

What's gender got to do with it? An assessment of scientific writing on gender studies in Social Sciences and Communication

Ricardo Morais

CITCEM, Faculdade de Letras, Universidade do Porto (Portugal) 

Francisco Segado-Boj

Facultad de Ciencias de la Información, Universidad Complutense de Madrid (España) 

Clara Eloise Fernandes

Lasalle-College of the Arts, UNIDCOM/IADE Research Centre (Singapur) 

Valeriano Piñeiro-Naval

Departamento de Sociología y Comunicación, Universidad Salamanca (España) 

<https://dx.doi.org/10.5209/rgid.95095>

Recibido: 29/03/2024 • Revisado: 15/105/2025 • Aceptado: 20/06/2025

ENG Abstract. Gender-related studies have grown in social sciences and communication in the past few years. This interest follows society's shift and newfound knowledge of gender inequalities. Thus, this research will focus specifically on social sciences and communication, where we question and attempt to evaluate how gender matters have been scrutinised and researched by other authors, also identifying keywords used in the publications, researchers' collaborations, and their provenience. Our quantitative-method approach tackles the bibliographic information from Web of Science, where we retrieved articles authored by at least one individual affiliated with a Spanish or Portuguese institution, published between 2012 and 2022, and included in the Social Science Citation Index (SSCI) (N = 792) and Emerging Sources Citation Index (ESCI) (N = 489) databases. By adding a filter of the Communication discipline according to the WoS Category, we ended up with a disaggregated sample of 42 articles in SSCI and 39 documents in ESCI. Data reveal that gender studies are developed mainly in social sciences rather than communication, Spanish researchers collaborate more with Anglo-Saxon countries, and social sciences privilege reflections on gender identity and the gender gap. In contrast, communication focuses more on feminism and social media.

Keywords. Gender studies, social sciences, communication, articles, web of science

ES ¿Qué tiene que ver el género con esto? Un análisis de la literatura científica sobre estudios de género en Ciencias Sociales y Comunicación

ES Resumen. Los estudios relacionados con género han crecido en Ciencias Sociales y en Comunicación en los últimos años. Este interés es paralelo al cambio de la sociedad y al conocimiento acerca de las desigualdades de género. Así, esta investigación se centrará específicamente en las Ciencias Sociales y la Comunicación, donde indagamos e intentamos evaluar cómo las cuestiones de género han sido analizadas y tratadas por otros autores, identificando también palabras clave utilizadas en las publicaciones, colaboraciones entre los investigadores y su procedencia. Nuestro enfoque metodológico y cuantitativo aborda la información bibliográfica de Web of Science, de la cual recuperamos artículos escritos por al menos un firmante afiliado a una institución española o portuguesa, publicados entre 2012 y 2022, e incluidos tanto en Social Science Citation Index (SSCI) (N = 792) como en Emerging Sources Citation Index (ESCI) (N = 489). Los datos revelan que los estudios de género se desarrollan principalmente en las ciencias sociales más que en la comunicación, que los investigadores españoles colaboran más con los países anglosajones, y que las ciencias sociales privilegian las reflexiones sobre la identidad y la brecha de género. En cambio, la comunicación se centra más en el feminismo y las redes sociales.

Palabras clave. Estudio de género, ciencias sociales, comunicación, artículos, web of science.

Sumario. 1. Introduction. 2. Literatura review. 3. Methods. 4. Results. 5. Discussion and conclusions. 6. References.

Cómo citar: Morais, R. *et al.* (2025) What's gender got to do with it? An assessment of scientific writing on gender studies in Social Sciences and Communication, en *Revista General de Información y Documentación* 35 (1), 135-148, e(ID doi). <https://dx.doi.org/10.5209/rgid.95095>.

1. Introduction

The academic field has a long and continued curiosity for gender studies, and the topics are varied across this theme (Madison; Söderlund, 2018), such is the interest in gender matters in academia and research. Moreover, these topics can not only include issues such as gender parity in academia but also tackle discrimination, equality, and social conditions (Madison; Söderlund, 2018). Interestingly enough, the way these topics are approached has also evolved, with more and more studies focusing less on the evolution of such matters in academic research and more on quantitative methods being used to evaluate and compare metrics such as authorship, placement, subjects tackled, and so on (Söderlund; Madison, 2017). Furthermore, studies found that tackling gender issues could lead to publications in journals of lesser quality and impact, less visibility and, therefore, fewer citations (Söderlund; Madison, 2015; 2017). Concomitantly, the same study also drew relationships between exaggerated language and statements in such literature (Söderlund; Madison, 2015; 2017) whilst others drew a parallel between publications on gender issues and feminist political agenda in the related editorials (Madison; Söderlund, 2018).

However, “despite some progress over the last decade, gender inequalities persist in academic and research settings” and “the studies have shown that women have a lesser share of authorship positions overall and are less likely than men to be first or last author, the most relevant positions to career progression” (Pinho-Gomes; Peters; Thompson; Hockham; Ripullone; Woodward; Carcel, 2020: 1).

In this specific case, we will approach gender studies in the Social Sciences field, particularly concerning communication as a specific discipline, to understand how these studies are made and the purpose behind their emphasis. Our focus is not, at the moment, on women versus men's authorship, although we understand the interest and importance of this approach (González; Guarinos, 2017). Our research focuses on assessing gender studies, on which topics authors approach and focus, the types of collaborations between authors, and their provenience. Finally, we look at what articles are considered central in terms of citations regarding gender studies publications and evaluate significant differences between citations and topics studied.

2. Literature review

According to Pinho-Gomes et al., “underrepresentation of female researchers tends to create under-representation of issues that are relevant to women in research” (Pinho-Gomes; Peters; Thompson; Hockham; Ripullone; Woodward; Carcel, 2020: 1). Therefore, addressing gender gaps and issues related with gender inequality is important for female scientists and researchers who directly experience these issues. The authors also emphasize that: “women have been under-represented in COVID-19 research since the beginning of the outbreak. Gender equality and inclusiveness in COVID-19 research are key to succeed in the global fight against the pandemic. The disproportionate contribution of women to COVID-19” (Pinho-Gomes; Peters; Thompson; Hockham; Ripullone; Woodward; Carcel, 2020: 4). Successive lockdowns have imposed much more than restrictions on these women, as the woman of the household naturally assumes most home tasks. Many female researchers had more at-home responsibilities than their male counterparts and put their careers and professional activities on hold. However, our focus is not only on the representation of women but all gender issues that have been addressed in scientific research.

Another critical aspect of gender studies is the definition of the term “gender” itself. Although widespread and commonly used in social sciences (Kataeva; Durrani; Izenkova; Rakhimzhanova, 2023), its understanding is somewhat too vast, and interpretations are pretty expansive (Grau-Sarabia; Fuster-Morell, 2021). Although, in our case, the focus is not on male and female research (Sokil; Osorio, 2022), defining our understanding of gender is quite relevant. According to Grau-Sarabia and Fuster-Morell (2021): “Gender interacts with, but is different to the binary categories of biological sex. Gender is not only a constitutive element of social relationships based on perceived differences between the sexes but is also a primary way of signifying relationships of power, a field of norms and practices within which or through which power is articulated (Scott, 1986, p. 1067)” (2021: 2). Moreover, the term should be seen as an array of interpretations and issues brought by the diversity of fields that tackle gender studies, from political to technological and social to economic (Grau-Sarabia; Fuster-Morell, 2021).

For Scarborough and Risman, “gender study is an interdisciplinary academic field that examines gender inequality, women's lived experience, sexuality, masculinity, and the interaction of gendered social processes with race, class, and other systems of inequality” (Scarborough; Risman, 2020: 41). This is particularly relevant since western gender theories shifted considerably from the early views of philosophers and anthropologists at the beginning of the 20th century, compared to previous views of the field, deeming women and men fundamentally different. These turn-of-the-century theorists focused on the differences caused inherently by various factors, such as economic, social, political or cultural conjectures, without tackling gender inequalities as a rising issue, but rather an effect from different elements (Scarborough; Risman, 2020).

According to the authors, researchers specialise in different fields by combining gender studies with other well-explored fields, such as history or political sciences. Yet, all these themes look at differences between genders. In truth, the interest in studies on gender grew stronger with historic social movements brought by women's rights and western historical liberation movements, explored until then mainly in women's studies (Scarborough; Risman, 2020). From there, academic research started reevaluating the power imbalances and societal roles in different dimensions, from political, cultural, and social aspects. According to the authors: “While slightly different in emphasis, both women's and gender studies start with an understanding that gender inequality shapes the lives and perspectives of all individuals in society” (Scarborough; Risman, 2020: 41-42). The influence of real-life accomplishments and historical civil rights movements have undoubtedly changed the focus on gender studies for academics, with humanities turning into the main field of research for feminist researchers (Pilcher; Whelehan, 2016) and emphasising women's place and lack of balance in society, overlooked by previous theories that only portrayed the matter as a consequence of different factors, as previously approached. However, if both gender and women's studies include a vast collection of disciplines and topics, “the fundamental characteristic of gender studies that distinguish it from women's studies is the emphasis of gender as a system implicating the personalities, relationships, and social positions of both women and men” (Scarborough; Risman, 2020: 50-51).

As many different fields have been approached and crossed with gender studies (Hoppen; Vanz, 2023), the primary purpose of these studies seems to identify specific gender inequalities and perhaps solve them (Grau-Sarabia; Fuster-Morell, 2021). Yet social and cultural changes in gender equality seem to be both extremely distant as much as they have evolved. Our societies struggle to make the matter public as much as it is often taken by political agendas or simply because gender inequalities are so systemic that other public scandals often overshadow even recent movements like #MeToo. Nonetheless, the discussion on gender representation and equality has never been so vocal and widespread, and academic research is a crucial vehicle for such change to transcend political and economic factors, as well as to assess how specific communication trends or social events can take part in the role of new discussions on gender equality. It is even more crucial to take a multidisciplinary approach to gender studies and research in a vast array of fields to understand how this matter is institutionalised and widespread across disciplines (Scarborough; Risman, 2020). Multidisciplinarity has also been a common approach in gender studies, as many different areas of study have tackled this subject over the past few years (Hoppen; Vanz, 2023), a phenomenon that appears to be responsible for a consolidation of the interest and attention of gender studies through the lens of many other research areas (Hoppen; Vanz, 2020). This multidisciplinary approach is also believed to be evolving from a crossing between studies and cultural studies, into a new discipline (Curthoys, 2014).

Moreover, our study comes at a time when the European Commission has also made a conscious mission, since 2012, to promote the “integration of the gender perspective in research” (Hernández Ruiz; Tortajada; Martínez, 2023: 219-220). In an attempt to reduce the gap in scientific research, the commission has created a set of guidelines called “Sex and Gender Equity in Research guidelines” (or SAGER). Yet, as authors Hernández Ruiz, Tortajada and Martínez have found, such guidelines being implemented by editors on their journals cannot account for their rightful and effective implementation (Hernández Ruiz; Tortajada; Martínez, 2023: 219-220). On the other hand, Wöhrer points out that “being located at a North American or Western European institution still seems to be a crucial factor in authors being published and referred to – both in Western academic centres and in other regions” (Wöhrer, 2016: 323). These are just a few of the ideas defended by other authors on gender studies.

In this particular case, we focused on the area of communication, following other studies that sought to understand the presence and development of works relating to gender and women's studies have been analysed (Zurbano-Berenguer; Cano-Orón; Liberia Vayá, 2018). In this context, we tried, above all, to understand the angles considered in gender studies, the importance of collaboration between researchers from different countries, and also to what extent the various investigations recur and frequently cite the same studies.

Considering the substantial deficit of such incorporation of the gender dimension in Communication and Media Studies (Rodríguez; Cucklanz, 2014), our research seeks to understand how communication studies and social sciences studies are contributing to gender studies. In addition to assessing the issue of women and the position they occupy, as done in previous research (Rodríguez; Cucklanz, 2014), we also want to highlight the other problems, namely in research, since this has become a critical stage of validation of scientific results and to generate new avenues for change and social transformation.

It is in this context that we consider this work relevant because, as other studies have also shown us (Coslado; De Filippo; Ros; Sanz-Casado, 2023) “the study of gender bias is essential for scientific development since it reveals how gender stereotypes are manifested in research” (Coslado; De Filippo; Ros; Sanz-Casado, 2023: 2). Thus, from the point of view of the review of the literature or the starting point for this work, it passes, on the one hand, to enhance the studies that have analysed the possibility of the genre influencing the opportunities of publication of the articles, but also as there are several investigations that that we try to demonstrate that the gender can affect the levels of appointments of the jobs. However, there is a lack of studies that analyse the question of the genre from the point of view of collaboration between different authors from different countries. It was in this context that the present work arose seeking, in addition to comparing the publications that have less than a Portuguese or Spanish author, to understand what is hidden behind the term genre when we look at the primary databases of journals in the area of Social Sciences and Communications.

We, therefore, believe that it is relevant to understand this issue methodology-wise and empirically since gender is also a central part of the UN's Sustainable Development Goals for 2030, as questions of gender pull other crucial issues from health to economic and social matters (Majumder; Pandya; Chaudhary; Bhatt; Trivedi, 2021). Moreover, more than one topic can arise when we talk about gender, so it is crucial to continue to scrutinize and develop more conversations about this subject's relevance, from its multiple definitions to all its implications (Morais; Fernandes; Piñeiro-Naval, 2022).

Nevertheless, it is already well-known that gender equality in science is an established issue with many different implications. According to Astegiano *et al.* (2009):

The historical underrepresentation of women in science itself and socio-psychological and cultural factors underpinning gender bias against women may modulate gender differences in productivity perpetuating gender inequality in science. Gender-group productivity differences are not decreasing with time, even in research fields in which gender numerical equality has been reached” (2019, p. 10). The author also believes “much more work needs to be done to exclude gender inequality. If differences in productivity are linked to the time that researchers can dedicate to do science and to peer recognition in a male-dominated landscape, and if science impact has an important component of self-recognition, then socio-cultural gender bias against women may still be a strong factor promoting such inequality (Astegiano; Sebastián- González; Castanho, 2019: 10)

The topic that we address in this article is also relevant because most studies are still being done in STEM (Science, Technology, Engineering, Mathematics), whereas other areas, such as Social Sciences and especially Communication, are still little explored, and “funding institutions often use bibliometric methods to help them decide on priorities and to evaluate funded research” (Vera-Baceta; Thelwall; Kousha, 2019: 1).

We started this investigation with a literature review, which sought, above all, to highlight the need to promote awareness of gender issues in scientific production in the area of Social Sciences and Communication. Considering that scientific journals are fundamental elements in disseminating research, it is essential to understand, in line with

other studies, the role assumed, in particular, by gender studies in these publications. The very terminology associated with gender issues also integrates the literature review since we also tried to understand to what extent this expression manages to address such different investigations, depending on the context and areas of research.

Thus, after reviewing the literature, we present the methodological procedures adopted to collect and analyse articles by Portuguese and Spanish authors in the Social Science Citation Index (SSCI) and Emerging Sources Citation Index (ESCI) databases. The results will then be presented, with an attempt to establish a comparison between the countries under study and the research areas analysed. The work ends with conclusions, where in addition to systematising the main results, we present the research limitations. At the same time, we also propose new paths to be explored in the future, considering the need to develop policies that give visibility to the work of researchers in the areas of Social Sciences and Communication, namely through the publications they carry out in specialised journals.

3. Methods

We retrieved the bibliographic information from Web of Science (WOS) through the query in all fields: ("gender studies" OR "gender gap" OR "gender identity" OR "gender representation" OR "gender roles" OR "gender research").

The words were chosen to achieve results within the scope of gender research, using only what the platforms present when a search is done based on that term. For this reason, other terms were excluded since the analysis is mainly based on the complexity of terminology on gender topics.

Results were restricted to articles authored by at least one individual affiliated with a Spanish or Portuguese institution, published between 2012 and 2021, and included in the Social Science Citation Index (SSCI) (N = 792) and Emerging Sources Citation Index (ESCI) (N = 489) databases. Data was downloaded on September 16th, 2022. We applied an additional filter by Communication discipline according to the WOS Category, which generated a disaggregated sample of 42 articles in SSCI and 39 documents in ESCI.

By applying an additional filter by Communication discipline according to the WOS Category, we mean to explain that we worked with two datasets. We, therefore, first analysed the Social Sciences category, which includes all the results in the whole SSCI, and then only the communication category in SSCI.

We used VOSViewer software (van Eck; Waltman, 2010) to generate three different networks from the bibliographic information: international collaboration, keyword co-occurrence (co-keyword), and co-citation. Networks or graphs represent the relationships among elements (nodes or vortexes) through links (also known as edges or lines).

In the international collaboration network, each country is a node. Countries are connected when two or more scholars associated with institutions from different nations have authored at least one document together.

The co-keyword network vortexes are the keywords assigned by the authors to each document. These nodes are linked among themselves every time they are listed together in one article. We discarded the automatically assigned keywords by WOS. We manually homogenised the keywords to identify and merge synonyms or similar concepts (f.i., 'youth' and 'young people') and different spellings of the same term (f.i., 'content analysis' and 'content-analysis'). Thus, we reduced the original 3683 keywords in the global network and the 375 keywords in the Communication sample to 3603 and 354 elements, respectively.

Similarly, the co-citation network represents the relationships among documents (nodes) cited in the same reference list of any posterior article in the sample. When two articles appear in a reference list, they are thus linked between them. This co-citation network has been generated from references cited at least twice.

We have employed Pajek software (Batagelj; Mrvar, 1998) to visualise and analyse these networks. To represent the graphs, we have followed a reduction strategy to make the figures more easily readable and to highlight the more relevant relationships in each network. We have removed lines that did not reach a minimum threshold of frequency. We also provide the following structural indexes (see Table 1) of each network:

- Nodes: The total sum of the number of elements in the network.
- Components: A component is a block of nodes connected among themselves, disconnected from other groups of vortexes. The higher this value, the more fragmented the network.
- Main component size: Indicates the percentage of nodes included in the most significant component of the network.
- Density: This index measures how tightly connected the vortexes are among themselves. A value of 1 would imply that all the possible links among the nodes exist. Meanwhile, a value of 0 would suggest that all the vortexes are disconnected, and the network lacks any line.
- Centrality: Centrality Degree (CD) can be defined as how many connections a node has to other vortexes in the network. The higher this value, the more connected and, by extension, the more relevant a node is. We offer a ranking of centrality degrees for each network (Tables 2 to 5) and the average degrees in each graph (see Table 1). We also provide the centrality value for each network, taken as the extent to which it is developed among particular nodes. A centrality value of 1 would mean that the graph revolves around one only node, connected to the rest of the vortexes, which are not connected among themselves. On the contrary, a centrality value of 0 would mean that all the vortexes in the graph are equally connected.
- Clustering coefficients: Clustering refers to the probability that vortexes connected to a given node are linked to that element and connected among themselves. In other words, the idea is that nodes are forming groups or communities instead of just establishing isolated connections. In this sense, we provide two values. Watts-Strogatz coefficient is calculated considering the low centrality degree nodes, and Transitivity considers the connections among high centrality vortexes. That is, Transitivity implies how connected the most central nodes are and Watt-Strogatz refers to how the peripheral nodes are connected alongside the most relevant vortexes.

- Average distance: It measures the number of vortexes that separate two given nodes.
- Longest distance: It identifies how far between them are the most distant points in the graph.

Table 1 Estructural indexes of the analysed networks

Structural Indexes	Social Sciences			Communication		
	International collaboration	Co-citation	Co-keyword	International collaboration	Co-citation	Co-keyword
Nodes	80	5258	3603	13	144	354
Components	1	7	80	1	5	6
Main component size (%)	100	98.9	89.84	100	95.14	92.37
Density (no loops)	0.23	0.01	0	0.22	0.15	0.03
Average Degree	17.98	48.41	7.78	2.62	21.51	9.36
Watts-Strogatz Clustering Coefficient	0.81	0.61	0.90	0.82	0.73	0.91
Transitivity	0.58	0.43	0.08	0.19	0.74	0.37
Centrality	0.68	0.14	0.23	0.92	0.33	0.28
Average distance	1.85	3.07	3.20	1.78	2.52	2.88
Longest distance	3	7	8	2	6	6

Source: authors' own elaboration.

The manuscript's next section is dedicated to the report of the main results achieved in this study: first, international collaboration; second, co-keywords network; and finally, co-citation patterns. All this data is divided into two groups related to the fields of Social Sciences, in general, and Communication, in particular.

4. Results

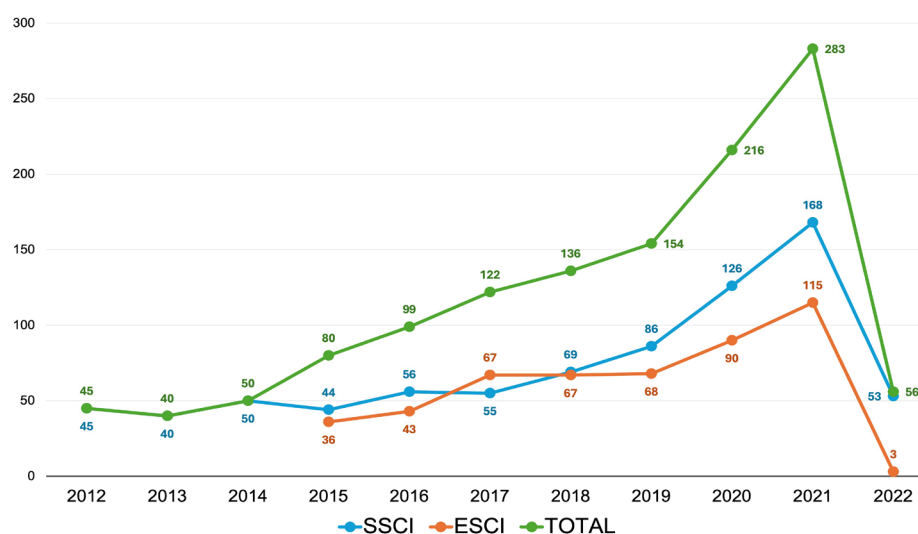
We elaborated several figures and tables to present the retrieved data and results. To kick-off our result and discussion section, we will share the sample distribution (Table 2):

Table 2 Sample distribution (frequencies)

Category	Ranking		Total
	SSCI	ESCI	
Social Sciences	750	450	1200
Communication	42	39	81
Total	792	489	1281

Source: authors' own elaboration.

We can see in Table 2 that the field of Communication only contributes with 81 articles (6,32%), while the aggregate of Social Sciences represents the 93,68% of the sample. In order to see the chronological evolution of gender production, Figure 1 shows the timeline for the 2012-2022 period:



(figure.1) Chronological evolution of gender production (2012-2022). Source: authors' own elaboration.

Figure 1 shows three lines: the evolution of papers indexed in SSCI (blue), ESCI (orange) and the total amount of documents (green). In all cases we can observe an increasing trend until 2021. However, data was downloaded on September 16th, 2022, so we can't make an accurate interpretation of 2022. With regard to journals that most contribute to the study sample, they appear in Table 3:

Table 3 Journals that most contribute to the study sample (frequencies)

SSCI		ESCI	
Journal	N		N
Journal of Gender Studies	52	Feminismo/s	14
Sustainability	33	Investigaciones Feministas	13
International Journal of Environmental Research and Public Health	29	Revista Iberoamericana de Tecnologías del Aprendizaje	9
Frontiers in Psychology	20	Revista Latina de Comunicación Social	8
Gaceta Sanitaria	19	Prisma Social	6
PLoS One	12	Aposta	5
Profesional de la Información	10	Athenea Digital	5
Comunicar	9	Communication & Society	5
Movimento	9	Revista Complutense de Educación	5
Psicothema	9	Social Sciences	5
Sex Roles	9	Arenal	4
Social Indicators Research	9	Masculinities & Social Change	4

Source: authors' own elaboration.

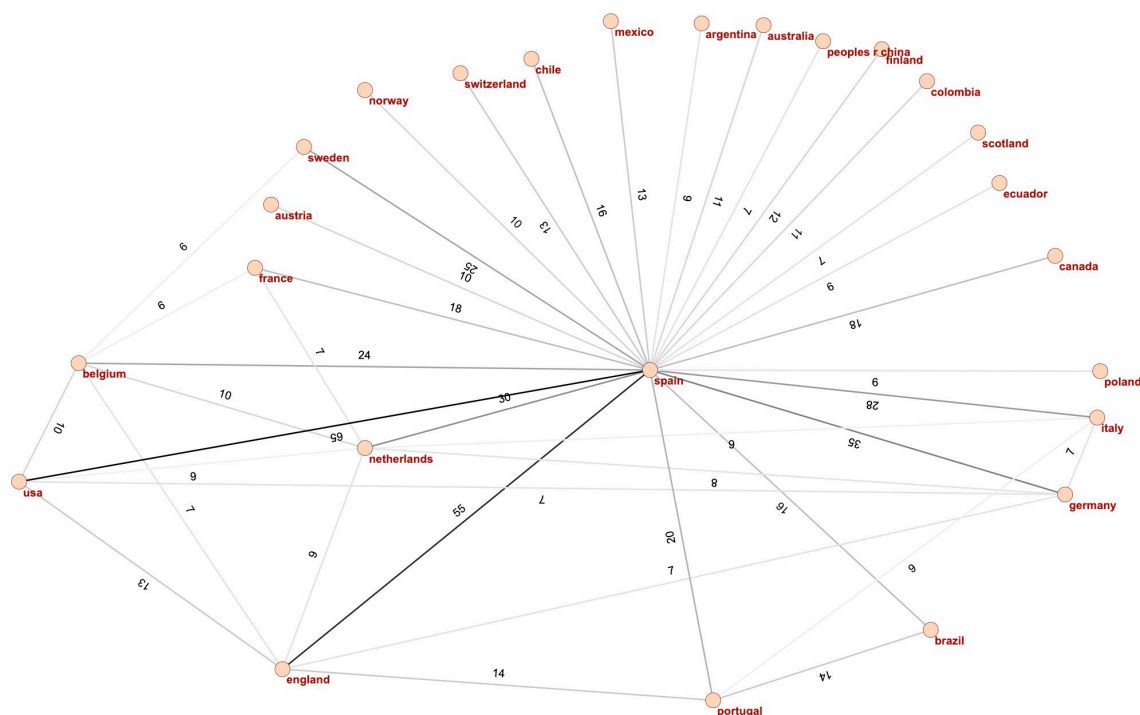
According to Table 3, the main journal are “Journal of Gender Studies” (SSCI) and “Feminismo/s” (ESCI). At this point, we continue with international collaboration networks. In Table 4 is possible to see a list of top nations ordered by their centrality degrees:

Table 4 Top nations by centrality degree in the international collaboration networks

Social Sciences		Communication	
Nation	CD	Nation	CD
Spain	70	Spain	12
England	49	USA	3
USA	48	Switzerland	3
Belgium	46	Italy	2
Portugal	46	England	2
Netherlands	44	Chile	2
Italy	44	Portugal	2
Germany	43	Germany	2
Sweden	37	France	2

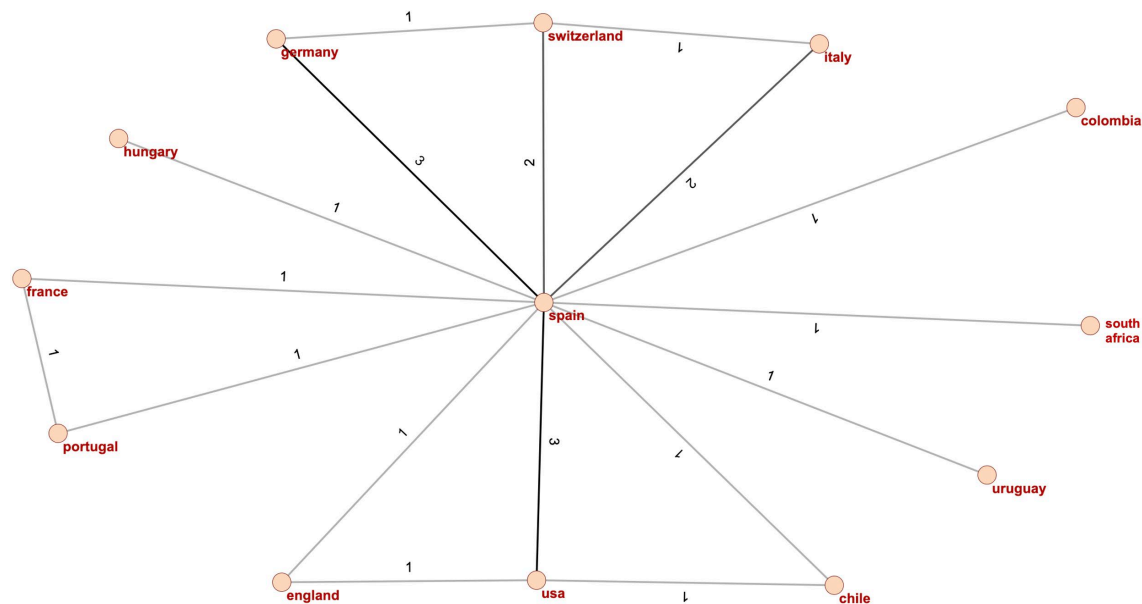
Source: authors' own elaboration.

As could be expected due to the search criteria (articles authored by at least one individual affiliated with a Spanish or Portuguese institution), Spain is at the top of the list, and Portugal also appears as one of the most important countries, especially in the Social Sciences general category. The following figures (2 and 3) show in an obvious way the central role that Spain plays in the international collaboration network.



(figure.2) International collaboration network (Social Sciences). Source: authors' own elaboration.

Figure 2 indicates that the most frequent relationships are established between: Spain and USA (65 documents), Spain and England (55), and Spain and Germany (35). Regarding the collaboration network in the field of Communication (Figure 3), Spain is also regularly connected with the USA (3) and Germany (3). Yet, given the fewer documents in the Communication sample, such relationships are less frequent and more irregular.



(figure.3) International collaboration network (Communication). Source: authors' own elaboration.

In figures 2 and 3, as well as table 4, we can observe a connection between Spain and English-speaking countries, which can result from the fact that efforts are made to allow more visibility to publications through the English language in the field of social sciences, but also the area of communication. In this context, it is also interesting that, although Portugal and Spain are neighbouring countries, there is no significant collaboration network. These data indicate different concerns concerning gender studies in both countries and different approaches to establishing collaborations. The results' second part focuses on the most central keywords (see Table 5) around which the gender scientific production is organised.

Table 5 Top 25 keywords by centrality degree in the co-word networks

Social Sciences		Communication	
Keyword	CD	Keyword	CD
gender	849	gender	108
gender studies	440	gender studies	98
gender identity	357	social media	72
gender gap	330	feminism	60
gender roles	275	gender gap	50
spain	244	women	47
women	212	spain	41
feminism	205	adolescents	39
gender equality	184	internet	39
adolescents	174	stereotypes	39
stereotypes	128	journalism	35
education	121	advertising	34
social media	115	youth	33
masculinities	109	television	32
gender stereotypes	107	gender representation	28
identities	101	gender equality	26
gender differences	100	twitter	25
qualitative methods	87	journalist	24
transgender	84	digital divide	24
covid-19	78	digital activism	23
higher education	76	content analysis	23
youth	75	sexism	23
gender dysphoria	74	research	22
sexism	72	gender stereotypes	22
discrimination	67	gender inequality	22

Source: authors' own elaboration.

cluster is the third in several components, dominated by “gender studies” and “feminism”. The red cluster refers to gender “roles” and “stereotypes”, while the blue group is only composed of “gender dysphoria” and “transsexualism”.

The research clusters confirm the initial idea regarding the difference between countries and thematic approaches. In the Portuguese case, gender studies in social sciences have focused on education, university, innovation and entrepreneurship issues. In contrast, in the case of Spain, more generic studies stand out but are oriented to other aspects, such as media consumption. At the crossing between Communication Studies and Gender Studies, again, different paths stand out, with the Spanish focusing on gender roles and gender stereotypes, in addition to issues of masculinity. On the other hand, the Portuguese focus on the part of women in feminism, also considering cultural studies in these approaches. In short, we can say that the clusters are much denser in social sciences, a sign of greater multi-disciplinarity and fewer ramifications in communication. However, in this field, new thematic areas are addressed.

The third part, or results report, is dedicated to co-citation networks. In this sense, the following tables (6 and 7) include the lists of the top 10 references about gender in Social Sciences and Communication.

Table 6 Top-10 references by centrality degree in the global Social Sciences co-citation networks

nº	Complete reference	CD
1	West, C., & Zimmerman, D. H. (1987). Doing gender. <i>Gender & Society</i> , 1(2), 125-151.	760
2	Bem, S. L. (1974). The measurement of psychological androgyny. <i>Journal of Consulting and Clinical Psychology</i> , 42(2), 155-162.	568
3	Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. <i>Psychological Review</i> , 109(3), 573-598.	455
4	Eagly, A. H., & Kite, M. E. (1987). Are stereotypes of nationalities applied to both women and men? <i>Journal of Personality and Social Psychology</i> , 53(3), 451-462.	409
5	Bianchi, S. M., Milkie, M. A., Sayer, L. C., & Robinson, J. P. (2000). Is anyone doing the housework? Trends in the gender division of household labor. <i>Social Forces</i> , 79(1), 191-228.	382
6	Brines, J. (1994). Economic dependency, gender, and the division of labor at home. <i>American Journal of Sociology</i> , 100(3), 652-688.	354
7	Glick, P., & Fiske, S. T. (2018). The ambivalent sexism inventory: Differentiating hostile and benevolent sexism. In <i>Social Cognition</i> (pp. 116-160). Routledge.	342
8	Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. <i>Qualitative Research in Psychology</i> , 3(2), 77-101.	327
9	Inglehart, R., Norris, P., & Ronald, I. (2003). <i>Rising tide: Gender equality and cultural change around the world</i> . Cambridge University Press.	320
10	Spence, J. T., & Helmreich, R. L. (1978). <i>Masculinity and femininity: Their psychological dimensions, correlates and antecedents</i> . University of Texas Press.	298

Source: authors' own elaboration.

Table 7 Top-10 references by centrality degree in the Communication co-citation networks

nº	Complete reference	CD
1	Galán-Fajardo, E. (2007). Gender construction and Spanish fiction TV. <i>Comunicar</i> , 14(28), 229-236.	68
2	García-Muñoz, N., Fedele, M., & Gómez-Díaz, X. (2012). The occupational roles of television fiction characters in Spain: distinguishing traits in gender representation. <i>Comunicación y Sociedad</i> , 25(1), 349-366.	60
3	Fernández-Villanueva, C., Revilla-Castro, J. C., Domínguez-Bilbao, R., Gimeno-Jiménez, L., & Almagro, A. (2009). Gender differences in the representation of violence on Spanish television: Should women be more violent? <i>Sex roles</i> , 61(1), 85-100.	57
3	Tous-Rovirosa, A., Ayerdi, K. M., & Sola, N. S. (2013). La imagen de la mujer en series de televisión españolas. Análisis de los casos Vasco y Catalán. <i>Comunicación y Sociedad</i> , 26(3), 67-97.	57
4	Signorielli, N., & Bacue, A. (1999). Recognition and respect: A content analysis of prime-time television characters across three decades. <i>Sex roles</i> , 40(7), 527-544.	54
4	Signorielli, N. (2009). Race and sex in prime time: A look at occupations and occupational prestige. <i>Mass Communication and Society</i> , 12(3), 332-352.	54
4	Signorielli, N., & Kahlenberg, S. (2001). Television's world of work in the nineties. <i>Journal of Broadcasting & Electronic Media</i> , 45(1), 4-22.	54
5	Belmonte-Arocha, J., & Guillamón-Carrasco, S. (2008). Co-educating the gaze against gender stereotypes in TV. <i>Comunicar</i> , 16(31), 115-120.	53
6	Red2Red Consultores (2007). Tratamiento y representación de las mujeres en las teleseries emitidas por las cadenas de televisión de ámbito nacional. Madrid: Instituto de la Mujer.	51
7	Bazzini, D. G., McIntosh, W. D., Smith, S. M., Cook, S., & Harris, C. (1997). The aging woman in popular film: Underrepresented, unattractive, unfriendly, and unintelligent. <i>Sex roles</i> , 36(7), 531-543.	49
7	Collins, R. L. (2011). Content analysis of gender roles in media: Where are we now and where should we go? <i>Sex roles</i> , 64(3), 290-298.	49
7	Vernon, J. A., Williams Jr, J. A., Phillips, T., & Wilson, J. (1991). Media stereotyping: A comparison of the way elderly women and men are portrayed on prime-time television. <i>Journal of Women & Aging</i> , 2(4), 55-68.	49
8	Neuendorf, K. A. (2017). <i>The content analysis guidebook</i> . Sage.	47
9	Rudy, R. M., Popova, L., & Linz, D. G. (2011). Contributions to the content analysis of gender roles: An introduction to a special issue. <i>Sex roles</i> , 64(3), 151-159.	46
10	Rudy, R. M., Popova, L., & Linz, D. G. (2010). The context of current content analysis of gender roles: An introduction to a special issue. <i>Sex roles</i> , 62(11), 705-720.	44

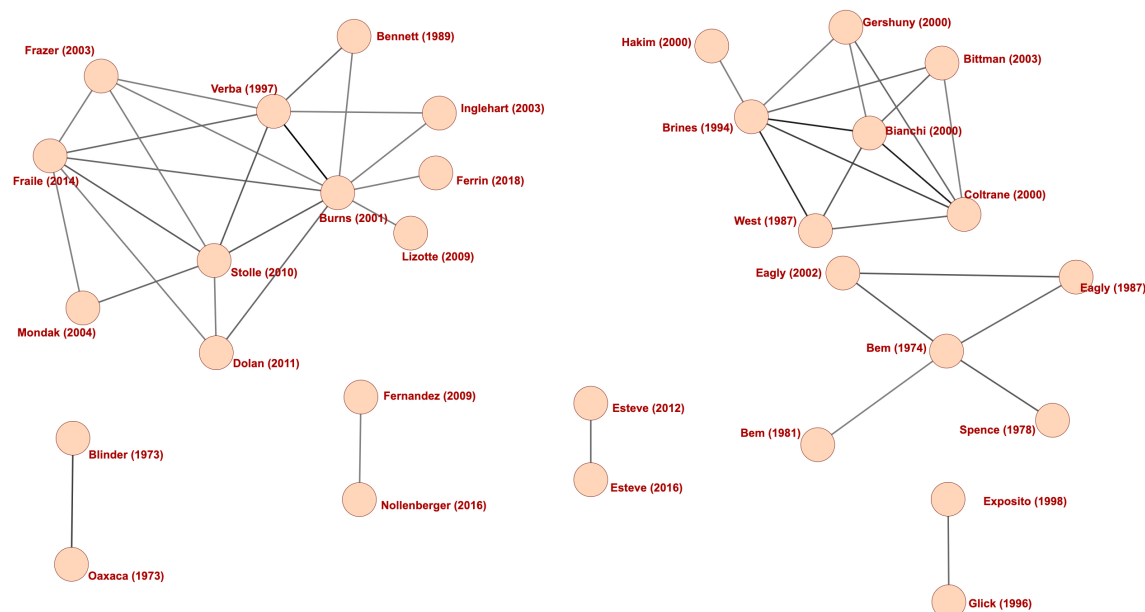
Source: authors' own elaboration.

In Social Sciences, we observe a wide variety of references, both journals and handbooks. However, when discussing the Communication discipline, we detect two frequent authors (Signorielli and Rudy) and especially two leading journals: Sex Roles and Comunicar. This fact reveals a higher reference concentration in Communication when compared with the general Social Sciences field.

We checked the authorship of the papers listed in the table. Through the specific analysis of each piece, it was possible to know the names behind the initials and thus identify whether they were female researchers. It is also interesting to note that among the Top-10 references by centrality degree in the global Social Sciences co-citation networks (table 6), only three are first authored by a man, which reveals that co-citation networks in social studies are centred on works whose first author is a woman.

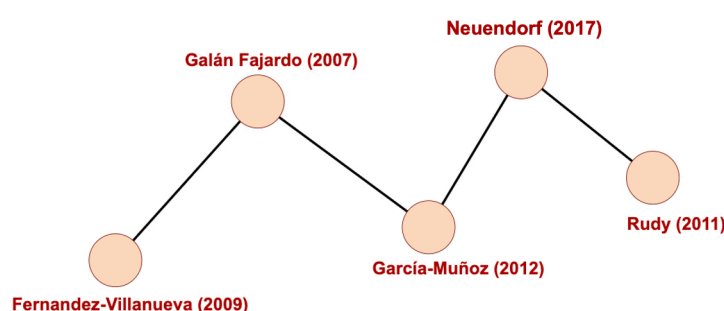
Concomitantly, in the communication discipline, it is noteworthy that in the same top 10 references (table 7), only one of the works has a man as its first author. These data seem to point towards the fact that female authors mostly cite other women in the field of gender studies, thus combatting the fact that men cite women's works less.

The co-citation network for the global SSCI production identifies three central communities along four other dyads (Figure 6). This could be evidence of three main intellectual areas and other more specialised communities. The most significant component shows a tightly dense connection between studies on political knowledge and participation inequalities. A second one is organised across domestic labour (Bianchi; Milkie; Sayer; Robinson, 2000). A third one focused on psychological concepts and definitions of gender, masculinity and/or femininity. Only those relationships equal to or greater than 7 times are included (see Appendix A).



(figure.6) Co-keywords network (Social Science). Source: authors' own elaboration.

The co-citation graph for the Communication output (Figure 7) draws a more straightforward map for the fewer nodes because such vortexes are less connected among them. Only those relationships equal to or greater than 4 times are included (see Appendix B).



(figure.7) Co-citation network (Communication). Source: authors' own elaboration.

Only four items appear to be cited together, and their interconnection is mainly bidirectional. This could be taken as evidence of a less cohesive intellectual foundation of the field, where references and cited work are quite different among them, pointing to a lack of common grounds or theoretical basis for the study of gender from the perspective of Communication Studies. Also, as one of the few references is a methodological reference (Neuendorf), it also implies that the only point where Gender research from Communication is developed is that it employs a content analysis perspective. Unfortunately, we could not draw definite conclusions on certain aspects, such as the lack of theoretical basis for gender studies in the field of Communication, as the results cannot allow for this interpretation. In the same field, we also found that only one male first author was present in the top-10 references centrality degree in the Communication co-citation networks (Table 7).

Lastly, we also determined very different approaches in gender studies through the social studies lenses of Portugal and Spain. In the case of Portugal, the recurrent themes focus on academic, research and entrepreneurship-related differences, whilst its Iberian counterpart focuses on generic topics around media consumption. Although our results cannot determine why the differences are so abysmal, it would be relevant to fully comprehend why the problem seems deeply focused on research and higher-education settings in Portugal and if

many gender gaps highly persist in the country for such an interest to be taken. However, this last point could also be related to the fact that Portugal is still at an “early” phase on the topic gender studies (Santos; Monteiro; Lopes; Martinez; Ferreira, 2023), and therefore, has yet to move to different general topics of research, based on gender.

5. Discussion and conclusions

Our research assessed gender studies, focusing on the topics that authors tackle, the types of collaborations between authors, and their provenience. Finally, we looked at what articles are considered central citations regarding gender studies publications and evaluated significant differences between citations and topics studied.

Most of the Portuguese and Spanish research about Gender is published in Gender Studies or Feminism focused specific venues such as *Journal of Gender Studies*, *Feminismo/s or Investigaciones Feministas* (see Table 3). The second and third journals with most published papers - *Sustainability and International Journal of Environmental Research and Public Health* (IJERPH), respectively - theoretically are indexed in specific categories of the SSCI a priori far from the field of Gender Studies: Environmental Studies and Green & Sustainable Science & Technology the former, Public, Environmental & Occupational Health the latter. Even though a stream of research on Gender provides from the Sustainability field (see, f.i., Khalikova; Jin; Chopra, 2021) the presence of *Sustainability* and *IJERPH* in our sample must be explained from the fact that these journals practically operate as a mega multidisciplinary journal, where most of their papers have little or nothing to do with their respective attributed fields in Web of Science. Moreover, both *Sustainability* and *IJERPH* have turned to be two of the outlets where most Spanish research is published (Repiso; Merino-Arribas; Cabezas-Clavijo, 2021), with no regard of the discipline or specialization. In this sense, the presence of this two journals cannot be taken as evidence of a particular interest of Environmental or Public Health focus from the Spanish and Portuguese production on Gender Studies. Their presence is more a distortion than evidence of a tendency or a feature.

Thus, apart from Gender Studies or Feminist Theory journals, and leaving aside the distortion produced by *Sustainability* and *IJERPH*, most of the scientific output is published in Psychology (*Frontiers in Psychology*, *Psicothema*), Communication (*Profesional de la Información*, *Comunicar*, *Latina*, *Communication & Society*) or Education (*Comunicar*, *Revista Iberoamericana de Tecnologías del Aprendizaje*, *Revista Complutense de Educación*) journals. This prominence of Psychology is common with research on Gender from other geographic areas such as Eastern Europe (Kataeva; Durrani; Izekenova; Rakhimzhanova, 2023), and the relevance of education issues has also previously mentioned in other context (Hoppen; Vanz, 2023) but the high-volume production stemming from Communication looks like a peculiar trait of the Iberian research on Gender.

We focused on the area of Communication, following other studies that sought to understand the presence and development of works relating to gender and women's studies. In this context, we tried, above all, to understand the angles considered in gender studies, the importance of collaboration between researchers from different countries, and also to what extent the various investigations recur and frequently cite the same studies.

The analysis revealed that studies on gender are conceived primarily in Social Sciences rather than Communication. We also found that Spanish researchers collaborate more with Anglo-Saxon countries, and social sciences privilege reflections on gender identity and the gender gap. Our co-word analysis also identified one topic revolving around political knowledge and participation, in line with the prevalence of a stream on research of the relationship of Gender and politics (Sokil; Osorio, 2022).

There are fewer collaboration networks in the area of communication and a less diversified thematic approach. It is interesting to analyse how the clusters are organised when we focus the research on the field of communication, which for several years had difficulties asserting itself as an autonomous discipline in the universe of social sciences. On the other hand, it is interesting to note that issues such as those related to social media emerge in communication clusters, which are essential for modern analysis of gender issues and which we do not always find in social sciences studies.

Reflection on scientific production must recognise all the transformations that have occurred in recent decades in economic, political and social terms. However, these need to be constantly reflected in the research carried out in academia. This idea was also one of the reasons that led us to carry out this study, to determine to what extent the studies carried out in these two areas reflect social transformations, namely regarding gender issues. We conclude that the centrality some themes assume in the work of researchers, such as gender identity and the gender gap, are reflections of what has been happening in society. In this way, we can conclude that in the particular case of gender studies, the academy has not distanced itself from the reality that surrounds it but, on the contrary, incorporates it into its investigations.

In other sense, our results lead us to conclude that Spanish and Portuguese research on gender shows some symptoms of immaturity. The first of them is related to the fact that most of the articles are published mostly on national journals. This finding might reveal a lack of theoretical focus. It is undeniable that such a feature might also indicate, under a more positive light, the existence of an interdisciplinary or multidisciplinary perspective (Hoppen; Vanz, 2020). Yet, such optimistic interpretation is not supported by the co-citation analysis, that draws a strongly disconnected collection of communities, where there are no bridges among different disciplines. In the case of Communication, it has been previously pointed that this field is a peripheral, disconnected, area inside the wider field (Segado-Boj; Gómez-García; Díaz-Campo, 2022).

The lack of development of Gender Studies in the Spanish and Portuguese academia can also be seen in the fact that most of the outputs are published in national or local journals. Such a trend might indicate a lack of international projection, sustained also in the weak international connections seen in the co-authorship networks. Previous studies have highlighted the internationalization of Portuguese Gender Research (Santos; Monteiro; Lopes; Martinez; Ferreira, 2023). Our data remarks this internationalization in the sense that the primary outlets where research results are published are non-Portuguese journals. Yet, such internationalization is scarce in the co-authorship level: Portuguese researchers collaborate mainly with their compatriots, and when they collaborate with other countries, they do it with Spanish, English or Brazilian authors (see Figure 2).

Finally, this study presents findings containing purposeful, relevant and timely knowledge regarding the number of topics and themes treated around gender in re-search, as well as showing directions on where these topics are headed and where re-searchers' interests lie in these areas. Our co-word analysis delineates a landscape that coincides with previous detected topics (Santos; Monteiro; Lopes; Martinez; Ferreira, 2023) in meta-analysis of the Portuguese scientific production on Gender and Women's studies, namely, the focus on gender and youth, the relevance of culture or the inequalities. Yet some other differences arise, for example, the absence of a focus on labour relations or sexism and discrimination. From a theoretical point of view, it is worth mentioning the absence of the intersectional theoretical-analytical perspective, thought to have gained prominence since 2017. Such perspective remains particular to Portugal and has not still been adopted by Spanish researchers.

We can also conclude that in the field of gender studies, there is a certain tendency to cite works whose primary authors are women. This trend can be interpreted as giving visibility to these works but, above all, combating other trends of exclusion of female authorship. These data are a good starting point for carrying out new studies, which consider other areas and try to understand to what extent the works of male authors have been relegated to the background when gender issues are at stake. Concerning researchers' networks, it also can be observed that women are central in these networks and establish a connection with other researchers. Thus, and even if one could speak of homophily, it is necessary to deepen the analysis and try to understand to what extent we do not verify a similar trend in works signed by men, but above all, what are the reasons for these options in terms of citation networks?

Like all investigations, the one we carried out in this article also has limitations. One of the limitations of the work added at the end is related to the impossibility of identifying publications from the same author with her name misspelt.

We start by pointing out the need for deep data analysis. We need to understand the number of citations that the works with more centrality obtained and other factors that can contribute to establishing differences in gender studies, such as whether or not they have received funding.

On the other hand, it would be equally important to look at the role of journals, the calls for papers, and the editors of these calls to understand whether the leading publications in the area have favoured gender studies and which investigators have been at the forefront of these calls. We believe that the more complete the mapping of the universe of scientific publications on gender studies is, the more significant the contribution we can make to society. Knowing what concerns researchers and what they investigate is also a way of understanding how the academy can contribute, with its results, to a change in society. With this regard, we believe that a greater focus is needed in the field of communication and gender studies because the precise nature of communication studies is fundamental for this area. Likewise, we cannot fail to note the importance of continuing to study, in future studies, how collaborative networks form around gender studies in the national and international context, but above all in the multidisciplinary dimension.

The article may be essential to foster new collaborations between researchers, especially from neighbouring countries such as Portugal and Spain, once we realise that it still does not exist, at least not that gender studies say respect, and considering scientific publication, a thematic approach.

The results are significant because they show us that the term gender has very different meanings depending on the research areas, a diversity that research based on simple concepts or keywords never always reveals. It is crucial to realise that in the case of gender, it is very different to address gender issues from the point of view of the Social Sciences and Communications. The collaborations between authors reveal a different multidisciplinary approach, which is critical to identify to allow a study of the increasingly comprehensive gender issues. More than anything else, it makes it possible to connect social issues with communication issues. The proper terminology used by the authors demonstrates that it can contribute to adjusting joint work when what would be desirable was an approximation that would allow the affirmation of increasingly relevant gender questions in research journals.

6. References

- Astegiano J.; Sebastián- González, E.; Castanho, C. de T. (2019). Unravelling the gender productivity gap in science: a meta-analytical review. *Royal Society Open Science*, 6 (6), 1-12. <http://dx.doi.org/10.1098/rsos.181566>
- Batagelj, V.; Mrvar, A. (1998). Pajek – Program for Large Network Analysis. *Connections*, 2 (2), 47-57.
- Bianchi, S. M.; Milkie, M. A.; Sayer, Liana C.; Robinson, J. P. (2000). “s anyone doing the housework? Trends in the gender division of household labor. *Social Forces*, 79 (1), 191–228. <https://doi.org/10.1093/sf/79.1.191>
- Caro González, F. J.; Guarinos, V. (2017). Male presence in gender research networks in the communication field in Spain. *Masculinities and Social Change*, 6 (1), 62-90. <http://doi.org/10.17583/MCS.2017.2452>
- Coslado, M. Á.; De Filippo, D.; Ros, G.; Sanz-Casado, E. (2023). “Análisis de buenas prácticas editoriales en igualdad de género en España. *Revista Española de Documentación Científica*, 46 (1), e348. <https://doi.org/10.3989/redc.2023.1.1952>
- Curthoys, A. (2014). Gender in the Social Sciences. Field of Study or Form of Inequity?. *Australian Feminist Studies*, 29 (80), 115-120. <http://doi.org/10.1080/08164649.2014.930553>
- Grau-Sarabia, M.; Fuster-Morell, M. (2021). Gender approaches in the study of the digital economy: a systematic literature review. *Humanities and Social Sciences Communications*, 8, 201. <https://doi.org/10.1057/s41599-021-0087-x>
- Hernández Ruiz, A.; Tortajada, I.; Martínez, I. J. (2023). El enfoque de género en la política editorial de las revistas científicas de Comunicación de mayor impacto del Journal Citation Reports. *Revista General de Información y Documentación*, 33 (1), 219-230. <https://doi.org/10.5209/rigid.89227>
- Hoppen, N. H. F.; Vanz, S. A. de S. (2023). The development of Brazilian women's and gender studies: a bibliometric diagnosis. *Scientometrics*, 128, 227–261. <https://doi.org/10.1007/s11192-022-04545-w>

- Hoppen, N. H. F.; Vanz, S. A. de S. (2020). "O que são estudos de gênero: caracterização da produção científica autodenominada Estudos De Gênero em uma base de dados multidisciplinar e internacional. *Encontros Bibli: Revista Eletrônica de Biblioteconomia e Ciência da Informação*, 25, 01-30. <https://doi.org/10.5007/1518-2924.2020.e71677>
- Khalikova V. R.; Jin, M.; Chopra, S. S. (2021). Gender in Sustainability Research: Inclusion, Intersectionality, and Patterns of Knowledge Production. *Journal of Industry Ecology*, 25, p900-912. <https://doi.org/10.1111/jiec.13095>
- Kataeva, Z.; Durrani, N.; Izenkova, Z.; Rakhimzhanova, A (2023). Evolution of gender research in the social sciences in post-Soviet countries: a bibliometric analysis. *Scientometrics*, 128, 1639-1666. <https://doi.org/10.1007/s11192-022-04619-9>
- Madison, G.; Söderlund, T. (2018). Comparisons of content and scientific quality indicators across peer-reviewed journal articles with more or less gender perspective: gender studies can do better" *Scientometrics*, 115, 1161-1183. <https://doi.org/10.1007/s11192-018-2729-3>
- Majumder, N.; Pandya, M.; Chaudhary, S.; Bhatt, A.; Trivedi, D. (2021). Measuring the Global Research Output and Visualization on Gender Equality: A Bibliometric Analysis. *Library Philosophy and Practice (e-journal)*. <http://dx.doi.org/10.2139/ssrn.3915981>
- Morais, R.; Fernandes, C. E.; Piñeiro-Naval, V. (2022). Big Girls Don't Cry: An Assessment of Research Units' Leadership and Gender Distribution in *Higher Education Institutions*. *Social Sciences*, 11(8), 345. <https://doi.org/10.3390/socsci11080345>
- Pilcher, J.; Whelehan, I. (2016). *Key Concepts in Gender Studies*. Sage.
- Pinho-Gomes, A.-C.; Peters, S; Thompson, K.; Hockham, C.; Ripullone, K.; Woodward, M.; Carcel, C: (2020). Where are the women? Gender inequalities in COVID-19 research authorship. *BMJ Global Health*, 5, e002922. <http://dx.doi.org/10.1136/bmjgh-2020-002922>
- Repiso, R.; Merino-Arribas, A.; Cabezas-Clavijo, A. (2021). El año que nos volvimos insostenibles: Análisis de la producción española en Sustainability *Profesional de la información*, 30 (4), e300409. <https://doi.org/10.3145/epi.2021.jul.09>
- Rodríguez, M. P.; Cucklanz, L. (2014). Gender dimension in media and communication studies: main concepts and illustrations in mass mediated texts. *Anàlisi. Quaderns de Comunicació i Cultura*, 50, 27-38. <http://dx.doi.org/10.7238/a.v0i50.2250>
- Santos, C.; Monteiro, R.; Lopes, M.; Martinez, M.; Ferreira, V. (2023). From Late Bloomer to Booming: A Bibliometric Analysis of Women's, Gender, and Feminist Studies in Portugal. *Social Sciences*, 12 (7), 396. <https://doi.org/10.3390/socsci12070396>
- Scarborough, W. J.; Risman, B. J. (2020). Gender Studies. In *Companion to Women's and Gender Studies* (41-68). John Wiley & Sons Ltd, 41-68.
- Segado-Boj, F.; Gómez-García, S.; Díaz-Campo, J. (2022). Intellectual and thematic structure of Communication research in Scopus (1980-2020). A comparative perspective among Spain, Europe, and Latin America. *Profesional de la información*, 31(1), e310110. <https://doi.org/10.3145/epi.2022.ene.10>
- Söderlund, T.; Madison, G. (2017). Objectivity and realms of explanation in academic journal articles concerning sex/gender: a comparison of Gender studies and the other social sciences. *Scientometrics*, 112, 1093-1109. <https://doi.org/10.1007/s11192-017-2407-x>
- Söderlund, T.; Madison, G. (2015). Characteristics of gender studies publications: a bibliometric analysis based on a Swedish population database. *Scientometrics*, 105, 1347-1387. <https://doi.org/10.1007/s11192-015-1702-7>
- Sokil, J. P.; Osorio, L. (2022). Producción científica en el campo de los Estudios De género: análisis de revistas seleccionadas de Web of Science (2008-2018)". *Revista Española De Documentación Científica*, 45 (1), 1-14. <https://doi.org/10.3989/redc.2022.1.1849>
- Van Eck, N. J.; Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84, 523-538. <https://doi.org/10.1007/s11192-009-0146-3>
- Vera-Baceta, M.-A.; Thelwall, M.; Kousha, K. (2019). Web of Science and Scopus language coverage. *Scientometrics*, 121, 1803-1813. <https://doi.org/10.1007/s11192-019-03264-z>
- Wöhrer, Veronika (2016). Gender studies as a multi-centred field? Centres and peripheries in academic gender research. *Feminist Theory*, 17 (3), 323-343. <https://doi.org/10.1177/1464700116652840>
- Zurbano-Berenguer, B.; Cano-Orón, L.; Liberia Vayá, I. (2018). Gender studies in communication research: A longitudinal analysis of scientific papers published in spanish journals indexed in the Journal Citation Reports (JCR) and the SCImago journal rank (SJR) (1988-2017). *Journal of Research in Gender Studies*, 8, 166-197. <https://doi.org/10.22381/JRGS82201810>

Appendix A. References of figure 6 (Social Science' co-citation network) in alphabetic order

- Bem, S. L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology*, 42(2), 155. <https://doi.org/10.1037/h0036215>
- Bem, S. L. (1981). Gender schema theory: A cognitive account of sex typing. *Psychological Review*, 88(4), 354-364. <https://doi.org/10.1037/0033-295x.88.4.354>
- Bennett, L. L., & Bennett, S. E. (1989). Enduring gender differences in political interest: The impact of socialization and political dispositions. *American Politics Quarterly*, 17(1), 105-122. <https://doi.org/10.1177/1532673X8901700106>
- Bianchi, S. M., Milkie, M. A., Sayer, L. C., & Robinson, J. P. (2000). Is anyone doing the housework? Trends in the gender division of household labor. *Social Forces*, 79(1), 191-228. <https://doi.org/10.2307/2675569>

- Bittman, M., England, P., Sayer, L., Folbre, N., & Matheson, G. (2003). When does gender trump money? Bargaining and time in household work. *American Journal of Sociology*, 109(1), 186-214. <https://doi.org/10.1086/378341>
- Blinder, A. S. (1973). Wage discrimination: reduced form and structural estimates. *Journal of Human Resources*, 8(4) 436-455. <https://doi.org/10.2307/144855>
- Brines, J. (1994). Economic dependency, gender, and the division of labor at home. *American Journal of Sociology*, 100(3), 652-688. <https://doi.org/10.1086/230577>
- Burns, N., Schlozman, K. L., & Verba, S. (2001). *The Private Roots of Public Action: Gender, Equality, and Political Participation*. Harvard University Press. <https://doi.org/10.4159/9780674029088>
- Coltrane, S. (2000). Research on household labor: Modeling and measuring the social embeddedness of routine family work. *Journal of Marriage and Family*, 62(4), 1208-1233. <https://doi.org/10.1111/j.1741-3737.2000.01208.x>
- Dolan, K. (2011). Do women and men know different things? Measuring gender differences in political knowledge. *The Journal of Politics*, 73(1), 97-107. <https://doi.org/10.1017/s0022381610000897>
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109(3), 573-598. <https://doi.org/10.1037//0033-295x.109.3.573>
- Eagly, A. H., & Kite, M. E. (1987). Are stereotypes of nationalities applied to both women and men? *Journal of Personality and Social Psychology*, 53(3), 451-462. <https://doi.org/10.1037/0022-3514.53.3.451>
- Esteve, A., García-Román, J., & Permanyer, I. (2012). The gender-gap reversal in education and its effect on union formation: the end of hypergamy? *Population and Development Review*, 38(3), 535-546. <https://doi.org/10.1111/j.1728-4457.2012.00515.x>
- Esteve, A., Schwartz, C. R., Van Bavel, J., Permanyer, I., Klesment, M., & Garcia, J. (2016). The end of hypergamy: Global trends and implications. *Population and Development Review*, 42(4), 615-625. <https://doi.org/10.1111/padr.12012>
- Expósito, F., Moya, M. C., & Glick, P. (1998). Sexismo ambivalente: medición y correlatos. *Revista de Psicología Social*, 13(2), 159-169. <https://doi.org/10.1174/021347498760350641>
- Fernández, R., & Fogli, A. (2009). Culture: An empirical investigation of beliefs, work, and fertility. *American Economic journal: Macroeconomics*, 1(1), 146-77. <https://doi.org/10.1257/mac.1.1.146>
- Ferrin, M., Fraile, M., & García-Albacete, G. (2018). Is It Simply Gender? Content, Format, and Time in Political Knowledge Measures. *Politics & Gender*, 14(2), 162-185. <https://doi.org/10.1017/S1743923X1700023X>
- Fraile, M. (2014). Do women know less about politics than men? The gender gap in political knowledge in Europe. *Social Politics*, 21(2), 261-289. <https://doi.org/10.1093/sp/jxu006>
- Frazer, E., & Macdonald, K. (2003). Sex differences in political knowledge in Britain. *Political Studies*, 51(1), 67-83. <https://doi.org/10.1111/1467-9248.00413>
- Gershuny, J. (2003). *Changing times: Work and leisure in postindustrial society*. Oxford University Press.
- Glick, P., & Fiske, S. T. (1996). The Ambivalent Sexism Inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology*, 70(3), 491-512. <https://doi.org/10.1037/0022-3514.70.3.491>
- Hakim, C. (2000). *Work-lifestyle choices in the 21st century: Preference theory*. Oxford University Press.
- Inglehart, R., Norris, P., & Ronald, I. (2003). *Rising tide: Gender equality and cultural change around the world*. Cambridge University Press.
- Lizotte, M. K., & Sidman, A. H. (2009). Explaining the gender gap in political knowledge. *Politics & Gender*, 5(2), 127-151. <https://doi.org/10.1017/s1743923x09000130>
- Mondak, J. J., & Anderson, M. R. (2004). The knowledge gap: A reexamination of gender-based differences in political knowledge. *The Journal of Politics*, 66(2), 492-512. <https://doi.org/10.1111/j.1468-2508.2004.00161.x>
- Nollenberger, N., Rodríguez-Planas, N., & Sevilla, A. (2016). The math gender gap: The role of culture. *American Economic Review*, 106(5), 257-61. <https://doi.org/10.1257/aer.p20161121>
- Oaxaca, R. (1973). Male-female wage differentials in urban labor markets. *International Economic Review*, 14(3), 693-709. <https://doi.org/10.2307/2525981>
- Spence, J. T., Helmreich, R. L., & Holahan, C. K. (1979). Negative and positive components of psychological masculinity and femininity and their relationships to self-reports of neurotic and acting out behaviors. *Journal of Personality and Social Psychology*, 37(10), 1673-1682. <https://doi.org/10.1037/0022-3514.37.10.1673>
- Stolle, D., & Gidengil, E. (2010). What do women really know? A gendered analysis of varieties of political knowledge. *Perspectives on Politics*, 8(1), 93-109. <https://doi.org/10.1017/s1537592709992684>
- Verba, S., Burns, N., & Schlozman, K. L. (1997). Knowing and caring about politics: Gender and political engagement. *The Journal of Politics*, 59(4), 1051-1072. <https://doi.org/10.2307/2998592>
- West, C., & Zimmerman, D. H. (1987). Doing gender. *Gender & Society*, 1(2), 125-151. <https://doi.org/10.1177/0891243287001002002>

Appendix B. References of figure 7 (Communication's co-citation network) in alphabetic order

- Fernández-Villanueva, C., Revilla-Castro, J. C., Domínguez-Bilbao, R., Gimeno-Jiménez, L., & Almagro, A. (2009). Gender differences in the representation of violence on Spanish television: Should women be more violent? *Sex Roles*, 61(1), 85-100. <https://doi.org/10.1007/s11199-009-9613-9>
- Galán-Fajardo, E. (2007). Gender construction and spanish fiction TV. *Comunicar*, 28, 229-236. <https://doi.org/10.3916/C28-2007-24>
- García-Muñoz, N., Fedele, M., & Gómez-Díaz, X. (2012). The occupational roles of television fiction characters in Spain: distinguishing traits in gender Representation. *Communication & Society*, 25(1), 349-366. <https://doi.org/10.15581/003.25.36184>
- Neuendorf, K. A. (2017). *The Content Analysis Guidebook*. Sage.
- Rudy, R. M., Popova, L., & Linz, D. G. (2011). Contributions to the content analysis of gender roles: An introduction to a special issue. *Sex Roles*, 64(3), 151-159. <https://doi.org/10.1007/s11199-011-9937-0>