.

Fig. 5. The Author Keywords Word Cloud Information.

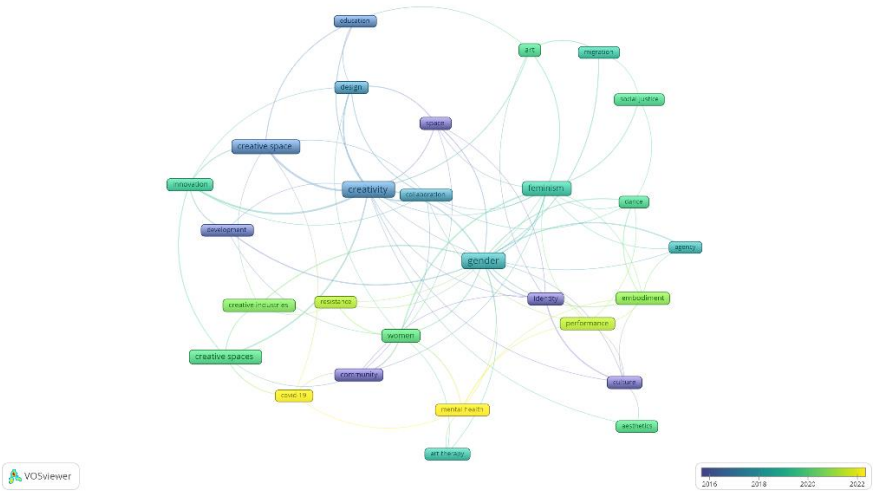

Fig. 6. The Co-Occurrence Overlay Visualization of Author Keywords**.**

The co-occurrence network map (Figure 6) provides further insight into the structural relationships among these concepts. "Gender" serves as a central node, closely linked with "creativity," "feminism," "creative spaces," and "women," indicating a highly interconnected research landscape. Peripheral but significant clusters include "innovation," "creative industries," "community," and "mental health," suggesting that gendered creativity is explored not only in terms of individual and collective agency but also concerning broader societal challenges and opportunities. The color gradient in Figure 6 indicates that emerging topics such as "mental health," "community," and "COVID-19" have gained traction in more recent years, reflecting the field's responsiveness to contemporary issues. These figures demonstrate a rapidly expanding and thematically rich body of research at the intersection of gender, creativity, and sustainability. The visualizations confirm the centrality of women's experiences in creative spaces and the growing scholarly attention to their roles in driving innovation and addressing complex social issues.

Discussion

This bibliometric analysis reveals key trends in the interdisciplinary field of gender, creativity, and sustainability. The increasing prominence of Women's Studies and Arts & Humanities after 2016 indicates a shift towards gender-specific research and the role of creative practices in addressing societal challenges. The emergence of new voices and institutions highlights the field's evolving nature and potential for future innovation. The co-occurrence network analysis underscores the centrality of concepts like gender and creativity while identifying areas that warrant further investigation, such as the explicit integration of sustainability. The late emergence and peripheral position of gendered keywords suggest systemic underrecognition. Academic leadership and research policy must address these silos by supporting interdisciplinary, equity-focused inquiry.

Conclusion

This bibliometric study highlights the insights on women's participation in creative activities, their role in innovation and sustainability, and emerging gaps. While an increasing body of literature focuses on women's participation, women and sustainability remain an aside concern. The enduring separation of gender-specific analysis from the broader narrative of creativity and sustainability reveals the urgent

need for the mainstream. Furthermore, the absence of interdisciplinary dialogue and inadequate analyses through an intersectional lens hinders the ability to respond to the multifaceted contours of women's creativity. There is a need to shift paradigms in other domains like race, geography, and class. The research intends to focus on frameworks that seek to explain the relationship between gender and creativity, as these domains widen the boundaries of understanding sustainable development and a systems approach. Constructing an equitable global research agenda requires dealing with biases embedded in bibliometric evidence and diversifying the geographic scope of research. Enabling women to spearhead innovation for a sustainable future and integrate sustainability requires intersectional advocacy from scholars and policymakers.

Acknowledgments

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