Spanish research on Communication in *WoS*: thematic, methodological, and intellectual comparison between *SSCI* and *ESCI*

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Recommended citation:

Segado-Boj, Francisco; **Piñeiro-Naval, Valeriano**; **Antona-Jimeno, Tamara** (2023). "Spanish research on Communication in *WoS*: thematic, methodological, and intellectual comparison between *SSCI* and *ESCI*". *Profesional de la información*, v. 32, n. 3, e320309.

https://doi.org/10.3145/epi.2023.may.09

Article received on November 11th 2022
Approved on February 2nd 2023

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Abstract

This study analyses the thematic and conceptual structure of the Spanish scientific production published in *Emerging Sources Citation Index* (*Web of Science*) journals. In this way, the aim is to identify the closest links between concepts and terms based on the co-occurrence of keywords used by the authors of the papers analysed, and also to point out the theoretical foundations that exist in the discipline through the co-citation relationships of articles in the bibliography of the documents in the sample. Finally, these results were compared with those obtained from the analysis of Spanish scientific production in *Social Sciences Citation Index* (*SSCI*). To achieve these objectives, a network analysis of the co-occurrence of keywords and co-citation of references in articles published in Communication journals between 2015 and 2021 in *ESCI* (N = 3,559) and *SSCI* (N = 1,738) with at least one author linked to a Spanish institution was carried out. The results point to similar structural cohesion values and to a thematic and methodological similarity between both sets observed. There is a marked tendency towards quantitative studies on new technologies. While in *SSCI* there is an almost absolute dominance of Journalism studies, in *ESCI* there is a greater diversity of other disciplines such as Audiovisual Communication or Advertising. However, the intellectual structure of the production in *SSCI* reflects a more specialised character than in *ESCI*.

Keywords

Articles; Bibliometrics; Co-citation; Co-words; Communication; Topics; Methods; *Emerging Sources Citation Index*; *ESCI*; *Social Sciences Citation Index*; *SSCI*; *Web of Science*; *WoS*; Meta-research; Social network analysis; Spain.

Acknowledgments

We express our gratitude to the anonymous reviewers for their comments and suggestions that significantly improved the quality of this manuscript.

1. Introduction

According to **Ioannidis** (2018), meta-research is the study of research itself, encompassing its methods, reports, reproducibility, evaluation, and incentives. **Saperas** and **Carrasco-Campos** (2019) define this discipline as

> "a descriptive quantitative method linked to content analysis, specifically designed to analyze how the format of a scientific article is organized as a means of communication and dissemination among specialised audiences' (p. 222).

Its purpose, therefore, is

> "to provide a general overview of the features characterizing research in a given field' (**Igartua** *et al*., 2022, p. 59).

In recent years, a body of meta-research focused on Communication Studies has emerged and been consolidated in Spain (**Caffarel**, 2018; **Carrasco-Campos** *et al*., 2018; **Goyanes**, 2020; **Lozano-Ascencio** *et al*., 2020; **Martínez-Nicolás** *et al*., 2019). This research has focused on various features, including predominant theories (**Carrasco-Campos**; **Saperas**, 2022; **Piñeiro-Naval**; **Morais**, 2019), commonly used methods (**Gómez-Escalonilla**, 2021; **Martínez-Nicolás**; **Saperas**, 2011), analysed topics (**Segado-Boj** *et al*., 2022a; **Trillo-Domínguez**; **De-Moya-Anegón**, 2022), and funding sources (**Gaitán-Moya** *et al*., 2021; **Piñeiro-Naval** *et al*., 2021), among others.

Aligned with this perspective, bibliometric analysis enables, by drawing on a vast range of documents, the examination of various dimensions of a discipline, such as authorship (**Cuocolo** *et al*., 2020), productivity (**Carrillo-Vera** *et al*., 2018), performance –measured by impact or citation counts– (**Repiso**; **Moreno-Delgado**, 2022), social structure (**Eckl** *et al*., 2019), citation structures (**Rauchfleisch**; **Schäfer**, 2018), or preferred topics (**Montero-Díaz** *et al*., 2018), among others. This study aims to explore the intellectual and thematic structure of the Spanish scientific output on Communication Studies between 2015 and 2021. To accomplish this goal, the study compares articles of journals indexed in the database *Social Sciences Citation Index* (*SSCI*) and those featured in *Emerging Sources Citation Index* (*ESCI*), both of which are included in the *Web of Science* (*WoS*) *Core Collection*.

Clarivate created *ESCI* in 2015 to expand its collection of documents in languages other than English and to compete with the *Scopus* database. It includes journals that are not indexed in the *SSCI* but are considered potential candidates for this index (**De-Filippo**; **Gorraiz**, 2020). Compared with *SSCI*, *ESCI* increases the visibility of regions such as the 'Global South', which includes Latin America. Moreover, *ESCI* is more inclusive and provides coverage for fields with fewer documents indexed in *SSCI*, as seen in Social Sciences (**Huang** *et al*., 2017). In the 2021 edition of *SSCI*, the 'Communication' category features 95 journals, of which only two (*Comunicar* and *Profesional de la información*) are Spanish. In comparison, *ESCI* features 122 Communication journals in 2021, including 24 Spanish and 12 Latin American journals.

In this sense, Spain is one of the countries whose *WoS* coverage has increased the most since *ESCI* was created (**Ruiz-Pérez**; **Jiménez-Contreras**, 2019). 67% of Spain's production in the 'Communication' category of the *WoS* is included in the *ESCI* database (**Repiso**; **Moreno-Delgado**, 2022). *ESCI*'s inclusiveness has enabled it to better represent the Iberoamerican communication studies publishing ecosystem, which is characterized by a majority of open-access journals, published by non-commercial editors, and by a lesser dependence on big publishing houses. Also, the articles published by Iberoamerican Communication journals show publication and citation features distinct from those featured in other international Communication journals (**Demeter** *et al*., 2022).

ESCI includes a broader range of documents and reflects diverse streams of research, including particular or alternative perspectives, whereas *SSCI* represents the international standards of Communication research –in other words, the 'dominant perspective'–. While *SSCI* indexes highly recognized and visible journals, *ESCI* serves as a pre-selection for *SSCI*, indexing journals with lower or insufficient impact by *SSCI* standards. These differences in bibliometric measurements can affect the acceptance rate of articles (**Sugimoto** *et al*., 2013). Moreover, given that the editorial boards of journals with high impact may differ in composition from those in lower quartiles (**Dhanani**; **Jones**, 2017; **Goyanes**, 2019), there may be disparities in the editorial and scientific policies among the journals included in the databases (*SSCI* or *ESCI*).

Previous comparisons between *ESCI* and *SSCI* in other disciplines have revealed differences in authorship and other characteristics. For example, in Statistics (**Butt**, 2021), *ESCI* contains a higher proportion of publications from the Global South. In Social Work, differences are not only observed in the language of articles –with a greater percentage of Spanish documents in *ESCI*– but also in the topics covered, as certain issues, such as social representation, are more prevalent in *ESCI* than in *SSCI* (cfr. **Chaves-Montero**; **Vázquez-Aguado**, 2021; **Martínez** *et al*., 2015). In Communication studies, **Miquel-Segarra** (2021) notes that *ESCI* publications exhibit a lower level of co-authorship –which is relatively more frequent in *SSCI* (**Castillo-Esparcia** *et al*., 2012)– as well as a higher presence of Spanish-language documents. However, according

to this work, the methods used in *ESCI* publications are of lower quality, contradicting the general trend observed in other studies (**Goyanes** *et al*., 2018; **Martínez-Nicolás** *et al*., 2019), which suggest that Spanish Communication research is improving the rigor of its methods.

This paper aims to compare articles published in *SSCI* and *ESCI*, with the following specific objectives (SOs):

SO1: To analyze the co-word and co-citation networks in the Spanish scientific publications on Communication in *ESCI* and *SSCI* and characterize their structures.

SO2: To identify the primary thematic and conceptual relationships in the Spanish scientific publications on Communication in *ESCI* and *SSCI*.

SO3: To recognize the main intellectual and theoretical connections in the Spanish scientific publications on Communication in *ESCI* and *SSCI*.

In the following section, we provide a review of previous studies that have mapped scientific production in Communication studies, encompassing not only Spanish publications, but also those at the international level.

2. Previous research

Chronologically, the first study to be mentioned is **Barnett** *et al*. (2011) research on citation patterns in 45 *SSCI*-indexed journals from 1998 to 2007. Their findings indicate that Communication category journals which are indexed solely in this category are more central in the citation network compared to those attributed simultaneously to other social sciences. Additionally, their clustering analysis reveals the presence of three distinct communities: a psychological micro-cluster, a socio-political macro-cluster, and a minor cluster focused on gender studies. On a separate note, **Chung** *et al*. (2013) conducted a study on the most applied theories between 2000 and 2009 in four flagship journals in the field, namely *Communication Monographs, Communication Research, Human Communication Research*, and *Journal of Communication*. They identified 89 conceptual paradigms, with framing, priming, cultivation theory, and agenda-setting being the most prominent.

Taking a different perspective, **Günther** and **Domahidi** (2017) analysed a sample of 15,172 manuscripts published in 19 journals from *WoS* and *Scopus* over 80 years (from 1935 to 2014). Using topic modeling, they identified 145 different topics and observed the longitudinal evolution of the 15 most prominent topics. They found that in the most recent period (2005-2014), topics such as digital media, health, and media effects emerged as the most popular. Similarly, **Montero-Díaz** *et al.* (2018) mapped 33,627 articles indexed in *SSCI* journals from 1980 to 2013 and found that in the closest period (2010-2013), the most frequent topics were news, internet, gender, and advertising. Likewise, **Vizoso** *et al*. (2019) observed, after analyzing 5,291 texts published in *SSCI* and *Scopus* between 2008 and 2018, that content analysis and discourse analysis were the most commonly used methods, that media uses, effects, and reception were the most researched issues, and that Information and Communication Technologies (ICTs) were the most common objects of study.

In another work, **Chan** and **Grill** (2020) used topic modeling to analyze 12,990 articles published in 18 international journals from 2000 to 2017. The authors highlighted the relevance of two topics: social media and persuasion. Meanwhile, **Demeter** and **Goyanes** (2020) compared the output of two years, 1997 and 2017, through the analysis of a probabilistic sample of articles indexed in *SSCI* (263 and 283, respectively, a total of 526). Their findings were consistent with those of **Vizoso** *et al.* (2019), as they noted the current relevance of quantitative methods (content analysis, survey, and experiment), while in 1997, the methods were mostly qualitative (discourse analysis and participant observation).

In another direction, recent analyses of the Spanish scientific output on communication have utilized social network analysis of *SSCI*-indexed documents **Aguado-Guadalupe** *et al*., 2022; **Segado-Boj** *et al.*, 2021a; 2021b), while other studies have conducted thematic and intellectual analysis using *Scopus* as their source (**Costa-Sánchez**, 2017; **Heras-Pedrosa** *et al*., 2018; **Segado-Boj** *et al*., 2022; **Trillo-Domínguez**; **De-Moya-Anegón**, 2022). However, although bibliometric analysis using *ESCI* has been employed in fields such as Statistics and Probability (**Butt** *et al.*, 2021) or Education (**Repiso** *et al*., 2017), its use in Communication has been limited to Spanish journals within that database (**Miquel-Segarra**, 2021). This sampling approach excludes works published in international journals by authors affiliated with Spanish institutions. As a significant contribution, this article expands its scope to include this broader universe of study.

3. Methods

Our sampling strategy involved selecting articles from *WoS*, included in the 'Communication' category, published between 2015 and 2021 (both included) and authored by at least one researcher affiliated with a Spanish institution. We further distinguished between articles published in journals indexed in *ESCI* (N = 3,559) and journals indexed in *SSCI* (N = 1,738). This information was downloaded on March 1st, 2022. We converted the bibliographic data to network data using *VOSviewer* (**Van-Eck**; **Waltman**, 2010) and subsequently analysed and visualized it using *Pajek* (**Batagelj**; **Mrvar**, 1998).

Network analysis examines the relationships (known as 'edges' or 'links') between elements (known as 'nodes' or 'vertices'). In the co-word network, the vertices represent the author keywords used to identify the articles (we excluded those keywords generated automatically by *WoS*). When two keywords appear together in the same article, they are

linked by an edge. Similarly, in the co-citation network, the nodes represent the references cited by an article and are connected by an edge when they appear in the same reference list.

> "The core of the *ESCI* co-citation network is formed by theoretical references focused on the impact of technologies (Jenkins, 2008; Castells, 2009; Scolari, 2013) and handbooks of research methods (Krippendorff, 1980; Igartua, 2006; Berelson, 1952; Bardin, 1996)"

We manually harmonized the keywords and references to homogenize synonyms (e.g., 'youth' and 'young people') and variations in the citation of the same piece of work, such as translations and different editions of the same book. After the harmonization process, the final database contained 12,289 keywords and 156,826 references, compared to the original database of 12,678 keywords and 157,372 references.

We generated separate co-word and co-citation networks for each database (*WoS* and *ESCI*) and calculated the main structural indices of each network, including:

- *Number of nodes*: the total number of vertices in the network.
- *Components*: a component is a group of nodes that are connected to each other but not connected to other groups. The higher the number of components, the more fragmented the network is.
- *Size of the main component*: the percentage of nodes included in the largest component.
- *Density*: measures the level of cohesion among the nodes in the network. A value of "1" would mean that all vertices are directly connected to each other, while a value of "0" would indicate that no nodes are connected to each other, resulting in no arcs in the network.
- *Centrality values*: degree centrality is defined as the number of connections between a given node and other vertices in the network. The nodes with higher centrality degree are considered more relevant and better connected. We provide a ranking of nodes with the highest centrality degree in each network (Tables 2-4), as well as the average centrality degree of the entire network (Table 1). Table 1 also includes the Centrality value of the network, which can be interpreted as the extent to which each network is organized around specific nodes. A centrality value of "1" would mean that the entire network revolves around just one node, and the rest of the vertices show no edges among them. On the contrary, a value of "0" would mean that all nodes in the network are equally connected to each other. We also provide the Betweenness value, which indicates the existence of nodes that, if excluded from the network, would result in fragmentation into detached components. A value of "1" would mean that the components in the network are linked by only one vertex, while a value of "0" would mean that the disappearance of any node would not cause fragmentation at all.
- *Clustering coefficients:* measure the likelihood that two connected nodes share common connections with other vertices. In other words, it examines whether nodes form communities or groups rather than isolated links. This clustering can be calculated using two measures: the Watts-Strogatz coefficient, which is based on low centrality nodes and measures the presence of internal connections within specialised communities, and transitivity, which is based on high centrality nodes and measures the interconnections between different groups or communities.
- *Distance*: the average distance calculates the number of nodes that separate two given vertices. The *longest distance* identifies the pair of nodes that are the farthest apart from each other.

In terms of visualization, since the goal of this work is to identify the primary relationships within each network, we have applied a reduction criterion to each graph. Therefore, the networks only display the arcs (co-occurrences of keywords and references) that exceed a minimum threshold, which is specified as a note in each figure.

The color of each node in Graphs 1-4 represents a cluster identified by the Louvain algorithm (multi-level thickening, single refinement, resolution parameter = 1, number of random restarts = 1, maximum number of levels in each iteration = 20, maximum number of repetitions at each level = 50). These clusters represent groups of vertices that are more likely to be connected to each other compared to the other nodes in the network.

The size of each node in Graphs 1 and 2 is proportional to the frequency of mentions of each keyword, while in Graphs 3 and 4 it is proportional to the number of citations of each reference. The number displayed inside each node represents the sum of citations or mentions, depending on the context.

To simplify the presentation, Graphs 1 and 2 only include the author's last name and the publication year. The full referencing information can be found in Annex I.

4. Results

The co-words and co-citation networks in *ESCI* contain a higher number of nodes (keywords and references) than those in *SSCI*, as shown in Table 1. This can be explained by the higher number of documents found in *ESCI*. Overall, the networks generated from both databases exhibit similar structural values, with relatively low density, decentralization, and a low number of arcs. The networks are well-connected, as indicated by their average and longest distances, and

the size of the main components in each case approaches 100%. However, the co-word network in *ESCI* exhibit more fragmentation in secondary components compared to *SSCI*, and the average centrality of the co-word network is higher in *SSCI* than in *ESCI*. The most central nodes tend to be more interconnected with each other (Watts-Strogatz coefficient), particularly in the co-word networks, compared to the relationships among peripheral nodes (transitivity).

4.1. Keywords

In both *ESCI* and *SSCI*, the co-keyword networks revolve around the broad concept of "social media", which exhibits the highest centrality degree (Table 2). Terms associated with specific social media platforms, particularly *Twitter*, as well as *Facebook* and *YouTube*, are also among the top positions. Additionally, both networks demonstrate a preference for new technologies, as indicated by the prominence of keywords such as "internet", "digital media", and "Information and Communication Technologies (ICTs).

As we analyse Spanish scientific output, it is not surprising that "Spain" appears as the second most central keyword in the ranking. No other geographic scenario or location is mentioned among the most central keywords. Additionally, the impact of the Sars-CoV-2 pandemic is evident in both databases, as indicated by the relevance granted to keywords such as "COVID-19" or "pandemic".

The ranking of centrality degree suggests that Spanish research on Communication in *SSCI* is dominated by concepts related to Journalism. The *ESCI* network features this trend as well, albeit with less intensity. In *ESCI*, other disciplines such as advertising or television hold more central positions than they do in *SSCI*. Furthermore, the thematic core of *ESCI* features other media, such as "cinema", which is absent in *SSCI*. Additionally, *ESCI* places greater importance on terms related to Transmedia and framing, as well as education.

The co-word network in *ESCI* reveals six clusters (Graph 1). The one with the most nodes (represented in **green**) centres around the term "social media", which is linked to other keywords associated with digital technologies (such as "internet", "digital communication", "information and communication technologies", and "web 2.0"), specific platforms ("Instagram" and "Facebook"), aspects of audience profiling ("adolescence"), and forms of interaction and engagement ("engagement").

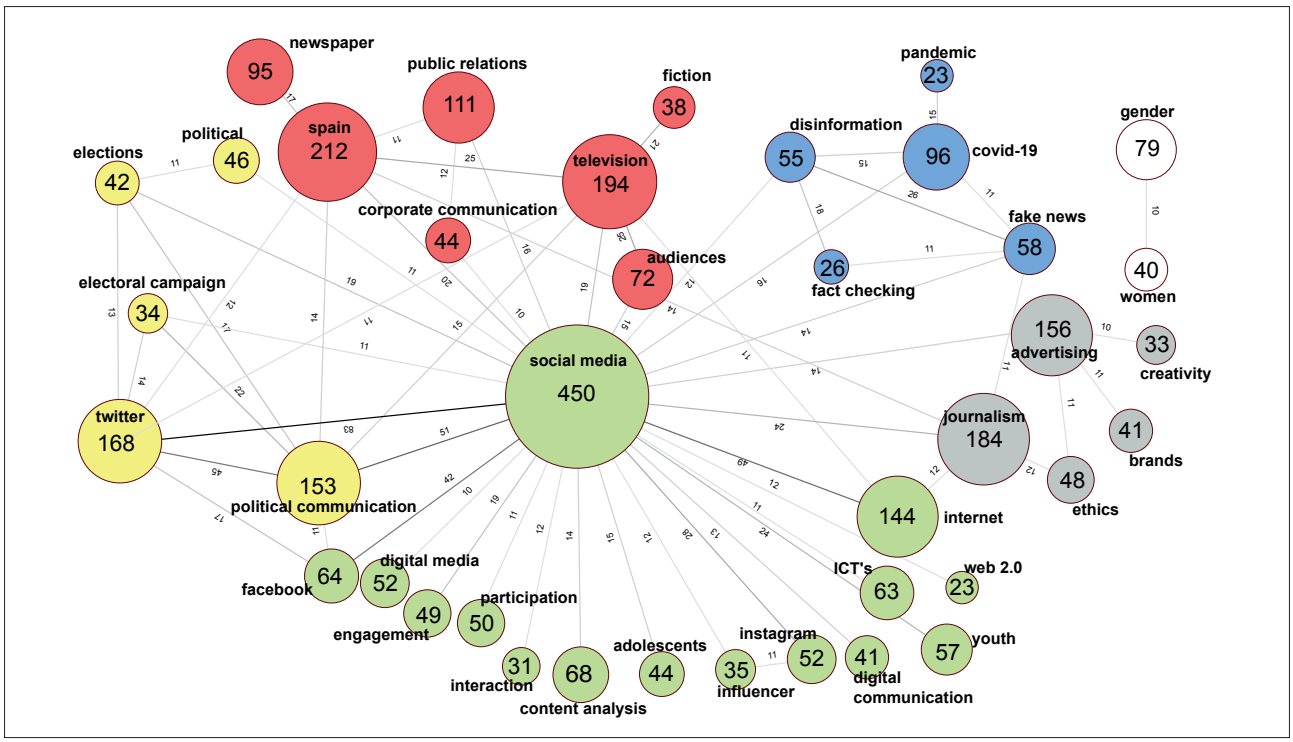
This green cluster is closely connected to the yellow one, which also features a central node related to social media ('Twitter'). This core is linked to concepts about political communication and electoral campaigns.

Table 1. Co-words and co-citation networks. Source: *Web of Science*.

	Co-words		Co-citation	
	SSCI	***ESCI***	***SSCI***	***ESCI***
Number of nodes	5,983	8,172	8,511	24,065
Density (no loops)	0.002	0.001	0.006	0.004
Average Degree Centrality	14.72	9.67	54.40	58.65
Number of components	49	86	3	6
Size of the main component (%)	95.85	94.80	99.87	99.95
Centrality	0.177	0.126	0.136	0.190
Betweenness	0.158	0.142	0.083	0.109
Watts-Strogatz	0.860	0.853	0.581	0.568
Transitivity	0.131	0.083	0.327	0.241
Average distance	3.208	3.431	3.029	2.898
Longest distance	8	8	7	7

Table 2. Keywords exhibiting the highest centrality degree (CD) in *SSCI* and *ESCI*. Source: *Web of Science*.

SSCI		***ESCI***	
Keyword	**CD**	**Keyword**	**CD**
social media	1,072	social media	1,039
spain	947	spain	694
journalism	582	journalism	550
twitter	469	television	549
covid-19	414	advertising	484
digital media	400	twitter	446
internet	393	internet	433
political communication	362	political communication	370
digital journalism	358	public relations	340
television	347	newspaper	311
newspaper	346	covid-19	306
audiences	338	cinema	288
pandemic	331	gender	271
content analysis	312	audiences	244
advertising	265	ICTs	242
facebook	245	content analysis	235
public relations	226	educommunication	233
university	221	frames	222
journalist	213	youtube	208
survey	213	digital journalism	192
gender	208	education	191
educommunication	206	transmedia	190
adolescents	205	university	189
university libraries	205	facebook	188
youtube	203	identities	187
		youth	187

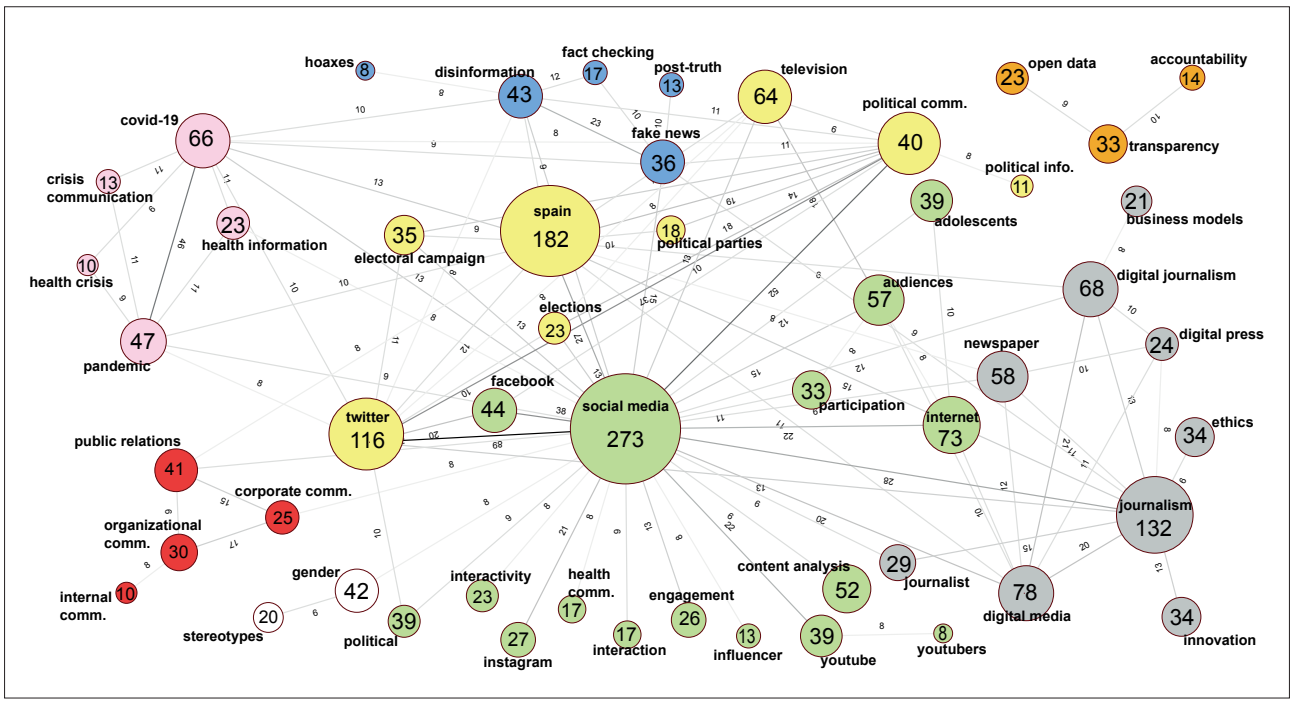


Graph 1. Co-word network of the Spanish scientific output on Communication in *ESCI* (2015-2021). Source: *Web of Science*.
Note. Featuring links equal or above 10.

In more peripheral positions, the graph depicts communities with lower specialization and greater heterogeneity in their nodes. Thus, the grey cluster merges advertising keywords (such as "creativity" and "brands") with others related to journalism, particularly "ethics". Similarly, the red cluster combines keywords on public relations (such as "corporate communication"), television ("fiction" and "audiences"), and once again, journalism ("newspapers"). In another sense, a specialised core (deep blue) is centred around disinformation, which also encompasses Covid-19. Finally, a white cluster, disconnected from the rest of the network, is devoted to gender issues.

Comparing this co-word network with the one generated from the *SSCI* database (Graph 2) reveals several similarities.

As in the previous network, terms and concepts related to social media and digital technologies form a specialised cluster (**green**) that shares several features with the **green** cluster in Graph 1. Nevertheless, the **green** cluster in Gra-



Graph 2. Co-word network of the Spanish scientific output on Communication in *SSCI* (2015-2021). Source: *Web of Science*.
Note. Featuring links equal or above 8.

ph 2 includes specific particularities such as being linked to health communication. A more specialised cluster on journalism (**grey**) features keywords related to 'digital technologies', 'innovation', 'business models', and 'ethics'. The **yellow** cluster contains concepts of political communication, such as 'electoral campaigns', 'elections', and 'political participation'.

> In both *ESCI* and *SSCI*, the co-keyword networks revolve around the broad concept of "social media", which exhibits the highest centrality degree

Just like in *ESCI*, the *SSCI* network also shows a cluster (**blue**) that features keywords related to 'post-truth' and 'disinformation'. However, while in Graph 1 this disinformation cluster gathered concepts about Covid-19, in Graph 2 keywords about the pandemic are organized in a separate community that includes concepts about crisis communication or health information.

The cluster of Public Relations (represented in **red**) is situated on the periphery and is formed by keywords such as 'organizational communication', 'internal communication', and 'corporate communication'. Similarly to *ESCI*, *SSCI* has a cluster (white) dedicated to gender issues. However, in *SSCI*, this cluster is connected to the main network. Additionally, keywords related to transparency and open data are gathered in a minor cluster (**orange**).

4.2. References

The core of the *ESCI* co-citation network is formed by theoretical references focused on the impact of technologies (**Jenkins**, 2008; **Castells**, 2009; **Scolari**, 2013) and handbooks of research methods (**Krippendorff**, 1980; **Igartua**, 2006; **Berelson**, 1952; **Bardin**, 1996) (Table 3).

Table 3. References exhibiting the highest centrality degree (CD) in *ESCI*. Source: *Web of Science*.

Reference	CD
Jenkins, Henry (2003). *Convergence culture: where old and new media collide*. New York: New York University Press. ISBN: 978 0 8147 4368 3	2737
Krippendorff, Klaus (1980). *Content analysis: an introduction to its methodology*. Beverly Hills: Sage. ISBN: 978 0 8039 1498 8	2195
Castells, Manuel (2009). *Communication power*. Oxford: Oxford University Press. ISBN: 978 0 19 157063 6	2133
Igartua, Juan-José (2006). *Métodos cuantitativos de investigación en comunicación*. Barcelona: Editorial Bosch. ISBN: 84 9790 271 8	1437
Chadwick, Andrew (2013). *The hybrid media system: politics and power*. Oxford: Oxford University Press. ISBN: 978 0 19 975947 7 *https://doi.org/10.1093/acprof:oso/9780199759477.001.0001*	1286
Scolari, Carlos (2013). *Narrativas transmedia: cuando todos los medios cuentan*. Barcelona: Deusto. ISBN: 978 84 234 1336 2	1268
Hallin, Daniel; **Mancini, Paolo** (2007). *Comparing media systems: three models of media and politics*. Cambridge: Cambridge University Press. ISBN: 978 0 521 54308 8	1249
Bardin, Laurence (1996). *El análisis de contenido*. Madrid: Akal Ediciones. ISBN: 978 84 7600 093 9	1135
Wimmer, Roger D.; **Dominick, Joseph R.** (1996). *La investigación científica de los medios de comunicación: una introducción a sus métodos*. Barcelona: Editorial Bosch. ISBN: 978 84 7676 359 9	1073
Toffler, Alvin (1980). *Future shock: the third wave*. New York: Bantam Books. ISBN: 0 553 24698 4	1071
Entman, Robert M. (1993). "Framing: toward clarification of a fractured paradigm". *Journal of communication*, v. 43, n. 4. *https://doi.org/10.1111/j.1460-2466.1993.tb01304.x*	1009
Berelson, Bernard (1952). *Content analysis in communication research*. New York: Hafner.	946
Castells, Manuel (2012). "Networks of outrage and hope - Social movements in the Internet age". *International journal of public opinion research*, v. 25, n. 3, pp. 398-402. *https://doi.org/10.1093/ijpor/edt020*	924
Campos-Domínguez, Eva (2017). "Twitter y la comunicación política". *Profesional de la información*, v. 26, n. 5. *https://doi.org/10.3145/epi.2017.sep.01*	843
López-García, Guillermo (2016). "Nuevos y viejos liderazgos: la campaña de las elecciones generales españolas de 2015 en Twitter". *Communication & society*, v. 29, n. 3. *https://doi.org/10.15581/003.29.35829*	779
Bauman, Zygmund (1999). *La modernidad líquida*. Madrid: Fondo de Cultura Económica de España. ISBN: 950 557 513 0	753
Castells, Manuel (1997). *La era de la información: economía, sociedad y cultura*. Madrid: Alianza. ISBN: 84 206 4246 0	740
Casero-Ripollés, Andreu; **Feenstra, Ramón A.**; **Tormey, Simon** (2016). "Old and new media logics in an electoral campaign: The case of Podemos and the two-way street mediatization of politics". *The international journal of press/politics*, v. 21, n. 3. *https://doi.org/10.1177/1940161216645340*	697

A similar pattern can be observed at the core of the *SSCI* co-citation network, as ten of the most central references in *ESCI* also appear in the centrality ranking in *SSCI*. A notable difference between both networks is that **Casero-Ripollés** (2016) jumps from the twentieth to the eighth position in the *SSCI* ranking (Table 4).

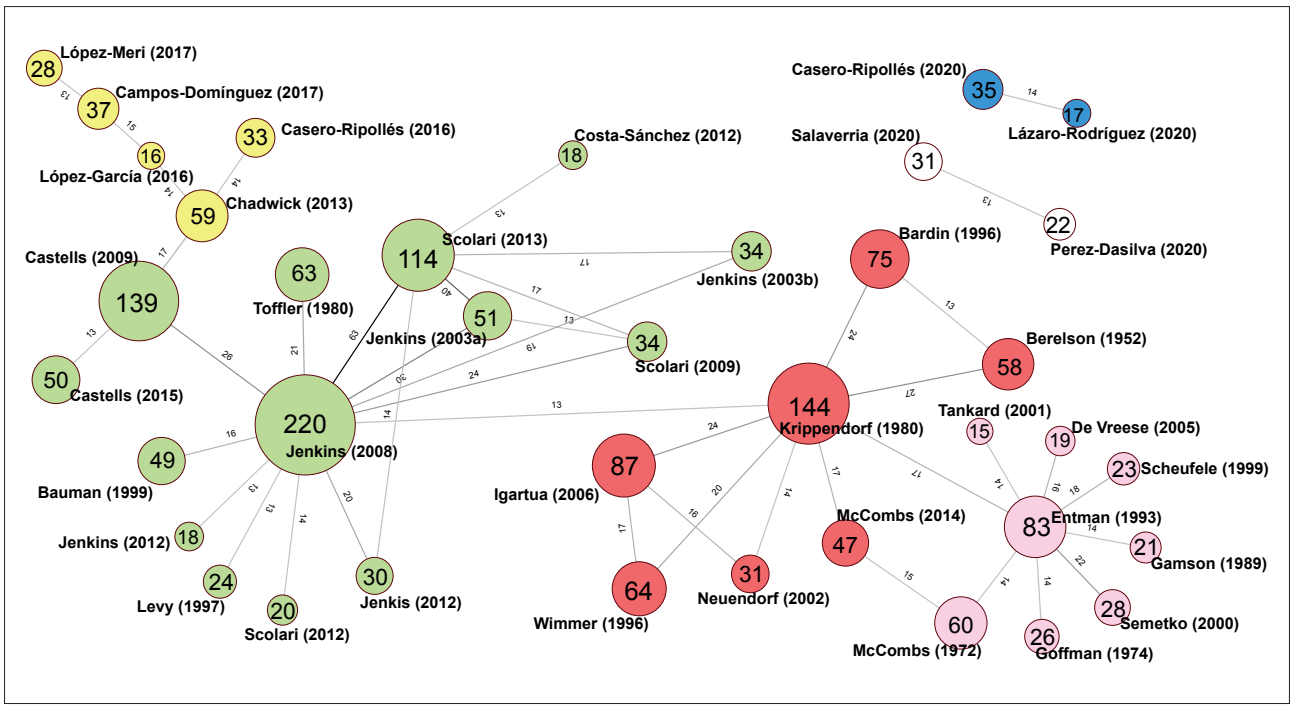
Table 4. References exhibiting the highest centrality degree (CD) in *SSCI*. Source: *Web of Science*.

Reference	CD
Jenkins, Henry (2003). *Convergence culture: where old and new media collide*. New York: New York University Press. ISBN: 978 0 8147 4368 3	1210
Hallin, Daniel; **Mancini, Paolo** (2007). *Comparing media systems: three models of media and politics*. Cambridge: Cambridge University Press. ISBN: 978 0 521 54308 8	1166
Chadwick, Andrew (2013). *The hybrid media system: politics and power*. Oxford: Oxford University Press. ISBN: 978 0 19 975947 7 *https://doi.org/10.1093/acprof:oso/9780199759477.001.0001*	1002
Castells, Manuel (2009). *Communication power*. Oxford: Oxford University Press. ISBN: 978 0 19 157063 6	847
Krippendorff, Klaus (1980). *Content analysis: an introduction to its methodology*. Beverly Hills: Sage. ISBN: 978 0 8039 1498 8	756
Krippendorff, Klaus (1980). *Content analysis: an introduction to its methodology*, Beverly Hills: Sage. ISBN: 978 0 8039 1498 8	552
Kovac, Bill; **Rosenstiel, Tom** (2001). *The elements of journalism: what newspeople should know and the public should expect*. New York: Crown Publishers. ISBN: 978 0 609607831	536
Pariser, Eli (2011). *The filter bubble: what the internet is hiding from you*. New York: Penguin. ISBN: 978 0 670 92038 9	529
Entman, Robert M. (1993). "Framing: toward clarification of a fractured paradigm". *Journal of communication*, v. 43, n. 4, pp. 51-58. *https://doi.org/10.1111/j.1460-2466.1993.tb01304.x*	527
Igartua, Juan-José (2006). *Métodos cuantitativos de investigación en comunicación*. Barcelona: Editorial Bosch. ISBN: 84 9790 271 8	502
Gil de Zúñiga, Homero; **Weeks, Brian**; **Ardèvol-Abreu, Alberto** (2017). "Effects of the news-finds-me perception in communication: social media use implications for news seeking and learning about politics". *Journal of computer-mediated communication*, v. 22, n. 3, pp. 105-123. *https://doi.org/10.1111/jcc4.12185*	466
McCombs, Maxwell E.; **Shaw, Donald L.** (1972). "The agenda setting function of mass media". *Public opinion quarterly*, v. 36, n. 2, pp. 176-187. *https://doi.org/10.1086/267990*	457
Enli, Gunn-Sara; **Skogerbø, Eli** (2013). "Personalized campaigns in party-centred politics information". *Communication & society*, v. 16, n. 5, pp. 757-74. *https://doi.org/10.1080/1369118X.2013.782330*	423
López-Meri, Amparo (2017). "Contribución ciudadana al debate electoral y su cobertura periodística en Twitter". *Prisma social: revista de investigación social*, n. 18. *https://revistaprismasocial.es/article/view/1466*	416
Jenkins, Henry; **Ford, Sam**; **Green, Joshua** (2013). *Spreadable media: creating value and meaning in a networked culture*. New York: NYU Press. ISBN: 978 0 8147 4350 8	409
Castells, Manuel (2012). "Networks of outrage and hope - Social movements in the Internet age". *International journal of public opinion research*, v. 25, n. 3, pp. 398-402. *https://doi.org/10.1093/ijpor/edt020*	409
Fletcher, Richard; **Nielsen, Rasmus-Kleis** (2018). "Are people incidentally exposed to news on social media? A comparative analysis". *New media & society*, v. 20, n. 7. *https://doi.org/10.1177/1461444817724170*	407
Allcott, Hunt; **Gentzkow, Matthew** (2017). "Social media and fake news in the 2016 election". *Journal of economic perspectives*, v. 31, n. 2, pp. 211-236. *https://doi.org/10.1257/jep.31.2.211*	399
Hermida, Alfred; **Fletcher, Fred**; **Korell, Darryl**; **Logan, Donna** (2012). "Share, like, recommend". *Journalism studies*, v. 13, n. 5-6, pp. 815-824. *https://doi.org/10.1080/1461670X.2012.664430*	397
Colleoni, Elanor; **Rozza, Alessandro**; **Arvidsson, Adam** (2014). "Echo chamber or public sphere? Predicting political orientation and measuring political homophily in Twitter using big data". *Journal of communication*, v. 64, n. 2, pp. 317-332. *https://doi.org/10.1111/jcom.12084*	388

The analysis of the most frequent relationships in *ESCI* (Graph 3) identifies a **green** cluster that focuses on the theoretical extensions of the concept of Transmedia (**Jenkins**, 2008; **Scolari**, 2009, 2013). This cluster is peripherally linked to Toffler through his contributions to the 'Third Wave' and the idea of 'prosumer' (**Toffler**, 1981), which are placed within a broader context of technological changes. This community also includes references about the social changes brought about by digital technologies (**Castells**, 2009). This cluster is connected to another one (**yellow**) that focuses on the impact of technologies in the structures of media systems (**Chadwick**, 2017) or specific areas such as political communication (**Campos-Domínguez**, 2017).

Another community (**red**) features references about content analysis and is linked to another group (**pink**) about media theories. Within this cluster, framing references (**Entman**, 1993; **Semetko**; **Valkenburg**, 2000; **Tankard**, 2001) are more common and placed at the centre, while agenda-setting (**McCombs**; **Shaw**, 1972) is less frequent and located in the periphery.

> The analysis of the co-word networks provides additional evidence supporting the aforementioned focus of Spanish Communication research on Mass Communication



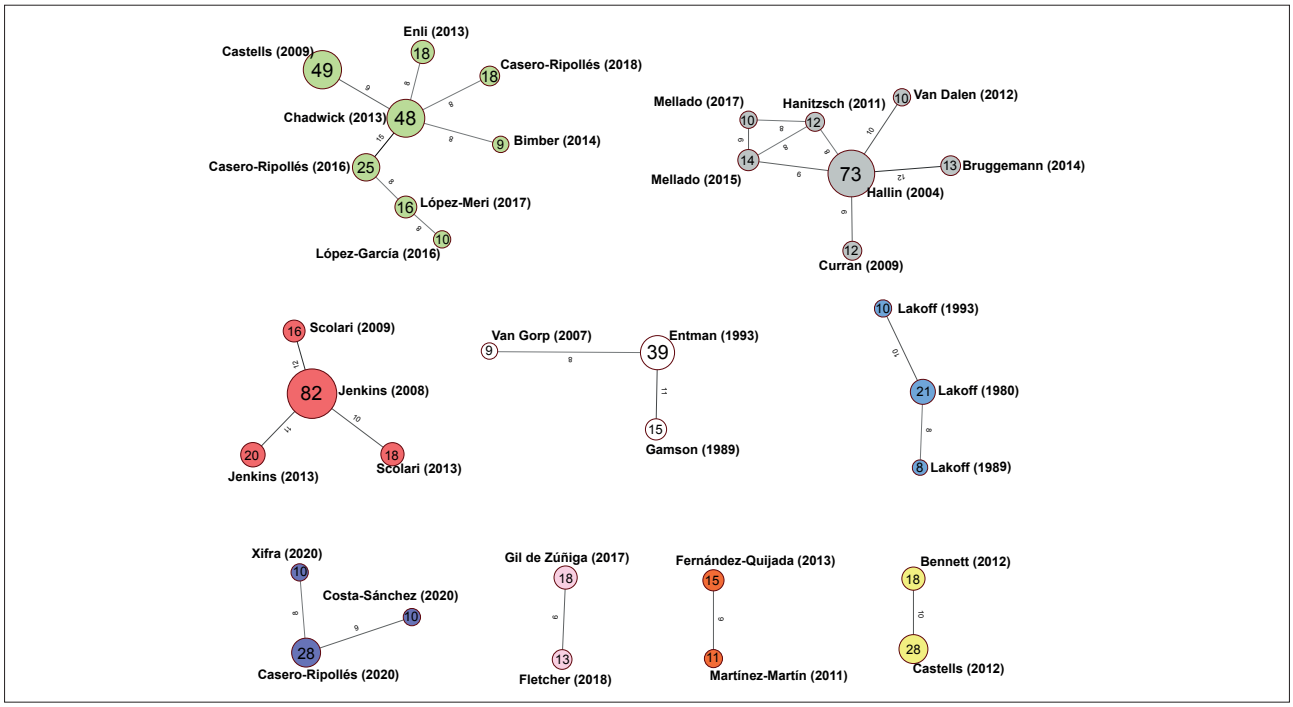
Graph 3. Co-citation network of the Spanish scientific output on Communication in *ESCI* (2015-2021). Source: *Web of Science*.
Note. Featuring links equal or above 13.

Last, two different dyads appear detached from the rest of the communities. One of them (**blue**) focuses on Covid-19, and the other (white) revolves around fake news.

The theoretical structure of Spanish scientific production in *SSCI* is more fragmented, with clusters of references that are more disconnected from each other (Graph 4).

Similar to *ESCI*, the co-citation network in *SSCI* contains multiple clusters of references centered on the impact of new technologies. In this case, the Transmedia cluster (**red**) is disconnected from the community (**green**) that focuses on the socio-political effects of digital media. Another group of references (**gray**) is dedicated to journalistic cultures (**Hanitzsch** *et al*., 2011; **Mellado** *et al*., 2017).

The **blue** cluster comprises references from the field of Linguistics tied by George Lakoff's (**Lakoff**, 1993) concept of 'metaphor'. Another group of citations (white) centers on framing (**Entman**, 1993). A triad (**deep blue**) includes references



Graph 4. Co-citation network of the Spanish scientific output on Communication in *SSCI* (2015-2021). Source: *Web of Science*.
Note. Featuring links equal or above 8.

that examine the impact of Covid-19 on various phenomena such as corporate communication (**Xifra**, 2020) or news consumption (**Casero-Ripollés**, 2020).

Finally, several dyads focus on specific issues such as incidental news consumption (**Fletcher**; **Nielsen**, 2018; **Gil-de-Zúñiga** *et al*., 2017), digital activism (**pink** cluster), or meta-research on Communication **Fernández-Quijada**; **Masip**, 2013) and Education (**Martínez-Martín** *et al*., 2011).

> Our data remarks that Spanish researchers in both *ESCI* and *SSCI* adopt quantitative paradigms, with qualitative analysis remaining a marginal aspect of the field

5. Discussion and conclusions

Our findings highlight certain trends in Spanish scientific publications on Communication, published in *ESCI*, that distinguish them from the characteristics observed in *SSCI* articles.

Spanish Research on Communication exhibits similar structural patterns in both *SSCI* and *ESCI*. The discipline appears to be relatively homogeneous and not highly fragmented, with main components of large size and reduced distances between them. There are no heavily dominant centers (as indicated by low centrality values), and the most central nodes tend to be connected to each other (as indicated by a relatively high Watts-Strogatz value). However, there is lower cohesion among the peripheral nodes (as indicated by a low Transitivity value).

These results are consistent with previous structural analyses of Spanish and Latin American research on Communication published in *Scopus* (**Segado-Boj** *et al.*, 2021a). The evidence suggests that structural values in Spanish communication research are consistent across various databases, including *Scopus*, *SSCI*, and *ESCI*. However, differences arise when examining the specific placement of individual elements within this overall structure.

Thus, the analysis of the co-citation networks reveals that Spanish *SSCI* research on Communication tends to focus on more specific consequences of new technologies, rather than solely on generic issues. Conversely, research on Communication in *ESCI* tends to analyze more generic topics than in *SSCI*. The theoretical communities in *SSCI* concentrate on specific features, such as incidental news consumption or activism, while in *ESCI*, clusters are organized mainly around the main theories in the discipline, such as framing or agenda setting. In addition, within *ESCI*, the cluster of references related to new technologies primarily comprises works on transmedia narratives, with the socio-political impact of these technologies being a peripheral part of the group. In contrast, in *SSCI*, these two conceptual domains remain separate and disconnected from each other.

While there may be some differences in how issues or concepts are linked, the thematic structures (co-word networks) in *SSCI* and *ESCI* are mostly similar and share many of the same keywords. It is worth noting that the Spanish academic community in Communication has not been immune to the sudden surge in the number of articles related to the health crisis caused by the pandemic. This trend has also been observed in other fields, representing an unprecedented increase in attention paid to a phenomenon in the entire history of science (**Odone** *et al*., 2020). This trend has been identified in both *SSCI* and *ESCI*.

The analysis of the co-word networks provides additional evidence supporting the aforementioned focus of Spanish Communication research on Mass Communication (**Caffarel-Serra** *et al.*, 2017; **Martínez-Nicolás** *et al*., 2019). Other areas of Communication research, such as interpersonal communication, are absent from both *ESCI* and *SSCI*.

Disaggregated analysis shows that the thematic core of *ESCI*'s production includes terms such as cinema or advertising, which are absent from *SSCI*. These terms did not appear in previous analyses of Spanish Communication research indexed in *Scopus* (**Segado-Boj** *et al*., 2022a). This fact suggests that future meta-studies on Spanish Communication aimed at exploring fields beyond Journalism should utilize *ESCI* as a source, or else a significant portion of the scientific production on such topics will be overlooked.

Furthermore, the analysis of the most central keywords (Table 2) highlights the importance given to new technologies, which is consistent with the findings of **Montero** *et al*. (2018) at the international level and with **Fernández-Fernández** *et al*. (2020) at the national level in Spain. The co-word cluster with the highest number of nodes in *SSCI* (Graph 1) consists of socio-political concepts (**green** cluster), which is consistent with international research on Communication (**Barnett** *et al*., 2011). However, in *ESCI* (Graph 1), such terms form smaller, more peripheral clusters (**yellow** and **pink**). This suggests that *ESCI* articles cover a wider range of themes compared to *SSCI* documents.

Another noteworthy finding is the isolated and tangential position of gender studies in both *ESCI* and *SSCI*. Gender-related keywords are detached from other specialised communities, and we did not find any specific clusters of references dedicated to gender studies in the co-citation network. This suggests a certain theoretical dispersion, which is consistent with previous evidence of its relatively weak presence in Spanish Communication

> Future meta-studies on Spanish Communication aimed at exploring fields beyond Journalism should utilize *ESCI* as a source, or else a significant portion of the scientific production on such topics will be overlooked

studies (**Zurbano-Berenguer** *et al.*, 2018). Hence, it may be necessary to incorporate a gender perspective into studies on political communication or media effects, to name just two relevant examples.

> Another noteworthy finding is the isolated and tangential position of gender studies in both *ESCI* and *SSCI*. Gender-related keywords are detached from other specialised communities, and we did not find any specific clusters of references dedicated to gender studies in the co-citation network

On another note, while international research is primarily structured around framing and priming (**Chung** *et al.*, 2013), Spanish research centres on convergence culture (**Jenkins**, 2008). Specific works on framing are not prominent in the core of the co-citation networks (Tables 3-4). However, the analysis of the most frequent relationships does indicate the significance of the framing theoretical perspective in both *ESCI* (**pink** cluster, Graph 3) and *SSCI* (white cluster, Graph 4). This trend could be linked to the theoretical dispersion identified in articles published by Spanish scholarly journals (**Martínez-Nicolás** *et al.*, 2019; **Piñeiro-Naval**; **Morais**, 2019; **Carrasco-Campos**; **Saperas**, 2022) and in *Scopus* articles authored by Spanish researchers (**Segado-Boj** *et al.*, 2022b).

Similarly, the presence of content analysis as one of the most central keywords in both *ESCI* and *SSCI* (Table 2) reflects the importance of this method in Spanish Communication research (**Gómez-Escalonilla**, 2021; **Piñeiro-Naval**, 2020; **Vizoso** *et al.*, 2019). This relevance is particularly significant in *ESCI*, where a specific community of references (**red** cluster, Graph 3) revolves around this method. These findings emphasize the use of content analysis as one of the most common research tools in Communication (**Berger**, 2016). Additionally, our data remarks that Spanish researchers in both *ESCI* and *SSCI* adopt quantitative paradigms, with qualitative analysis remaining a marginal aspect of the field.

In contrast, our findings indicate that media effects, which constitute a fundamental aspect of international Communication research (**Günther**; **Domahidi**, 2017), have not been a specific focus of Spanish researchers, as evidenced by the absence of particular communities (Graphs 1 and 2) and keywords related to this area among the most central concepts (Table 2). Instead, the research conducted by Spanish scholars continues to be primarily focused on media messages and content analysis (**Caffarel-Serra** *et al.*, 2017; **Martínez-Nicolás** *et al.*, 2019), while other areas (audience research and media context) have yet to be fully explored.

Co-citation and co-word analysis have been extensively employed in prior research to investigate particular themes and subjects in the Communication field (cfr. **McGowan** *et al.*, 2022; **Quevedo-Redondo** *et al.*, 2022; **Segado-Boj** *et al.*, 2022a), showcasing its ability to automatically handle large data sets. Methodologically, we believe that the primary contribution of this study is emphasizing the importance of utilizing *ESCI* as a resource, and specifically, comparing it to *SSCI*. Thus, we suggest separating two spheres within Spanish communication research: one that aligns with and conforms to Anglo-Saxon models, and another that is more distinctive and particular, less integrated into these paradigms.

Several possible explanations (not necessarily mutually exclusive) could be proposed to explain the differences between *ESCI* and *SSCI*, such as those listed below:

- *ESCI* displays emerging patterns that have the potential to be consolidated in *SSCI* in the future.
- Difference in focus: The majority of Communication journals included in *SSCI* are international publications, with only two journals published in Spain. In contrast, *ESCI* includes a greater number of Spanish and Latin American journals. It could be argued that the perspective of research published in *ESCI* may be too local to garner interest from international journals.
- Quality differences cannot be disregarded. It is possible that the articles published in *ESCI* do not meet the standards necessary to surpass the high rejection rates of *SSCI* journals.

Limitations

Despite the valuable contributions of this study, it is important to acknowledge its limitations when interpreting the findings. Our analysis relied primarily on a bibliometric approach, which enabled us to automatically process large volumes of data, but it was limited to superficial document features such as author keywords and references cited in the sampled articles. Additionally, the automated analysis used to detect clusters generated heterogeneous communities. This finding should not be taken at face value as proof of the existence of a consolidated subgroup of topics or references, but rather as evidence of smaller communities that lack coherence to be identified as autonomous clusters by the algorithm. This happens, for example, in Graph 1, where the **red** and **grey** clusters represent the combination of issues from Journalism and Public Relations and from Journalism and Television, respectively.

> Possible explanations for the differences between *ESCI* and *SSCI*: 1) *ESCI* displays emerging patterns that have the potential to be consolidated in *SSCI* in the future. 2) The journals indexed in *SSCI* are more international than in *ESCI*, where they are more Spanish and Latin American. 3) Quality differences.

Prospective

As a prospect for further research, content analyses could complement our findings by manually analysing a significant random sample of articles. This approach would provide a deeper look at the frames, theories, methods, and other features of Spanish communication research. Similarly, we propose investigating whether the differences identified between *ESCI* and *SSCI* are also present in Latin American research or if these differences are unique to the Spanish field. Finally, based on the hypothesis that *ESCI* articles may be of lower quality compared to those indexed in *SSCI*, future studies could explore whether there is a significant difference (measured, for example, in citations or other altmetrics) between the works indexed in one database versus the other.

> "The Spanish *SSCI* research on Communication tends to focus on more specific consequences of new technologies, rather than solely on generic issues. Conversely, research on Communication in *ESCI* tends to analyze more generic topics than in *SSCI*"

6. References

Aguado-Guadalupe, Guadalupe; **Herrero-Curiel, Eva**; **De-Oliveira-Lucas, Elaine-Rosangela** (2022). "Dinámicas de la producción científica española en las revistas de Comunicación en WoS". *Revista española de documentación científica*, v. 45, n. 2, e326.
https://doi.org/10.3989/redc.2022.2.1854

Barnett, George A.; **Huh, Catherine**; **Kim, Youngju**; **Park, Han Woo** (2011). "Citations among communication journals and other disciplines: a network analysis". *Scientometrics*, v. 88, n. 2.
https://doi.org/10.1007/s11192-011-0381-2

Batagelj, Vladimir; **Mrvar, Andrej** (2004). "Pajek - Analysis and visualization of large networks". In: *Graph drawing software*, Berlin: Springer, pp. 77-103. ISBN: 978 3 642 18638 7
https://doi.org/10.1007/978-3-642-18638-7_4

Berger, Arthur-Asa (2000). *Media and communication research methods: an introduction to qualitative and quantitative approaches*. Thousand Oaks: Sage Publications. ISBN: 978 0 7619 1852 3

Brüggemann, Michael; **Engesser, Sven**; **Büchel, Florin**; **Humprecht, Edda**; **Castro, Laia** (2014). "Hallin and Mancini revisited: four empirical types of western media systems". *Journal of communication*, v. 64, n. 6.
https://doi.org/10.1111/jcom.12127

Butt, Nadeem-Shafique (2021). "Bibliomining and comparison of Q4 and ESCI indexed journals under statistics and probability category". *Pakistan journal of statistics and operation research*, v. 17, n. 1.
https://doi.org/10.18187/pjsor.v17i1.3243

Butt, Nadeem-Shafique; **Malik, Ahmad-Azam**; **Shahbaz, Muhammad-Qaiser** (2021). "Bibliometric analysis of statistics journals indexed in Web of Science under Emerging Source Citation Index". *SAGE Open*, v. 11, n. 1.
https://doi.org/10.1177/2158244020988870

Caffarel-Serra, María-Carmen (2018). "La metainvestigación en comunicación, una necesidad y una oportunidad". *adComunica*, v. 15, pp. 293-295.
https://doi.org/10.6035/2174-0992.2018.15.16

Campos-Domínguez, Eva (2017). "Twitter y la comunicación política". *Profesional de la información*, v. 26, n. 5.
https://doi.org/10.3145/epi.2017.sep.01

Carrasco-Campos, Ángel; **Saperas, Enric** (2022). "Between centrality and theoretical dispersion: theoretical frameworks in Spanish peer-reviewed communication journals. Analysis of research papers published by five top-ranked journals 2011-2020". *Communication & society*, v. 35, n. 2, pp. 155-168.
https://doi.org/10.15581/003.35.2.155-168

Carrasco-Campos, Ángel; **Saperas, Enric**; **Martínez-Nicolás, Manuel** (2018). "¿Cómo investigamos la comunicación en España? Universidades públicas y privadas en las publicaciones científicas de comunicación españolas (1990-2014)". *adComunica*, v. 15, pp. 45-63.
https://doi.org/10.6035/2174-0992.2018.15.4

Carrillo-Vera, José-Agustín; **Aguado-Terrón**, **Juan-Miguel**; **Gómez-García, Salvador** (2021). "Following the trail of esports: the multidisciplinary boom of research on the competitive practice of video games". *International journal of gaming and computer-mediated simulations*, v. 10, n. 4, pp. 42-61.
https://doi.org/10.4018/IJGCMS.2018100103

Casero-Ripollés, Andreu (2020). "Impact of Covid-19 on the media system. Communicative and democratic consequences of news consumption during the outbreak". *Profesional de la información*, v. 29, n. 2.
https://doi.org/10.3145/epi.2020.mar.23

Casero-Ripollés, Andreu; **Feenstra, Ramón A.**; **Tormey, Simón** (2016). "Old and new media logics in an electoral campaign: the case of podemos and the two-way street mediatization of politics". *The international journal of press/politics*, v. 21, n. 3.
https://doi.org/10.1177/1940161216645340

Castillo-Esparcia, Antonio; **Rubio-Moraga, Ángel**; **Almansa-Martínez, Ana** (2012). "La investigación en Comunicación. Análisis bibliométrico de las revistas de mayor impacto del ISI". *Revista latina de comunicación social*, n. 67, pp. 248-270.
https://doi.org/10.4185/RLCS-067-955-248-270

Chadwick, Andrew (2013). *The hybrid media system: Politics and power*. Oxford University Press. ISBN: 978 0 19 975947 7
https://doi.org/10.1093/acprof:oso/9780199759477.001.0001

Chan, Chung-hong; **Grill, Christiane** (2022). "The highs in communication research: research topics with high supply, high popularity, and high prestige in high-impact journals". *Communication research*, v. 49, n. 5.
https://doi.org/10.1177/0093650220944790

Chaves-Montero, Alfonso; **Vázquez-Aguado, Octavio** (2021). "La calidad de la producción de trabajo social de autores/as españoles/as indexada en ESCI". *Alternativas cuadernos de trabajo social*, v. 28, n. 2, pp. 189-213.
https://doi.org/10.14198/ALTERN2021.28.2.03

Chung, Chung-Joo; **Barnett, George A.**; **Kim, Kitae**; **Lackaff, Derek** (2013). "An analysis on communication theory and discipline". *Scientometrics*, v. 95, n. 3.
https://doi.org/10.1007/s11192-012-0869-4

Costa-Sánchez, Carmen (2017). "Análisis de la productividad y visibilidad en Scopus de los investigadores españoles en comunicación". *Observatorio (OBS*)*, v. 11, n. 3.
https://doi.org/10.15847/obsOBS11320171030

Costa-Sánchez, Carmen; **López-García, Xosé** (2020). "Comunicación y crisis del coronavirus en España. Primeras lecciones". *Profesional de la información*, v. 29, n. 3.
https://doi.org/10.3145/epi.2020.may.04

Cuocolo, Renato; **Ponsiglione, Andrea**; **Dell'Aversana, Serena**; **D'Acierno, Ludovica**; **Lassandro, Giulia**; **Ugga, Lorenzo**; **Romeo, Valeria**; **Vola, Elena-Augusta**; **Stanzione, Arnaldo**; **Verde, Francesco**; **Picariello, Valentina**; **Capaldo, Iolanda**; **Pontillo, Giuseppe**; **Cantoni, Valeria**; **Green, Roberta**; **Petretta, Mario**; **Cuocolo, Alberto**; **Imbriaco, Massimo** (2020). "The cardiac conundrum: a systematic review and bibliometric analysis of authorship in cardiac magnetic resonance imaging studies". *Insights into imaging*, v. 11, n. 1.
https://doi.org/10.1186/s13244-020-00850-1

De-Filippo, Daniela; **Gorraiz, Juan** (2020). "Is the Emerging Source Citation Index an aid to assess the citation impact in social science and humanities?". *Journal of informetrics*, v. 14, n. 4, 101088.
https://doi.org/10.1016/j.joi.2020.101088

De-las-Heras-Pedrosa, Carlos; **Martel-Casado, Telva**; **Jambrino-Maldonado, Carmen** (2018). "Análisis de las redes académicas y tendencias científicas de la comunicación en las universidades españolas". *Revista prisma social*, n. 22, pp. 229-246.
https://revistaprismasocial.es/article/view/2584

Dhanani, Alpa; **Jones, Michael-John** (2017). "Editorial boards of accounting journals: gender diversity and internationalization". *Accounting, auditing & accountability journal*, v. 30, n. 5.
https://doi.org/10.1108/AAAJ-08-2014-1785

Entman, Robert M. (1993). "Framing: toward clarification of a fractured paradigm". *Journal of communication*, v. 43, n. 4.
https://doi.org/10.1111/j.1460-2466.1993.tb01304.x

Fernández-Fernández, Maximiliano; **Díaz-Cano, Eduardo**; **Fernández-Alameda, Carlos M.**; **Tardivo, Giuliano** (2020). "Temas de investigación predominantes en los congresos de la Asociación Española de Investigación de la Comunicación (AE-IC)". En: *Comunicación y diversidad. Selección de comunicaciones del VII Congreso Internacional de la Asociación Española de Investigación de la Comunicación (AE-IC).* Valencia, España, 28-30 de octubre, pp. 11-24. EPI SL. ISBN: 978 84 120239 5 4
https://doi.org/10.3145/AE-IC-epi.2020

Gaitán-Moya, Juan-Antonio; **Lozano-Ascencio, Carlos-Horacio**; **Caffarel-Serra, Carmen**; **Piñuel-Raigada, José-Luis** (2021). "La investigación en comunicación en proyectos I+D en España de 2007 a 2018". *Revista latina de comunicación social*, n. 79.
https://doi.org/10.4185/RLCS-2020-1486

Gómez-Escalonilla, Gloria (2021). "Métodos y técnicas de investigación utilizados en los estudios sobre comunicación en España". *Revista mediterránea de comunicación*, v. 12, n. 1.
https://doi.org/10.14198/MEDCOM000018

Goyanes, Manuel (2019). "Diversidad geográfica y de género en los comités editoriales de las revistas en comunicación". *Estudios sobre el mensaje periodístico*, v. 25, n. 1.
https://doi.org/10.5209/ESMP.63727

Goyanes, Manuel (2020). "Editorial. Meta-investigación en comunicación: antecedentes, efectos y retos de una investigación y gobernanza estandarizada". *Profesional de la información*, v. 29, n. 4.
https://doi.org/10.3145/epi.2020.jul.06

Goyanes, Manuel; **Rodríguez-Gómez, Eduardo-Francisco**; **Rosique-Cedillo, Gloria** (2018). "Investigación en comunicación en revistas científicas en España (2005-2015): de disquisiciones teóricas a investigación basada en evidencias". *Profesional de la información*, v. 27, n. 6.
https://doi.org/10.3145/epi.2018.nov.11

Günther, Elisabeth; **Domahidi, Emese** (2017). "What communication scholars write about: an analysis of 80 years of research in high-impact journals". *International journal of communication*, v. 11, n. 0.
https://ijoc.org/index.php/ijoc/article/view/6989

Hallin, Daniel; **Mancini, Paolo** (2007). *Comparing media systems: three models of media and politics*. Cambridge University Press. ISBN: 978 0 521 54308 8

Hanitzsch, Thomas; **Hanusch, Folker**; **Mellado, Claudia**; **Anikina, Maria**; **Berganza, Rosa**; **Cangoz, Incilay**; **Coman, Mihai**; **Hamada, Basyouni**; **Hernández, María-Elena**; **Karadjov, Christopher D.**; **Virginia Moreira, Sonia**; **Mwesige, Peter G.**; **Plaisance, Patrick Lee**; **Reich, Zvi**; **Seethaler, Josef**; **Skewes, Elizabeth A.**; **Vardiansyah-Noor, Dani**; **Kee-Wang-Yuen, Edgar** (2011). "Mapping journalism cultures across nations: a comparative study of 18 countries". *Journalism studies*, v. 12, n. 3.
https://doi.org/10.1080/1461670X.2010.512502

Huang, Ying; **Zhu, Donghua**; **Lv, Qi**; **Porter, Alan L.**; **Robinson, Douglas K. R.**; **Wang, Xuefeng** (2017). "Early insights on the Emerging Sources Citation Index (ESCI): an overlay map-based bibliometric study". *Scientometrics*, v. 111, n. 3.
https://doi.org/10.1007/s11192-017-2349-3

Igartua, Juan-José; **Arcila-Calderón, Carlos**; **Piñeiro-Naval, Valeriano**; **González, Alejandro**; **Blanco-Herrero, David** (2022). "La teoría del framing en la investigación iberoamericana sobre comunicación política". En: Muñiz, Carlos. *Framing y política. Aportaciones empíricas desde Iberoamérica*. Ciudad de México: Tirant Humanidades, pp. 57-98. ISBN: 978 84 19071 71 2

Ioannidis, John P. A. (2018). "Meta-research: Why research on research matters". *PLoS biology*, v. 16, n. 3.
https://doi.org/10.1371/journal.pbio.2005468

Jenkins, Henry (2008). *Convergence culture: la cultura de la convergencia de los medios de comunicación*. Barcelona: Paidós. ISBN: 978 84 493 2153 5

Krippendorff, Klaus (1980). *Content analysis: an introduction to its methodology*. Sage. ISBN: 978 0 8039 1498 8

Lakoff, George (1993). "The contemporary theory of metaphor". In: *Metaphor and thought*, Cambridge: Cambridge University Press, pp. 202-251. ISBN: 978 0 521 40561 4

López-García, Guillermo (2016). "Nuevos y viejos liderazgos: la campaña de las elecciones generales españolas de 2015 en Twitter". *Communication & society*, v. 29, n. 3.
https://doi.org/10.15581/003.29.35829

López-Meri, Amparo; **Marcos-García, Silvia**; **Casero-Ripollés, Andreu** (2017). "What do politicians do on Twitter? Functions and communication strategies in the Spanish electoral campaign of 2016". *Profesional de la información*, v. 26, n. 5.
https://doi.org/10.3145/epi.2017.sep.02

Lozano-Ascencio, Carlos; **Gaitán-Moya, Juan-Antonio**; **Caffarel-Serra, Carmen**; **Piñuel-Raigada, José-Luis** (2020). "Una década de investigación universitaria sobre Comunicación en España, 2007-2018". *Profesional de la información*, v. 29, n. 4.
https://doi.org/10.3145/epi.2020.jul.12

Martínez, María-Ángeles; **Cobo, Manuel-Jesús**; **Herrera, Manuel**; **Herrera-Viedma, Enrique** (2015). "Analyzing the scientific evolution of social work using science mapping". *Research on social work practice*, v. 25, n. 2.
https://doi.org/10.1177/1049731514522101

Martínez-Martín, Miquel; **Esteban-Bara, Francisco**; **Buxarrais-Estrada, María-Rosa** (2011). "Escuela, profesorado y valores". *Revista de educación*, n. extra, pp. 95-113.
http://hdl.handle.net/11162/92222

Martínez-Nicolás, Manuel; **Saperas, Enric**; **Carrasco-Campos, Ángel** (2019). "La investigación sobre comunicación en España en los últimos 25 años (1990-2014). Objetos de estudio y métodos aplicados en los trabajos publicados en revistas españolas especializadas". *Empiria*, n. 42, pp. 37-69.
https://doi.org/10.5944/empiria.42.2019.23250

McCombs, Maxwell E.; **Shaw, Donald L.** (1972). "The agenda setting function of mass media". *Public opinion quarterly*, v. 36, n. 2.
https://doi.org/10.1086/267990

McGowan, Nadia; **Repiso, Rafael**; **Montero-Díaz, Julio** (2022). "Las obras de mayor relevancia en el estudio científico del Cine y Fotografía". *Fotocinema*, n. 25, pp. 381-410.
https://doi.org/10.24310/Fotocinema.2022.vi25.14428

Mellado, Claudia; **Hellmueller, Lea**; **Márquez-Ramírez, Mireya**; **Humanes, María-Luisa**; **Sparks, Colin**; **Stepinska, Agnieszka**; **Pasti, Svetlana**; **Schielicke, Anna-Maria**; **Tandoc, Edson**; **Wang, Haiyan** (2017). "The hybridization of journalistic cultures: a comparative study of journalistic role performance". *Journal of communication*, v. 67, n. 6.
https://doi.org/10.1111/jcom.12339

Miquel-Segarra, Susana (2021). "Capítulo 4.2. Análisis de la investigación publicada en las revistas de comunicación con índice ESCI (Emerging Sources Citation Index)". *Espejo de monografías de comunicación social*, n. 2.
https://doi.org/10.52495/c4.2.emcs.2.mic6

Montero-Díaz, Julio; **Cobo, Manuel-Jesús**; **Gutiérrez-Salcedo, María**; **Segado-Boj, Francisco**; **Herrera-Viedma, Enrique** (2018). "Mapeo científico de la categoría comunicación en WoS (1980-2013)". *Comunicar*, v. 26, n. 55.
https://doi.org/10.3916/C55-2018-08

Odone, Anna; **Salvati, Stefano**; **Bellini, Lorenzo**; **Bucci, Daria**; **Capraro, Michele**; **Gaetti, Giovanni**; **Amerio, Andrea**; **Signorelli, Carlo** (2020). "The runaway science: a bibliometric analysis of the COVID-19 scientific literature: How COVID-19 has changed academic publishing". *Acta biomedica Atenei Parmensis*, v. 91, n. 9, pp. 34-39.
https://doi.org/10.23750/abm.v91i9-S.10121

Piñeiro-Naval, Valeriano (2020). "The content analysis methodology. Uses and applications in communication research on Spanish-speaking countries". *Communication & society*, v. 33, n. 3.
https://doi.org/10.15581/003.33.3.1-15

Piñeiro-Naval, Valeriano; **Morais, Ricardo** (2019). "Estudio de la producción académica sobre comunicación en España e Hispanoamérica". *Comunicar*, v. 27, n. 61.
https://doi.org/10.3916/C61-2019-10

Piñeiro-Naval, Valeriano; **Morais, Ricardo**; **Baptista, João-Pedro** (2021). "Una perspectiva hispánica sobre la actual investigación en comunicación (2014-2019)". *Revista general de información y documentación*, v. 31, n. 2.
https://doi.org/10.5209/rgid.79464

Repiso, Rafael; **Jiménez-Contreras, Evaristo**; **Aguaded, Ignacio** (2017). "Revistas iberoamericanas de educación en SciELO Citation Index y Emerging Source Citation Index". *Revista española de documentación científica*, v. 40, n. 4, e186.
https://doi.org/10.3989/redc.2017.4.1445

Repiso, Rafael; **Moreno-Delgado, Alicia** (2022). "Producción científica española en comunicación indexada en Web of Science: contextualización y presencia en el ranking de Shanghái". *Profesional de la información*, v. 31, n. 1.
https://doi.org/10.3145/epi.2022.ene.19

Ruiz-Pérez, Rafael; **Jiménez-Contreras, Evaristo** (2019). "Los Emerging Sources Citation Index y la internacionalización de las revistas científicas españolas, con especial mención a las de Psicología". *Psicothema*, v. 31, n. 4, pp. 376-383.
https://doi.org/10.7334/psicothema2019.59

Saperas, Enric; **Carrasco-Campos, Ángel** (2019). "¿Cómo investigamos la comunicación? La meta-investigación como método para el estudio de las prácticas de investigación en los artículos publicados en revistas científicas". En: Francisco Sierra-Caballero; Jordi Alberich-Pascual (eds.). *Epistemología de la comunicación y cultura digital: retos emergentes*, pp. 217-230. Granada: Editorial Universidad de Granada. ISBN: 978 84 338 6527 4

Scolari, Carlos A. (2009). "Transmedia storytelling: Implicit consumers, narrative worlds, and branding in contemporary media production". *International journal of communication*, v. 3, pp. 586-606.

Scolari, Carlos A. (2013). *Narrativas transmedia: cuando todos los medios cuentan*. Barcelona: Deusto. ISBN: 978 84 234 1336 2

Segado-Boj, Francisco; **Chaparro, María-Ángeles**; **Ramírez-Daza, Óscar-Israel** (2022a). "Periodismo de investigación: análisis bibliométrico, conceptual e intelectual (2000-2020)". *Transinformação*, v. 34.
https://doi.org/10.1590/2318-0889202234e210080

Segado-Boj, Francisco; **Gómez-García, Salvador**; **Díaz-Campo, Jesús** (2022b). "Intellectual and thematic structure of Communication research in *Scopus* (1980-2020). A comparative perspective among Spain, Europe, and Latin America". *Profesional de la información*, v. 31, n. 1.
https://doi.org/10.3145/epi.2022.ene.10

Segado-Boj, Francisco; **Prieto-Gutiérrez, Juan-José**; **Díaz-Campo, Jesús** (2021a). "Redes de coautorías de la investigación española y latinoamericana en Comunicación (2000-2019): cohesión interna y aislamiento transcontinental". *Profesional de la información*, v. 30, n. 3.
https://doi.org/10.3145/epi.2021.may.05

Segado-Boj, Francisco; **Prieto-Gutiérrez, Juan-José**; **Quevedo-Redondo, Raquel** (2021b). "El Efecto Matilda en la red de coautorías Hispanoamericana en Comunicación". *Revista mediterránea de comunicación*, v. 12, n. 2.
https://doi.org/10.14198/MEDCOM.18971

Semetko, Holli A.; **Valkenburg-Valkenburg, Patti M.** (2000). "Framing european politics: a content analysis of press and television news". *Journal of communication*, v. 50, n. 2.
https://doi.org/10.1111/j.1460-2466.2000.tb02843.x

Sugimoto, Cassidy R.; **Larivière, Vincent**; **Ni, Chaoqun**; **Cronin, Blaise** (2013). "Journal acceptance rates: A cross-disciplinary analysis of variability and relationships with journal measures". *Journal of informetrics*, v. 7.
https://doi.org/10.1016/j.joi.2013.08.007

Toffler, Alvin (1980). *Future shock: the third wave*. New York: Bantam Books. ISBN: 0 553 24698 4

Trillo-Domínguez, Magdalena; **De-Moya-Anegón, Félix** (2022). "Map of scientific research on Communication in Spain: study fronts and rankings of authors, publications and institutions". *Profesional de la información*, v. 31, n. 1.
https://doi.org/10.3145/epi.2022.ene.12

Van-Eck, Nees-Jan; **Waltman, Ludo** (2010). "Software survey: VOSviewer, a computer program for bibliometric mapping". *Scientometrics*, v. 84.
https://doi.org/10.1007/s11192-009-0146-3

Vizoso, Ángel; **Pérez-Seijo, Sara**; **López-García, Xosé** (2019). "Diez años de investigación en las principales revistas científicas de comunicación. Tendencias y temáticas en las publicaciones de mayor impacto en JCR y SJR". *adComunica*, v. 18, pp. 245-270.
https://doi.org/10.6035/2174-0992.2019.18.12

Tankard, James W. (2001). "The empirical approach to the study of media framing". In: Stephen D. Reese; Oscar H. Gandy; August E. Grant (eds.). *Framing public life*. Routledge. ISBN: 978 1 4106 0568 9

Xifra, Jordi (2020). "Comunicación corporativa, relaciones públicas y gestión del riesgo reputacional en tiempos del Covid-19". *Profesional de la información*, v. 29, n. 2.
https://doi.org/10.3145/epi.2020.mar.20

Zurbano-Berenguer, Belén; **Cano-Orón, Lorena**; **Liberia-Vayá, Irene** (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*, v. 8, n. 2, pp. 169-200.
https://doi.org/10.22381/JRGS82201810

7. Annexes

Appendix 1. References of Graph 3

Bardin, Laurence (1996). *El análisis de contenido*. Madrid: Akal Ediciones. ISBN: 978 84 7600 093 9

Bauman, Zygmund (1999). *La modernidad líquida*. Madrid: Fondo de Cultura Económica de España. ISBN: 950 557 513 0

Berelson, Bernard (1952). *Content analysis in communication research*. New York: Hafner.

Campos-Domínguez, Eva (2017). "Twitter y la comunicación política". *Profesional de la información*, v. 26, n. 5.
https://doi.org/10.3145/epi.2017.sep.01

Casero-Ripollés, Andreu (2020). "Impact of Covid-19 on the media system. Communicative and democratic consequences of news consumption during the outbreak". *Profesional de la información*, v. 29, n. 2.
https://doi.org/10.3145/epi.2020.mar.23

Casero-Ripollés, Andreu; **Feenstra, Ramón A.**; **Tormey, Simon** (2016). "Old and new media logics in an electoral campaign: The case of Podemos and the two-way street mediatization of politics". *The international journal of press/politics*, v. 21, n. 3.
https://doi.org/10.1177/1940161216645340

Castells, Manuel (2009). *Communication power*. Oxford: Oxford University Press. ISBN: 978 0 19 157063 6

Castells, Manuel (2012). "Networks of outrage and hope - Social movements in the Internet age". *International journal of public opinion research*, v. 25, n. 3, pp. 398-402
https://doi.org/10.1093/ijpor/edt020

Chadwick, Andrew (2013). *The hybrid media system: politics and power*. Oxford: Oxford University Press. ISBN: 978 0 19 975947 7
https://doi.org/10.1093/acprof:oso/9780199759477.001.0001

Costa-Sánchez, Carmen; **Piñeiro-Otero, Teresa** (2012). "Nuevas narrativas audiovisuales: multiplataforma, crossmedia y transmedia: El caso de Águila Roja (RTVE)". *Icono 14*, v. 10.
https://doi.org/10.7195/ri14.v10i2.156

Entman, Robert M. (1993). "Framing: toward clarification of a fractured paradigm". *Journal of communication*, v. 43, n. 4.
https://doi.org/10.1111/j.1460-2466.1993.tb01304.x

Gamson, William A.; **Modigliani, Andre** (1989). "Media discourse and public opinion on nuclear power: a constructionist approach". *American journal of sociology*, v. 95, n. 1.
https://doi.org/10.1086/229213

Goffman, Erving (1974). *Frame analysis: an essay on the organization of experience*. Cambridge: Harvard University Press. ISBN: 978 0 674 31656 0

Igartua, Juan-José (2006). *Métodos cuantitativos de investigación en comunicación*. Barcelona: Editorial Bosch. ISBN: 84 9790 271 8

Jenkins, Henry (2003a). *Convergence culture: where old and new media collide*. New York: New York University Press. ISBN: 978 0 8147 4368 3

Jenkins, Henry (2003b). "Transmedia storytelling". *MIT technology review*.

Jenkins, Henry (2012). *Textual poachers: television fans and participatory culture*. Routledge. ISBN: 978 0 415533294

Jenkins, Henry; **Ford, Sam**; **Green, Joshua** (2013). *Spreadable media: creating value and meaning in a networked culture*. New York: NYU Press. ISBN: 978 0 8147 4350 8

Krippendorff, Klaus (1980). *Content analysis: an introduction to its methodology*. Beverly Hills: Sage. ISBN: 978 0 8039 1498 8

Lázaro-Rodríguez, Pedro; **Herrera-Viedma, Enrique** (2020). "Noticias sobre Covid-19 y 2019-nCoV en medios de comunicación de España: el papel de los medios digitales en tiempos de confinamiento". *Profesional de la información*, v. 29, n. 3.
https://doi.org/10.3145/epi.2020.may.02

López-García, Guillermo (2016). "Nuevos y viejos liderazgos: la campaña de las elecciones generales españolas de 2015 en Twitter". *Communication & society*, v. 29, n. 3.
https://doi.org/10.15581/003.29.35829

López-Meri, Amparo (2017). "Contribución ciudadana al debate electoral y su cobertura periodística en Twitter". *Prisma social: revista de investigación social*, n. 18.
https://revistaprismasocial.es/article/view/1466

McCombs, Maxwell E.; **Shaw, Donald L.** (1972). "The agenda setting function of mass media". *Public opinion quarterly*, v. 36, n. 2, pp. 176-187.
https://doi.org/10.1086/267990

Neuendorf, Kimberly A. (2002). *The content analysis guidebook*. Sage. ISBN: 978 0 7619 1977 3

Pérez-Dasilva, Jesús-Ángel; **Meso-Ayerdi, Koldobika**; **Mendiguren-Galdospín, Terese** (2020). "Fake news y coronavirus: detección de los principales actores y tendencias a través del análisis de las conversaciones en Twitter". *Profesional de la información*, v. 29, n. 3.
https://doi.org/10.3145/epi.2020.may.08

Salaverría, Ramón; **Buslón, Nataly**; **López-Pan, Fernando**; **León, Bienvenido**; **López-Goñi, Ignacio**; **Erviti, María-Carmen** (2020). "Desinformación en tiempos de pandemia: tipología de los bulos sobre la Covid-192. *Profesional de la información*, v. 29, n. 3.
https://doi.org/10.3145/epi.2020.may.15

Scheufele, Dietram A. (1999). "Framing as a theory of media effects". *Journal of communication*, v. 49, n. 1.
https://doi.org/10.1111/j.1460-2466.1999.tb02784.x

Scolari, Carlos A. (2009). "Transmedia storytelling: implicit consumers, narrative worlds, and branding in contemporary media production". *International journal of communication*, v. 3.

Scolari, Carlos A. (2012). "Comunicación digital. Recuerdos del futuro". *Profesional de la información*, v. 21, n. 4.
https://doi.org/10.3145/epi.2012.jul.01

Scolari, Carlos A. (2013). *Narrativas transmedia: cuando todos los medios cuentan*. Barcelona: Deusto. ISBN: 978 84 234 1336 2

Semetko, Holli A.; **Valkenburg, Patti M. Valkenburg-Valkenburg** (2000). "Framing European politics: a content analysis of press and television news". *Journal of communication*, v. 50, n. 2.
https://doi.org/10.1111/j.1460-2466.2000.tb02843.x

Tankard, James W. (2001). "The empirical approach to the study of media framing". In: Stephen D. Reese; Oscar H. Gandy; August E. Grant (eds.). *Framing public life*. Routledge. ISBN: 978 1 4106 0568 9

Toffler, Alvin (1980). *Future shock: the third wave*. New York: Bantam Books. ISBN: 0 553 24698 4

Vreese, Claes H. (2005). "News framing: theory and typology". *Information design journal*, v. 13, n. 1.
https://doi.org/10.1075/idjdd.13.1.06vre

Wimmer, Roger D.; **Dominick, Joseph R.** (1996). *La investigación científica de los medios de comunicación: una introducción a sus métodos*. Barcelona: Editorial Bosch. ISBN: 978 84 7676 359 9

Appendix 2. References of Graph 4

Bennett, Lance; **Segerberg, Alexandra** (2012). *The logic of connective action: digital media and the personalization of contentious politics*. Cambridge University Press. ISBN: 978 1 139198752
https://doi.org/10.1017/CBO9781139198752

Bimber, Bruce (2014). "Digital media in the Obama campaigns of 2008 and 2012: Adaptation to the personalized political communication environment". *Journal of information technology & politics*, v. 11, n. 2, pp. 130-150.
https://doi.org/10.1080/19331681.2014.895691

Brüggemann, Michael; **Engesser, Sven**; **Büchel, Florin**; **Humprecht, Edda**; **Castro, Laia** (2014). "Hallin and Mancini revisited: four empirical types of Western media systems". *Journal of communication*, v. 64, n. 6, pp. 1037-1065.
https://doi.org/10.1111/jcom.12127

Casero-Ripollés, Andreu (2018). "Research on political information and social media: Key points and challenges for the future". *Profesional de la información*, v. 27, n. 5.
https://doi.org/10.3145/epi.2018.sep.01

Casero-Ripollés, Andreu (2020). "Impact of Covid-19 on the media system. Communicative and democratic consequences of news consumption during the outbreak". *Profesional de la información*, v. 29, n. 2.
https://doi.org/10.3145/epi.2020.mar.23

Casero-Ripollés, Andreu; **Feenstra, Ramón A.**; **Tormey, Simon** (2016). "Old and new media logics in an electoral campaign: The case of Podemos and the two-way street mediatization of politics". *The international journal of press/politics*, v. 21, n. 3.
https://doi.org/10.1177/1940161216645340

Castells, Manuel (2009). *Communication power*. Oxford: Oxford University Press. ISBN: 978 0 19 157063 6

Castells, Manuel (2012). "Networks of outrage and hope - Social movements in the Internet age". *International journal of public opinion research*, v. 25, n. 3, pp. 398-402.
https://doi.org/10.1093/ijpor/edt020

Chadwick, Andrew (2013). *The hybrid media system: politics and power*. Oxford: Oxford University Press. ISBN: 978 0 19 975947 7
https://doi.org/10.1093/acprof:oso/9780199759477.001.0001

Costa-Sánchez, Carmen; **López-García, Xosé** (2020). "Comunicación y crisis del coronavirus en España. Primeras lecciones". *Profesional de la información*, v. 29, n. 3.
https://doi.org/10.3145/epi.2020.may.04

Curran, James; **Iyengar, Shanto**; **Lund, Anker-Brink**; **Salovaara-Moring, Inka** (2009). "Media system, public knowledge and democracy: a comparative study". *European journal of communication*, v. 24.
https://doi.org/10.1177/0267323108098943

Enli, Gunn-Sara; **Skogerbø, Eli** (2013). "Personalised campaigns in party-centered politics: Twitter and Facebook as arenas for political communication (2015)". *Information, communication and society*, v. 16, n. 5, pp. 757-774.
https://doi.org/10.1080/1369118X.2013.782330

Entman, Robert M. (1993). "Framing: toward clarification of a fractured paradigm". *Journal of communication*, v. 43, n. 4.
https://doi.org/10.1111/j.1460-2466.1993.tb01304.x

Fernández-Quijada, David; **Masip-Masip, Pere** (2013). "Tres décadas de investigación española en comunicación: hacia la mayoría de edad". *Comunicar*, v. 21, n. 41.
https://doi.org/10.3916/C41-2013-01

Fletcher, Richard; **Nielsen, Rasmus-Kleis** (2018). "Are people incidentally exposed to news on social media? A comparative analysis". *New media & society*, v. 20, n. 7.
https://doi.org/10.1177/1461444817724170

Gamson, William A.; **Modigliani, Andre** (1989). "Media discourse and public opinion on nuclear power: a constructionist approach". *American journal of sociology*, v. 95, n. 1.
https://doi.org/10.1086/229213

Gil de Zúñiga, Homero; **Weeks, Brian**; **Ardèvol-Abreu, Alberto** (2017). "Effects of the news-finds-me perception in communication: social media use implications for news seeking and learning about politics". *Journal of computer-mediated communication*, v. 22, n. 3, pp. 105-123.
https://doi.org/10.1111/jcc4.12185

Hallin, Daniel; **Mancini, Paolo** (2007). *Comparing media systems: three models of media and politics*. Cambridge: Cambridge University Press. ISBN: 978 0 521 54308 8

Hanitzsch, Thomas; **Hanusch, Folker**; **Mellado, Claudia**; **Anikina, Maria**; **Berganza, Rosa**; **Cangoz, Incilay**; **Coman, Mihai**; **Hamada, Basyouni**; **Hernández, María-Elena**; **Karadjov, Christopher D.**; **Virginia-Moreira, Sonia**; **Mwesige, Peter G.**; **Plaisance, Patrick-Lee**; **Reich, Zvi**; **Seethaler, Josef**; **Skewes, Elizabeth A.**; **Vardiansyah-Noor, Dani**; **Kee-Wang-Yuen, Edgar** (2011). "Mapping journalism cultures across nations: A comparative study of 18 countries". *Journalism studies*, v. 12, n. 3.
https://doi.org/10.1080/1461670X.2010.512502

Jenkins, Henry (2008). *Convergence culture: la cultura de la convergencia de los medios de comunicación*. Barcelona: Paidós. ISBN: 978 84 493 2153 5

Jenkins, Henry; **Ford, Sam**; **Green, Joshua** (2013). *Spreadable media: creating value and meaning in a networked culture*. New York: NYU Press. ISBN: 978 0 8147 4350 8

Lakoff, George (1993). "The contemporary theory of metaphor". In: *Metaphor and thought*. Cambridge: Cambridge University Press, pp. 202-251. ISBN: 978 0 521 40561 4
https://doi.org/10.1017/CBO9781139173865.013

Lakoff, George; **Turner, Mark** (1989). *More than cool reason: A field guide to poetic metaphor*. University of Chicago Press. ISBN: 978 0 226 46812 9
https://doi.org/10.7208/chicago/9780226470986.001.0001

Lakoff, Sanford A. (1980). "Moral responsibility and the Galilean imperative". *Ethics*, v. 91, n. 1.
https://doi.org/10.1086/292206

López-García, Guillermo (2016). "Nuevos y viejos liderazgos: la campaña de las elecciones generales españolas de 2015 en Twitter". *Communication & society*, v. 29, n. 3.
https://doi.org/10.15581/003.29.35829

López-Meri, Amparo (2017). "Contribución ciudadana al debate electoral y su cobertura periodística en Twitter". *Prisma social: revista de investigación social*, n. 18.
https://revistaprismasocial.es/article/view/1466

Martínez-Martín, Miguel (2011). "Educación, valores y democracia". *Revista de educación*, n. 1, pp. 15-19.

Mellado, Claudia (2015). "Professional roles in news content". *Journalism studies*, v. 16, n. 4, pp. 596-614.
https://doi.org/10.1080/1461670X.2014.922276

Scolari, Carlos A. (2009). "Transmedia storytelling: implicit consumers, narrative worlds, and branding in contemporary media production". *International journal of communication*, v. 3.

Scolari, Carlos A. (2013). *Narrativas transmedia: cuando todos los medios cuentan*. Barcelona: Deusto. ISBN: 978 84 234 1336 2

Van-Dalen, Arjen; **De-Vreese, Claes H.**; **Albæk, Erik** (2012). "Different roles, different content? A four-country comparison of the role conceptions and reporting style of political journalists". *Journalism*, v. 13, n. 7.
https://doi.org/10.1177/1464884911431538

Van-Gorp, Baldwin (2007). "The constructionist approach to framing: Bringing culture back in". *Journal of communication*, v. 57, n. 1, pp. 60-78.
https://doi.org/10.1111/j.1460-2466.2006.00329_3.x

Xifra, Jordi (2020). "Comunicación corporativa, relaciones públicas y gestión del riesgo reputacional en tiempos del Covid-19". *Profesional de la información*, v. 29, n. 2.
https://doi.org/10.3145/epi.2020.mar.20