



Review article

Corporate social responsibility reports: A review of the evolution, approaches and prospects

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ARTICLE INFO

Keywords:

Communication
Reporting
Corporate social responsibility
Bibliometrics

ABSTRACT

In recent years, the corporate social responsibility (CSR) report has gained strategic importance within organizations, especially after the development of strategies and different international regulations, such as the Global Compact and the United Nations' 2030 Agenda or Directive 2014/95/EU. This, together with the boom in CSR research and business management, has given rise to heterogeneity in the conceptualization and management of CSR report. Consequently, this research study proposes a bibliometric and systematic analysis of 4966 research articles, available in the Scopus repository and published during the period of 2001–2021, to improve the conceptualization and management of CSR communication. The documents analyzed were research articles that included concepts such as CSR, communication, and reporting in the title, abstract and keywords and that were published in the 21st century. The results show an exponential growth in scientific production in recent years, coinciding with the development of strategies and international regulations, and with a high percentage of authors, institutions and countries coming from the European Union. Additionally, the main characteristics of the research are obtained alongside data on the most productive authors, institutions, journals, and countries, in addition to information about their international cooperation networks. Finally, the results present the most relevant contributions in regard to the four research topics detected, namely: (a) accountability; (b) disclosure of performance; (c) management of the organization; (d) corporate strategy; and (e) corporate reputation. These results indicate a broad multidisciplinary nature of this line of research. Finally, future lines of research that can contribute to improving or expanding the current findings in this research area are established.

1. Introduction

Since its beginnings in the mid-twentieth century, where the first definitions were centered on the business–society binomial, the concept of corporate social responsibility (hereinafter, CSR) [1–3] has evolved and incorporated different elements, such as the principle of voluntariness, the interested parties of the theory of stakeholders [4] or the four interdependent dimensions of CSR itself [5]: economic, legal, ethical and philanthropic. Now, in the 21st century, CSR has been converted into one of the main intangible assets

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<https://doi.org/10.1016/j.heliyon.2023.e18348>

Received 7 December 2022; Received in revised form 11 July 2023; Accepted 13 July 2023

Available online 16 July 2023

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of organizations. Characterized by its transversality and its ability to be measured, and in light of the enormous production of sustainability reports in recent years, it could be said that CSR has been gaining importance within organizations and is now a part of the general corporate strategies.

Derived from this strategic nature of CSR, communication is emerging as the last step in the process to achieve the ultimate objective of CSR, which is to generate shared value between organizations and society [6]. CSR communication refers to the information that organizations provide to their stakeholders about their economic, environmental, and social commitments that they integrate into their activities and operations [7].

As part of the dialogue between the organization and the interested parties, reporting these commitments implies facilitating access to organizational information, which shows an exercise in transparency from which trust is generated. In addition, communicating in a balanced way both the previously established objectives and the results obtained throughout the CSR management process implies accountability on the part of the organization [8], which generates credibility among stakeholders. Additionally, these two intangibles are joined by a third: reputation, which is understood as the perception that interest groups have of organizations [9]. Consequently, the communication of CSR can influence favorable or negative behaviors of interested parties towards organizations, with a corresponding economic impact. If consistency is demonstrated between the values of the organization, its actions and the information that is transferred when communicating socially responsible management, this communication will contribute to generating a positive reputation for the organization, which will be reflected in its economic results. The opposite will happen if contradictions are perceived in the transferred messages, generating a reputational risk [10]. Indeed, through these three intangibles, it can be deduced that CSR communication makes it possible to establish and maintain mutually beneficial relationships between the organization and its stakeholders, generating the ultimate objective of CSR, which is shared value. The communication of socially responsible management acquires a strategic value within organizations, placing it as one of the key elements of CSR [11,12].

As a result of this strategic nature, and especially as a result of the development of different CSR strategies such as the Global Compact and the United Nations 2030 Agenda, the sustainability communication standards of organizations such as the Global Reporting Initiative, and international regulations such as the Directive 214/35UE and its transposition to the legal system of the member countries of the European Union, it can be affirmed that the communication of CSR has become a booming phenomenon, both at the level of research and business management, which has given This has led to an increase in the dissemination that organizations make about their CSR through their sustainability reports, their activity reports, their web pages or their profiles on social networks.

Sustainability reports as an instrument for disseminating CSR actions have been acquiring increasing importance. The first sustainability reports date from the 1970s, reporting on environmental and social aspects [13], becoming a more prominent practice in the late 1990s and early 2000s as a consequence of the rise of sustainability triple bottom line concept [14]. In conceptual terms, sustainability reports include information such as strategic objectives [15], resource allocation [16], change management [17] and evaluation, monitoring, and communication [18]. Beyond this, what is relevant and what generates value for stakeholders is the presentation approach, the most widely used being the "GRI standards" and, increasingly, the "International Integrated Information Framework" [19]. However, a wide variety of approaches fighting for dominance have emerged in the last decade [20]. However, far from all of them offering homogeneous content, offering accountability based on the same information parameters, allowing stakeholders to make decisions and adopt well-founded value judgments, there is heterogeneity in the topics addressed and in the conceptualization of CSR communication, coming to confuse CSR with social action or environmental action [21]. Consequently, this non-homogenization and diversity of presentation approaches is giving rise to a lack of comparability between the data [22].

Some previous systematic reviews of the literature have already addressed some very specific questions about CSR communication: Ali et al. (2017) and Dienes et al. (2016) carried out a systematic review on the drivers of CSR [23,24]; García-Sánchez (2021) studied the relationships between CSR disclosure predictors, individual, organizational and institutional factors, and the external or internal impacts of organizations [25]; Dawkins (2005) analyzed the specific challenges of CSR communication from the point of view of corporate reputation [26], and Ellerup-Nielsen & Thomsen (2018) the challenges from the point of view of the legitimacy of organizations. However, none of them addressed the problem of homogeneity, that is, what are the elements that must be communicated to interest groups to generate value for society and that facilitate future decision-making [27].

Consequently, we found a research gap related to the conceptualization and determination of the CSR areas that must be communicated to the interest groups, thus improving the effective and efficient dissemination of CSR in organizations, as a tool for the generation of value reputation and facility for decision-making by internal and external stakeholders. The purpose of this research is to carry out a bibliometric analysis of the scientific production in this line of research published over the period of 2001–2021, thus contributing to improving the conceptualization and management of CSR communication. Three research questions are posed in relation to the object of study.

- Q1. What are the main characteristics of the line of research and the most relevant research articles?
- Q2. Who are the largest scientific producers, and what do their international cooperation networks look like?
- Q3. What are the main research topics and future trends of this line of research?

This research is structured as follows: Section 2 presents the research methodology. Sections 3, 4 and 5 present the findings obtained in the order in which the research questions were posed. Finally, Section 6 presents the main conclusions, as well as some avenues that could be useful for future research on communication and CSR.

2. Methodology

2.1. Methodology applied to data analysis

Scientometric analysis or bibliometrics is the methodology used, as the main objective is to identify, organize, extract and analyze metadata from research documents to examine the change that a given area of knowledge has undergone over time [28,29]. Therefore, this methodology makes it possible to present a systematic description of the scientific literature on the subject under investigation [30] and to identify trends and the degree of interest in the subject [31–33].

To carry out this analysis based on the concepts of communication, CSR and reporting, the main elements of the interactions between these concepts are determined and analyzed, and the metadata and trends available in the different databases that reflect the line of research are presented [34–36]. For the visualization of the keyword network maps and international cooperation networks, the statistical software VOSviewer v.1.6.18 was used, as it has been widely applied in different fields of research [37–40].

2.2. Bibliometric analysis procedure

The methodology is applied in three stages (see Fig. 1).

2.2.1. Identification stage

After consulting the main scientific repositories such as Web of Science, Scopus, PubMed and Google Scholar [41,42], Scopus was selected for this study as it is the database with the largest volume of information in terms of authors, institutions and countries [43]; it is the repository with the largest number of articles and reviews that meet the quality requirements of scientific peer review [44,45]; and it has greater coverage compared to Web of Science [46]. Indeed, the number of scientific documents available in Scopus with the terms used was 8540.

Several filters were then applied. The first was determined by the type of scientific documents. Following the recommendations of Paul et al. (2021), research articles were selected as the filter, since they are evaluated based on novelty and meet the scientific quality requirements of blind peer review [47]. As a result, the total searchable documents were reduced to 6305.

The second filter that was applied was the time horizon. The period of 2001–2021 was chosen for several reasons: (a) in the year 2000, the United Nations Global Compact was created to promote the implementation of the Ten Universally Accepted Principles and thus to promote CSR, whose acceptance by organizations implies their willingness to communicate their actions of progress with respect to said principles; and (b) also in the year 2000, the Global Reporting Initiative (GRI) published its guide to preparing a sustainability report, the first global standard for preparing this type of report, in order to help guide CSR communication. These milestones have promoted communication in the field of CSR in organizations worldwide, and, consequently, an increase in scientific production on the topic. With this filter for time applied, the total number of documents that met the search requirements was reduced to 4,966.¹

The data were downloaded and analyzed in October 2022.

2.2.2. Analysis and visualization stage

A series of bibliometric indicators were examined, such as the number of published research articles, the authors, the institutions, the countries, the journals, the number of citations, which allows to know the evolution of the line of research as well as past and current interest in the area of knowledge.

International cooperation networks were also analyzed, which identify those authors who are working together and, consequently, generating innovative and high-impact scientific work [48]. From the documents obtained, through VOSviewer we build international cooperation networks of authors, institutions, and countries, based on the co-authorship method, so that from individual publications we can study which authors produce, how much they produce, with whom they write and how they collaborate. That is why we can define different elements (size, structure, and composition) in the groups of research, which can influence the performance and efficiency of the expansion of the research line. According to Fonseca et al. (2007), the networks allow an approach to the dynamics that are generated within scientific research, and with the results of the research that are reflected in articles, it is possible to carry out analysis of co-authorship networks, whose nodes are the authors, generating a link between two nodes, when two researchers appear in

¹ The search string was the following: (TITLE-ABS-KEY("Corporate Social Responsibility" OR "Corporate Social Responsibilities (CSR)" OR "CSR" OR "Social Responsibility Corporate" OR "Social Responsibility (CSR)" OR "Corporate Social Responsibility (CSR)" OR "Social Responsibility" OR "Social Responsibilities") AND TITLE-ABS-KEY("reporting" OR "communication" OR "CSR Reporting" OR "CSR Communication")) AND (EXCLUDE (PUBYEAR,2023) OR EXCLUDE (PUBYEAR,2022) OR EXCLUDE (PUBYEAR,2000) OR EXCLUDE (PUBYEAR,1999) OR EXCLUDE (PUBYEAR,1998) OR EXCLUDE (PUBYEAR,1997) OR EXCLUDE (PUBYEAR,1996) OR EXCLUDE (PUBYEAR,1995) OR EXCLUDE (PUBYEAR,1994) OR EXCLUDE (PUBYEAR,1993) OR EXCLUDE (PUBYEAR,1992) OR EXCLUDE (PUBYEAR,1991) OR EXCLUDE (PUBYEAR,1990) OR EXCLUDE (PUBYEAR,1989) OR EXCLUDE (PUBYEAR,1988) OR EXCLUDE (PUBYEAR,1987) OR EXCLUDE (PUBYEAR,1986) OR EXCLUDE (PUBYEAR,1985) OR EXCLUDE (PUBYEAR,1984) OR EXCLUDE (PUBYEAR,1983) OR EXCLUDE (PUBYEAR,1982) OR EXCLUDE (PUBYEAR,1981) OR EXCLUDE (PUBYEAR,1980) OR EXCLUDE (PUBYEAR,1979) OR EXCLUDE (PUBYEAR,1978) OR EXCLUDE (PUBYEAR,1977) OR EXCLUDE (PUBYEAR,1976) OR EXCLUDE (PUBYEAR,1975) OR EXCLUDE (PUBYEAR,1974) OR EXCLUDE (PUBYEAR,1973) OR EXCLUDE (PUBYEAR,1970) OR EXCLUDE (PUBYEAR,1968) OR EXCLUDE (PUBYEAR,1967) OR EXCLUDE (PUBYEAR,1957) OR EXCLUDE (PUBYEAR,1955)) AND (LIMIT-TO (DOCTYPE,"ar"))).

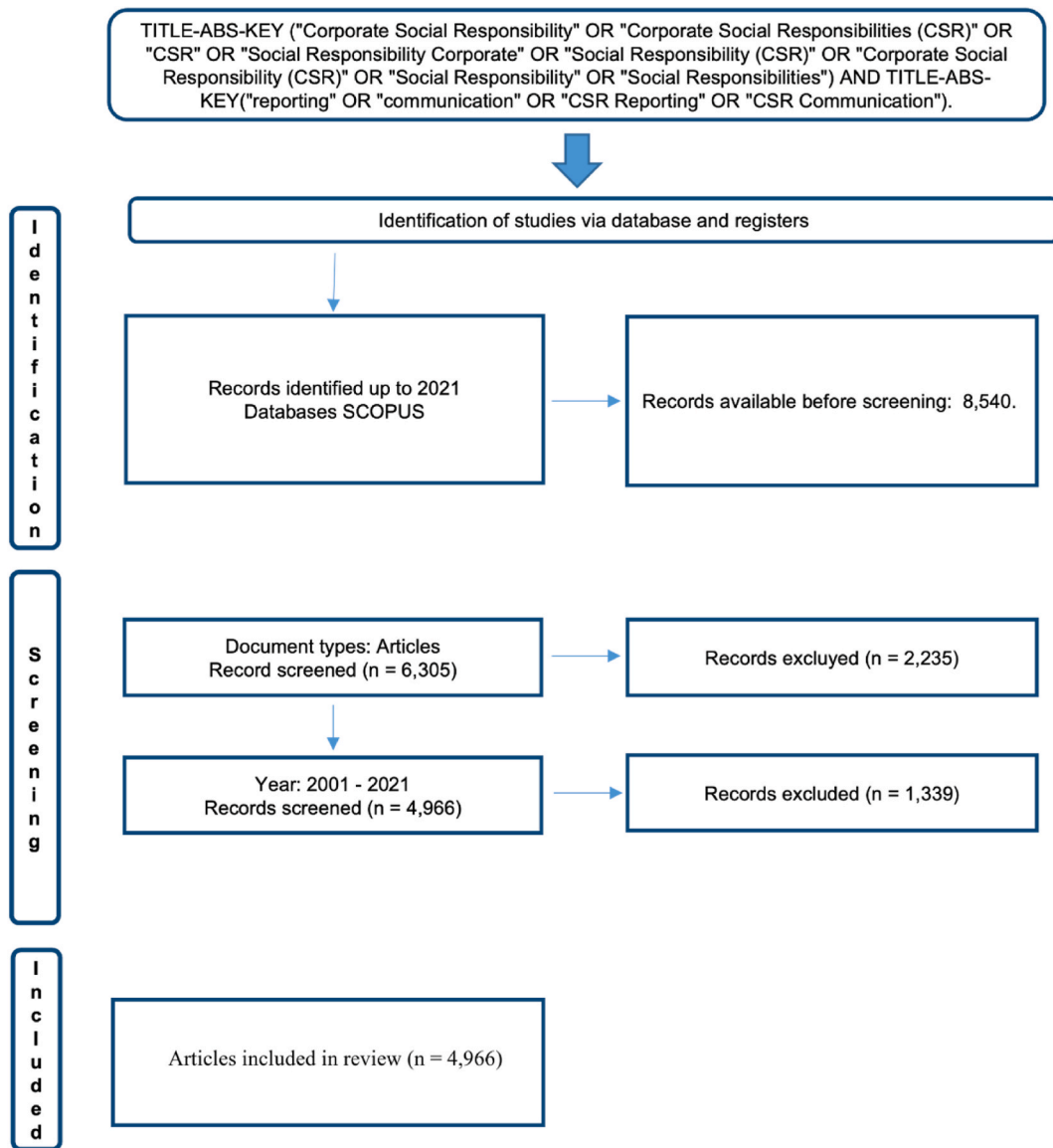


Fig. 1. Applied methodology
Source: created by the authors.

the same publication [49]. Finally, an analysis of the keywords is carried out, which allows the identification of research topics that have arisen over time, as well as the main trends that will focus the attention of researchers in the coming years. The analysis of the keywords was based on the co-occurrence method, which is based on the fact that the keywords are representative of the content, as well as that similar records share the same keywords [50–52]. Consequently, it allows analyzing the evolution of keywords over time [53] and creating an image of the line of research [54]. To do this, we use the VOSviewer tool, which develops the keyword matrix from the extraction and frequency calculation [55].

The statistical programs used were Microsoft Excel for the establishment of the bibliometric indicators, as well as VOSviewer for the generation of the maps. The latter was proposed by Van Eck and Waltman [37] and has been widely used in multiple areas of knowledge in the application of the bibliometric analysis methodology [56–58].

2.2.3. Results and discussion stage

The results are displayed by articles, authors, institutions, scientific journals, countries international cooperation networks, as well as by keywords. Additionally, maps were generated to establish the relationships between authors, institutions and countries applying the co-authorship method, according to which international cooperation networks are established as joint publications are made.

3. Main characteristics of scientific production (Q1)

This section presents the evolution of scientific production based on bibliometric indicators such as the number of published articles, authors, institutions, countries, journals, and total and average citations. To facilitate the interpretation of the results, the period of 2001–2021 was subdivided into seven trienniums. The results are shown in [Table 1](#).

In general terms, it was observed that over the last 20 years, the scientific production in this line of research increased considerably. In the first subperiod (2001–2003), 166 articles on communication, CSR and reporting were published, whereas in the last 3 years (2019–2021) the number of publications amounted to 1,617, which is an exponential increase. The same can be observed for the number of authors (which rises from 305 to 4274 between the first and last subperiods), of countries (from 35 to 131) and of institutions (from 229 to 3412) that address the subject matter under study. There was also a strong increase in the average number of authors, rising from 1.84 in the first three years (2001–2003) to 2.64 in the last three-year period (2019–2021). Finally, the evolution of the number of citations received in each sub-period stands out considerably, going from 120 (2001–2003) to 38,154 (2019–2021), which, together with the rapid growth of the rest of the indicators analyzed, shows a strong growth of interest. In the line of research analyzed.

[Fig. 2](#) shows the growth of published research papers. An exponential growth is clearly observed throughout the entire period analyzed. It is worth noting the rises experienced in these subperiods: the third subperiod (2007–2009) had a 171.48% increase compared to the 3 previous years; the fifth period (2013–2015) had an increase of 152.80% compared to the previous period; and the seventh period (2019–2021) had an increase of 149.03% compared to the previous three-year period.

The approval of the United Nations Global Compact and its ten principles and the Millennium Development Goals (UN, 2000), as well as the different EU policies to encourage and promote CSR that have been developed since 2000, including Green Paper CSR (European Commission, 2001); approval of the Strategy for growth, employment and sustainable development (European Commission, 2005); the Resolution of the European Parliament of March 13, 2007, on CSR, “CSR: a new partnership” (2006/2133(INI)); and the “Renewed EU Strategy for 2011–2014 on social responsibility of companies” (European Commission, 2011), have constituted milestones at an international level that have been drivers of growth not only in this line of research, but also in the management of CSR itself and its communication.

From there, the Directive 2014/95/EU of the European Parliament and of the Council of October 22, 2014 was published, which modifies Directive 2013/34/EU with regard to the disclosure of non-financial information and diversity information by certain large companies and certain groups, with the aim of requiring large companies to disclose their relevant non-financial information in order to provide investors and other interested parties with a more complete perspective on their evolution, results, situation and the impact of their activity. This was a milestone in terms of transparency with regard to the non-financial impacts of European business organizations, which, once transposed to the different legal systems of the EU Member States, has given rise to national legislation on non-financial information. This fact seems fundamental to understanding the trends in the scientific literature, since a change in the growth slope of the publications is observed during the period of 2013–2015; this subperiod was also likely influenced by the approval of the 2030 Agenda and the Sustainable Development Goals (SDGs) by the United Nations in 2015.

Additionally, Meseguer et al. (2021) carried out a study on the scientific production between Corporate Social Responsibility and Sustainability in a similar period, that is, between 2001 and 2020 [39]. Although the scientific production also grew exponentially, the number of documents published in that period was of 3,079, in our study it was 4,966, that is, almost double. Obviously, the regulatory development highlighted above affected both studies equally. However, in our case, the growth was much higher, which indicates that the academy was more concerned with helping public and proven institutions to show the progress achieved through the reports of their achievements in terms of sustainability.

[Fig. 3](#) shows the analysis of the thematic areas that have been addressed by the research on social responsibility, communication, and reporting throughout the entire period (2001–2021).

The 4966 research documents related to communication, CSR and reporting that were published during the time period of analysis (2001–2021) cover 28 thematic areas, of which the five main ones include: Business, Management and Accounting (n = 2557, 27.67%); Social Sciences (n = 2018, 21.84%); Medicine (n = 872, 9.44%); Economics, Econometrics and Finance (n = 869, 9.40%); and Environmental Science (n = 726, 7.86%). Consequently, despite the diversity of thematic areas that are addressed in this line of research, the five main areas contain 76.95% of the total scientific production. As expected, those business areas linked to the social sciences, especially business, received a large number of articles. They are followed by environmental sciences, which could be due above all to the consideration of CSR as an action in the environmental dimension [21], thus focusing attention on the dissemination of

Table 1

Articles, authors, countries, institutions, average number of authors and percentages of variation in articles published between periods.

Year	Articles	Authors	Countries	Institutions	Cites	Journals	Citations per article	Average Authors
2001–2003	166	305	35	229	120	127	0.72	1.84
2004–2006	242	537	38	433	745	174	3.08	2.22
2007–2009	415	929	94	739	2466	270	5.94	2.24
2010–2012	570	1257	69	945	5857	376	10.28	2.21
2013–2015	871	1995	83	1493	11,779	492	13.52	2.29
2016–2018	1085	2730	106	2127	20,789	605	19.16	2.52
2019–2021	1617	4274	131	3412	38,154	749	23.60	2.64

Source: created by the authors.

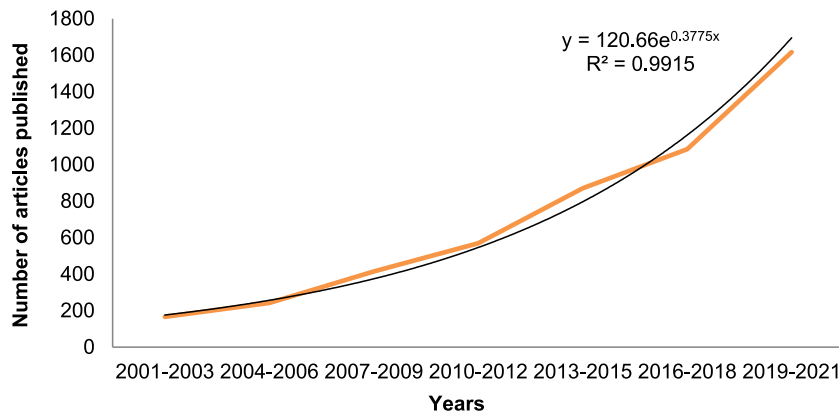


Fig. 2. Evolution of published articles. Source: created by the authors.

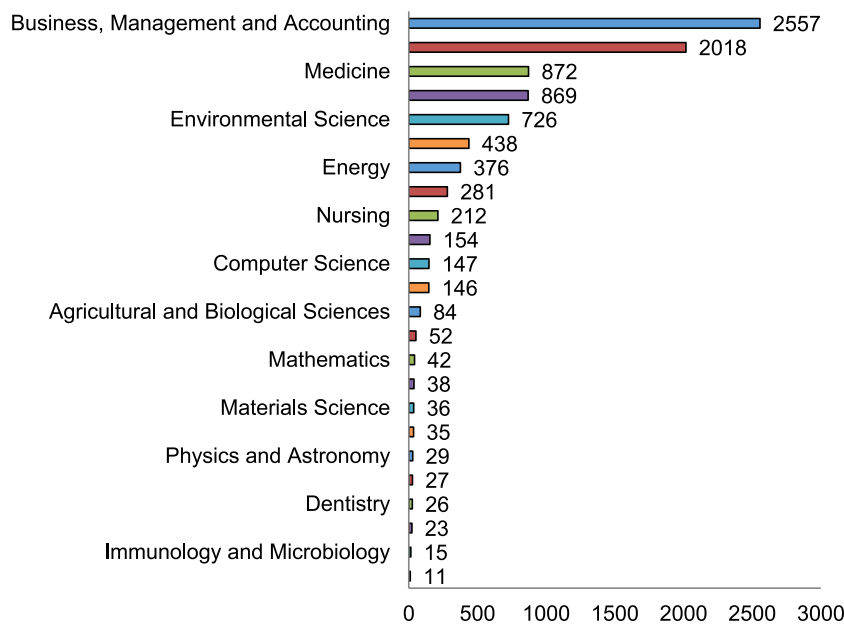


Fig. 3. Thematic areas. Source: created by the authors.

environmental impacts.

Finally, Table 2 presents the ten most relevant scientific articles in this line of research, which was measured based on the total number of citations. These are organized into several research themes that are set out below.

An important part of the scientific literature addresses stakeholders as a frame of reference for disseminating CSR. Chan et al. (2013), Clarkson et al. (2008) and Du et al. (2010) approached this topic from the perspective of the comprehensibility of the information offered and the effectiveness of its communication [59–61]. In their study, Maignan & Ralston (2002) focused not only on content, but also on scope [62]. Schaltegger & Wagner (2011) focused on innovation in the sustainability of companies [63].

Another topic detected within the most cited articles is the management of communication as a strategic axis of CSR. Dhaliwal et al. (2011) and Jenkins & Yakovleva (2006) analyzed the benefits of CSR communication for organizations [64,65]. In their study, Kim et al. (2012) delved into the interrelationship between companies' CSR communication and their behavior in terms of management under the same criteria of responsibility with their stakeholders [66]. Schaltegger & Wagner (2011) and Wagner et al. (2009) focused their research on advancing company sustainability and communication strategies to minimize the negative impact of stakeholder perceptions [63].

For their contribution to the literature, Dhaliwal et al. (2011) and Jenkins & Yakovleva (2006) addressed, as a central axis of research, improvements in corporate reputation levels derived from CSR communication [64,65]. Finally, the last issue identified is transparency. Kim et al. (2012), Marquis & Qian (2014) and Wagner et al. (2009) alluded to the similarity (real or unreal) between the

Table 2
Most cited scientific articles.

Year	Authors	Title	Journal	SJR Scimago	Cites
2013	Chan, AW; Tetzlaff, JM; Göttsche, PC; (...) Laupacis, A.; and Moher, D.	“SPIRIT 2013 explanation and elaboration: guidance for protocols of clinical trials”	<i>BMJ</i>	2.101 (Q1)	1852
2011	Dhaliwal, D.S.; Li, O.Z.; Tsang, A.; and Yang, Y.G.	“Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting”	<i>Accounting Review</i>	3.896 (Q1)	1322
2008	Clarkson, PM; Li, Y.; Richardson, GD; and Vasvari, F.P.	“Revisiting the relationship between environmental performance and environmental disclosure: An empirical analysis”	<i>Accounting, Organizations and Society</i>	3.142 (Q1)	1293
2010	Du, S.; Bhattacharya, C.B.; and Sen, S.	“Maximizing business returns to corporate social responsibility (CSR): The role of CSR communication	<i>International Journal of Management Reviews</i>	1.657 (Q1)	1091
2002	Maignan, I. and Ralston, D.A.	Corporate Social Responsibility in Europe and the US: Insights from Businesses’ Self-presentations”	<i>Journal of International Business Studies</i>	3.177 (Q1)	762
2012	Kim, Y.; Park, MS; and Wier, B.	“Is earnings quality associated with corporate social responsibility?”	<i>Accounting Review</i>	3.385 (Q1)	716
2011	Schaltegger, S. and Wagner, M.	“Sustainable entrepreneurship and sustainability innovation: Categories and interactions”	<i>Business Strategy and the Environment</i>	1.182 (Q1)	698
2014	Marquis, C. and Qian, C.	“Corporate social responsibility reporting in China: Symbol or substance?”	<i>Organization Science</i>	9.247 (Q1)	570
2009	Wagner, T.; Lutz, R.J.; and Weitz, BA.	“Corporate hypocrite: Overcoming the threat of inconsistent corporate social responsibility perceptions”	<i>Journal of Marketing</i>	5.765 (Q1)	563
2006	Jenkins, H. and Yakovleva, N.	“Corporate social responsibility in the mining industry: Exploring trends in social and environmental disclosure”	<i>Journal of Cleaner Production</i>	0.84 (Q1)	540

Source: created by the authors.

responsible commitments that are published in the sustainability reports of the companies and their strategic objectives [66–68].

4. Main producers and their international cooperation networks (Q2)

This section shows the results of the largest producers at the level of journals, authors, institutions, and countries, as well as an analysis of their international cooperation networks.

Table 3 shows the top-ten most prolific authors in the areas of communication, reporting and CSR in the last 20 years. It stands out that 70% are of European origin, of which 30% are Spanish. Authors from the United States and Malaysia complete the nationalities represented.

García-Sánchez and Pérez are the most productive authors, with 18 published research articles each. However, despite having only the third highest volume of scientific production with 13 published articles (the same as Pucheta-Martínez and Rim), Patten is the author who has achieved the greatest dissemination of his research results ($A = 13$; $TC/A = 83$). In second place with regard to the dissemination of his articles is the least productive author in the top ten, Amran ($A = 11$; $TC/A = 46.27\%$).

Focusing on the ten most productive institutions in terms of communication, reporting and CSR over the last 20 years, it can be seen (Table 4) that 70% of the most productive university institutions are of European origin (Spain, United Kingdom, Switzerland and Italy), and the remaining 20% come from North America (United States) and Asia (Malaysia; 10%).

Fig. 4 shows the international cooperation networks of researchers studying communication and CSR. The colors reflect the cooperative groups, whereas the sizes of the circles show the amount of scientific production. Out of a total of 10,890 authors, a minimum interaction of five research articles was selected; thus, a total of 27 authors organized around 6 international cooperation networks was obtained. The color of the circles shows the groups of authors according to the co-authorship method. The size, the

Table 3
Most productive authors publishing works on CSR communication.

Authors	A	TC	TC/A	Institution	Country	H-index
García-Sánchez, I.-M.	18	736	40.89	University of Salamanca	Spain	13
Laziness.	18	494	27.44	University of Cantabria	Spain	11
Patten, D.M.	13	1079	83.00	Illinois State University	United States	12
Pucheta-Martínez, MC	13	213	16.38	Jaume I University	Spain	9
Rim, H.	13	194	14.92	University of Minnesota Twin Cities	United States	8
Comfort, D.	12	428	35.67	University of Gloucestershire	United Kingdom	7
Jones, P.	12	428	35.67	University of Gloucestershire	United Kingdom	7
Seele, P.	12	515	42.92	University Della Svizzera Italiana	Switzerland	9
Siano, A.	12	263	21.92	University Degli Studio of Salerno	Italy	7
Amran, A.	11	509	46.27	Graduate School of Business	Malaysia	7

(A): number of articles published; (TC): total citations; (TC/A): average citations per article; (H-index): Hirsch index in the line of research.

Source: created by the authors.

Table 4
Most productive institutions.

Institution	C	A	TC	TC/A	H-index	CI (%)	CT/A	
							CI	NCI
University of Salamanca	Spain	45	1935	43.00	23	33.3%	17.20	55.90
University of Valencia	Spain	41	1048	25.56	15	46.3%	21.47	29.09
University of Toronto	Canada	39	4067	104.28	16	38.5%	101.80	105.83
Aarhus University	Denmark	34	821	24.15	16	26.5%	19.78	25.72
University of Cantabria	Spain	31	930	30.00	15	12.9%	47.75	27.37
Bucharest University of Economic Studies	Romania	30	264	8.80	8	23.3%	22.43	4.65
University of Florida	United States	29	1599	55.14	17	17.2%	24.00	61.63
Jaume I University	Spain	28	501	17.89	13	17.9%	22.60	16.87
University MARA Technology	Malaysia	28	772	27.57	11	35.7%	20.30	31.61
University Sains Malaysia	Malaysia	27	608	22.52	9	40.7%	6.45	33.56

(A): number of articles published; (TC): total citations; (TC/A): average citations per article; (H-index): Hirsch index in the line of research; (CI): international cooperation index; (TC/A CI): average number of citations with international cooperation; (TC/A NCI): average number of citations without international cooperation.

Source: created by the authors.

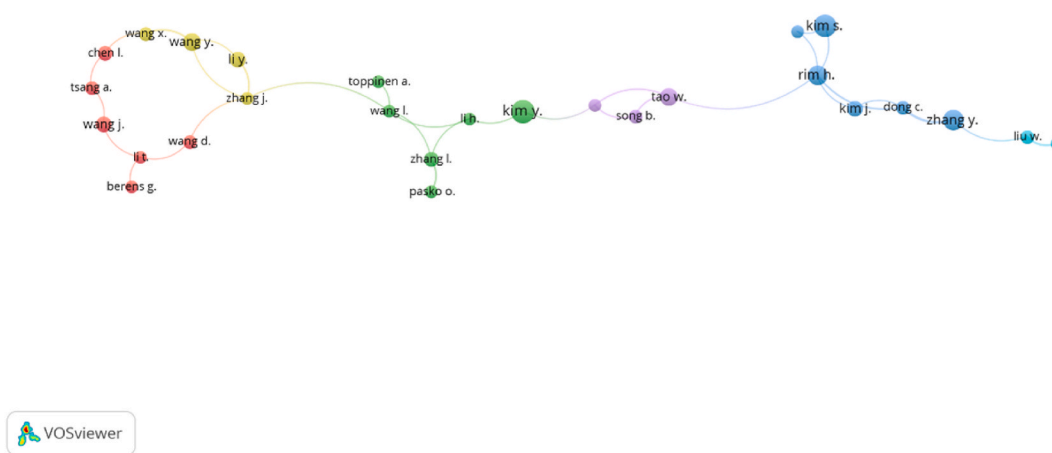


Fig. 4. International cooperation networks of authors with published works on communication and CSR.

Source: created by the authors.

number of publications that each author has made in the line of research. The lines show the frequency with which the authors co-publish. Finally, the position on the map of each cluster determines the relative importance of each group of authors: while authors who are in more central positions are the ones with the greatest number and diversity of international collaborations, those who appear at the extremes show fewer relationships with other authors.

The red, green, and dark blue groups are made up of six authors each, being the largest international cooperation networks. It is noteworthy that the purple cluster (the one made up of minor authors, only three) together with the green one is in the center of the figure, indicating that they act as a link between the rest of the identified cluster. Regarding the size of the circles, they are similar, which indicates that the authors published a similar number of research articles in the area of knowledge. And, finally, it should be noted that, among the ten most productive authors identified in Table 3, none are part of any of the international cooperation networks, which could be indicating that the most productive authors work mainly with authors from the same nationality.

Table 4 shows the results of the most productive institutions in the area of communication and CSR. The University of Salamanca led the way in scientific production during the period of time analyzed (45 published research articles), followed by the University of Valencia and University of Toronto (41 and 39 articles, respectively). The highest H-index in the top 10 is held by the University of Salamanca (H23), followed by the University of Florida (H17) and the University of Toronto and Aarhus University (H16 each). The total number of citations and the average number of citations reveal the institutions that have the greatest dissemination of their research related to the thematic areas of study, with the first being the University of Toronto (TC = 4067; TC/A = 104.28%), followed by the University of Florida and University of Salamanca with an average citation of 55.14% and 43%, respectively. It is striking that the institution that ranks sixth in productivity (Bucharest University of Economics Studies), with 30 published research articles, is the one that demonstrated the smallest dissemination of its research (TC = 264; TC/A = 8.80%).

On the other hand, low results are observed for the international cooperation index (CI < 50%) among the ten most productive universities. Only two of them exceeded 40%: the University of Valencia (CI = 46.3%) and University Sains Malaysia (CI = 40.7%). This case of the Asian university is noteworthy since, despite being the second institution in regard to international cooperation, its

results were more widely disseminated when they were not published with international co-authorship (TC/A CI = 6.45%; TC/A NIC = 33.56%). Additionally, it is noteworthy that the University of Cantabria (TC/A CI = 47.75%; TC/A NIC = 27.37%), Bucharest University of Economics Studies (TC/A CI = 22.43%; TC/A NIC = 4.65%) and Jaume I University (TC/A CI = 22.60%; TC/A NIC = 16.87%) are the only three top-ten institutions that obtained a greater dissemination of their results when they were published with international co-authorship, despite being in the lower positions in terms of international cooperation (10th, 7th and 8th, respectively).

Fig. 5 presents the results of the institutions' international cooperation networks. Out of a total of 9012 institutions during the period of 2001–2021, a minimum interaction of three research articles was selected, reducing the number of institutions that cooperate internationally to seven; these could be grouped into three large networks. The color of the circles shows the groups of institutions according to the co-authorship method. The size, the number of publications that each institution has carried out in the line of research. The lines show the frequency with which the institutions jointly publish. Finally, the position on the map of each cluster determines the relative importance of each group of institutions: while the institutions that are in more central positions are those that present a greater number and diversity of international collaborations, those that appear at the extremes show fewer relationships with other authors.

Despite the reduced interaction (only three articles), there is a considerably small cooperation network of institutions, in which only three are observed. The largest is the one in red, with four institutions, among which is the Department of Management Sciences of Comsats University Islamabad – CUI (Pakistan), which is in the center of the figure and works jointly with all the remaining institutions. The size of the circles shows the reduced number of publications from all the institutions, and the considerably long lines show that international cooperation is reduced. Along the same lines as the authors, none of the most productive institutions (Table 4) are in international cooperation networks, working mainly with other domestic institutions.

Table 5 presents the results of the most productive countries in scientific research on communication, reporting and CSR during the period of 2001–2021. A diversity of geographic origins is observed, with a European predominance of 50% (the United Kingdom, Spain, Italy, Germany, and the Netherlands), followed by 20% from North America (the United States and Canada), 20% from Asia (China and Malaysia) and 10% from Oceania (Australia).

The United States is the country with the highest scientific production in this line of research (1160 published research articles), followed by the United Kingdom (562 articles) and Spain (439 articles). These three countries lead as well in the H-index (H85, H73 and H52, respectively), of which Australia is tied with Spain with an H-index H52. In terms of the dissemination of their research, the first place is occupied by the Netherlands (51.01%), followed by Canada (44.34%) and Germany (38.66%), despite none of them being the most prolific countries in this line of research (154, 222 and 183 articles, respectively). Regarding established international cooperation networks, the countries with the largest number of collaborators are the United States (78), the United Kingdom (77) and Australia (55). In general, it is observed that the overall cooperation index is low (CI < 50%), with the exception of China (55.1%). They are followed by the United Kingdom (49.8%) and the Netherlands (46.1%). Only two countries showed a greater dissemination of their scientific documents without international co-authorship, although the difference with those developed in cooperation is minimal: Canada (TC/A CI = 44.13%; TC/A NIC = 44.51%) and Malaysia (TC/A CI = 13.67%; TC/A NIC = 18.22%). Despite this, practically all of the most productive countries achieved a greater dissemination of their research results when they developed their work in terms of cooperation.

Fig. 6 shows the international cooperation networks of the countries. Out of a total of 224 countries, a minimum interaction of 10

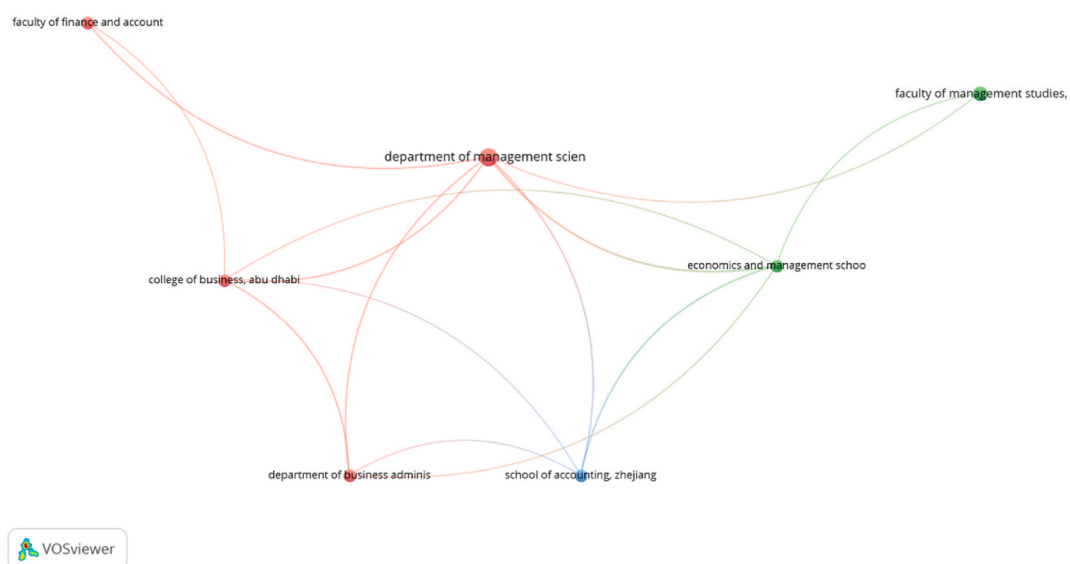


Fig. 5. International cooperation networks of communication and CSR institutions.
Source: Own Authors.

Table 5
Most productive countries.

Country	A	TC	TC/A	H-index	NC	Main collaborators	CI (%)	TC/A	
								CI	NCI
United States	1160	35,983	31.02	85	78	Canada, United Kingdom, Australia, China and South Korea	27.2%	41.30	27.19
United Kingdom	562	19,276	34.30	73	77	United States, Italy, Australia, France and Germany	49.8%	35.29	33.32
Spain	439	9862	22.46	52	44	Portugal, United Kingdom, United States, Colombia and Italy	30.3%	26.11	20.88
Australia	325	10,447	32.14	52	55	United States, United Kingdom, New Zealand, China and India	43.7%	33.75	30.90
Canada	222	9844	44.34	47	51	United States, United Kingdom, Australia, China and Germany,	44.1%	44.13	44.51
China	207	2402	11.60	25	47	United States, United Kingdom, Pakistan, Australia and Hong Kong	55.1%	14.77	7.72
Italy	207	4294	20.74	33	37	United Kingdom, United States, France, Spain and Germany	39.6%	24.35	18.38
Germany	183	7075	38.66	39	46	United Kingdom, United States, France and Switzerland	45.4%	51.42	28.07
Netherlands	154	7855	51.01	44	32	United Kingdom, United States, Belgium, Germany and Australia	46.1%	55.83	46.88
Malaysia	140	2314	16.53	25	26	Indonesia, Australia, United Kingdom, Bangladesh and China	37.1%	13.67	18.22

(A): number of articles published; (TC): total citations; (TC/A): average citations per article; (H-index): Hirsch index in the line of research; (NC): number of international collaborators; (CI): international cooperation index; (TC/A CI): average number of citations with international cooperation; (TC/A NIC): average number of citations without international cooperation.

Source: created by the authors.

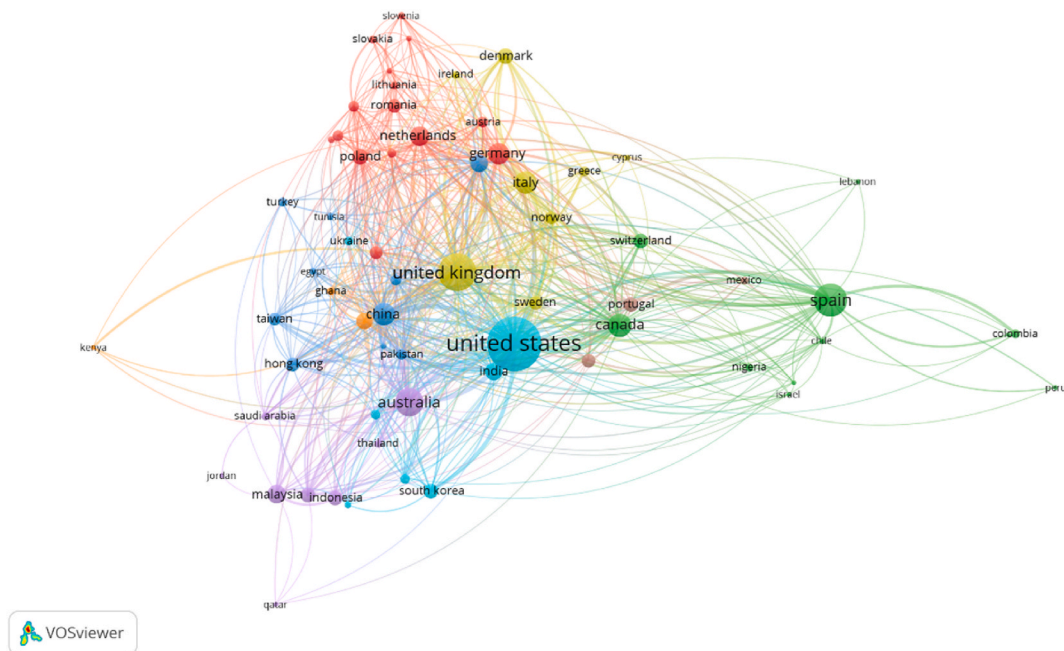


Fig. 6. International cooperation networks of countries publishing studies in communication and CSR.
Source: created by the authors.

research articles was selected, and thus, a total of 65 countries that are organized into 8 large international cooperation networks were obtained. The color of the circles shows the groups of countries according to the co-authorship method. The size, the number of publications that each country has made in the line of research. The lines show the frequency with which countries jointly publish. Finally, the position on the map of each cluster determines the relative importance of each group of countries: while the countries that are in more central positions are those that present a greater quantity and diversity of international collaborations, those that appear at the extremes show fewer relationships with other authors.

In the first place, great international cooperation is observed, since with the exception of the purple, orange and green clusters, the rest are in the center of the figure, which is showing that, despite the existence of more stable networks, all the countries are working together in the line of research. The red cluster is the one that integrates the most countries, 15 in total, with Germany and the Netherlands at the forefront. It is followed by the green cluster, which is led by Spain and made up of 11 countries. Next, the dark blue group is led by China and is made up of 10 countries. Composed of 8 countries, the United Kingdom leads the fourth yellow group and Australia leads the purple group. The sixth group in importance of international cooperation, in light blue, is made up of seven

countries and is led by the United States. The orange and brown clusters are close to this cooperation network, each one made up of three countries, and led by South Africa and Portugal, respectively. Now yes, the international cooperation networks of the countries include all the most productive countries identified in Table 5, unlike the authors and the institutions. This is showing great multi-disciplinarity in the line of research, since even at the level of authors and institutions, international cooperation networks are small, multiple authors from multiple institutions and areas of knowledge are cooperating internationally in the development of the line of research.

Finally, Table 6 presents the results of the ten most productive scientific journals from the time under study (2001–2021), in which articles on communication, CSR and reporting were published. It should be noted, first of all, that 100% of the most productive scientific journals belong to publishers of European origin, with 70% being British, 20% belonging to the Netherlands and 10% to Switzerland. Regarding the scientific quality of these, 80% were in the first quartile (Q1) of the SJR index in 2021, whereas the remaining 20% were in the second quartile (Q2).

Table 6 shows that *Sustainability Switzerland* and the *Journal of Business Ethics* are the most productive journals (with 195 and 160 publications, respectively). Considering the dissemination of research results, this latter journal obtained a higher number of total citations, but also had higher results in regard to the average number of citations per published article (TC = 11,371; TC/A = 71.07%). It was closely followed by *Business Strategy and the Environment* (TC/A = 69.78%), which is also one of the journals with the highest impact index (H-index of journal = 105), behind the *Journal Of Cleaner Production* (H-index of journal = 200) and *Journal of Business Ethics* (H-index of journal = 187). Articles related to the thematic areas under study published in the *Journal of Business Ethics*, *Corporate Social Responsibility and Environmental Management* and the *Journal of Cleaner Production* are the ones that showed the highest average number of citations per article and, therefore, the greatest impact (H-index articles): H61, H42 and H35, respectively.

5. Research topics and trends in CSR communication (Q3)

This section shows the results of the analysis of the keywords using the co-occurrence method. Consequently, the main research topics identified, and the most relevant contributions made for each topic are presented.

Out of a total of 9765 keywords contained in the 4966 research articles analyzed over the period of 2001–2021, a minimum interaction of 20 co-occurrences was selected, and therefore, a total of 94 keywords were obtained. Subsequently, a filter was used to eliminate those keywords that are incorporated into the search criteria but that does not add any value, for example, countries, techniques or methodologies used, population groups (children, women, men, among others) to avoid the possibility of obtaining non-representative results. Thus, the final number of keywords analyzed was 40. The size of each circle represents the number of times each keyword is repeated, the colors show the keyword groupings and the circles measure the frequency with which the keywords co-appear (Fig. 7).

In Fig. 7, the color of the circles shows the keyword clusters. The size, the number of occurrences of the keywords, that is, the number of articles in which they appear. The lines show the frequency with which the keywords appear together. Finally, the position on the map determines the importance of each topic: while the central keywords are those that are related to or with a greater number of keywords, those that appear at the extremes show fewer relationships with the rest of the keywords of the contained words. In the map.

The most important contributions within each theme identified in Fig. 6 are described in the following subsections.

Table 6
Most productive scientific journals.

Journal	A	TC	TC/A	H-index articles	H-index journal	SJR	Country
<i>Sustainability Switzerland</i>	195	2087	10.70	23	85	0.61 (Q1)	Switzerland
<i>Journal of Business Ethics</i>	160	11,371	71.07	61	187	2.21 (Q1)	Netherlands
<i>Corporate Social Responsibility and Environmental Management</i>	133	5559	41.80	42	73	1.52 (Q1)	United Kingdom
<i>Social Responsibility journal</i>	109	1845	16.93	23	31	0.53 (Q2)	United Kingdom
<i>Corporate communications</i>	97	2916	30.06	28	56	0.58 (Q2)	United Kingdom
<i>Journal of Cleaner Production</i>	75	4601	61.35	35	200	1.94 (Q1)	United Kingdom
<i>Public Relations Reviews</i>	66	2130	32.27	26	82	1.57Q1)	Netherlands
<i>Sustainability Accounting Management and Policy Journal</i>	54	1152	21.33	18	29	0.62 (Q1)	United Kingdom
<i>Business Strategy and The Environment</i>	50	3489	69.78	28	105	2.12 (Q1)	United Kingdom
<i>Accounting Auditing and Accountability Journal</i>	46	2611	56.76	25	99	1.74 (Q1)	United Kingdom

(A): number of articles published; (TC): total citations; (TC/A): average citations per article; (H-index articles): Hirsch index of articles published in this line of research; (H-index journal): Hirsch index of the journal according to SJR Scimago; (SJR) Scimago Journal & Country Rank (quartile). Source: created by the authors.

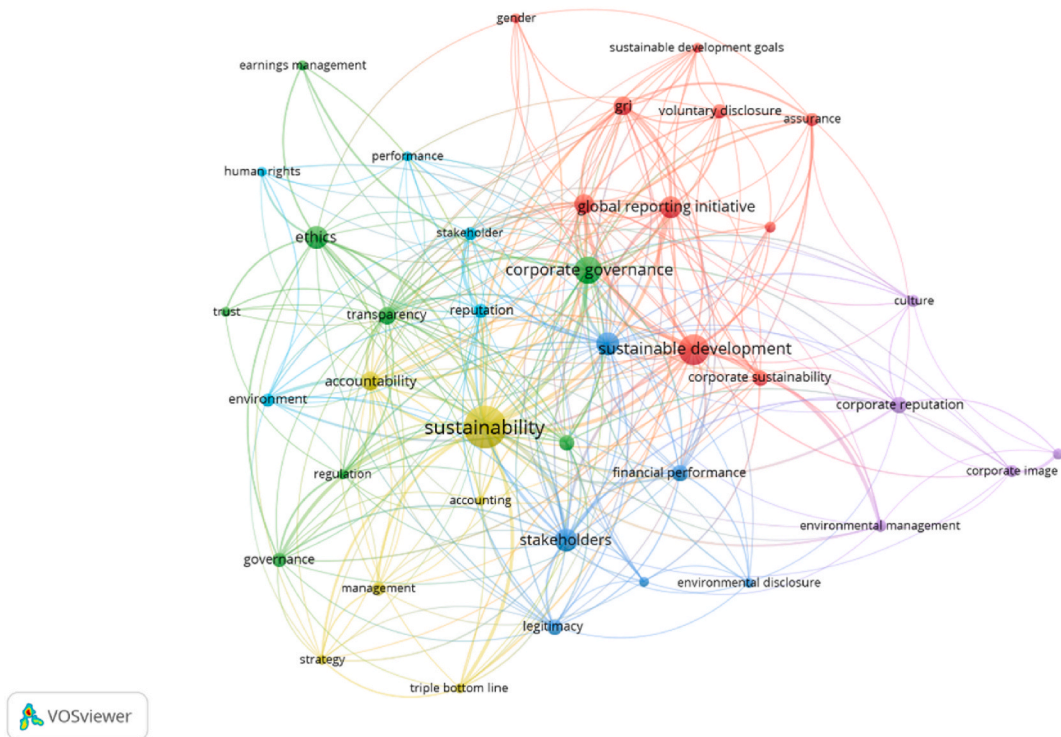


Fig. 7. Network of keywords from articles on communication, CSR and reporting.
Source: created by the authors.

5.1. Accountability

The cluster with the largest number of keywords is the one in red, with a total of 12 keywords from 748 research articles (15.06% of the sample), and which constitutes the research topic defined as accountability.

The relationship that organizations maintain with their interest groups conditions the disclosure of their CSR [18] and, therefore, this is linked to the expectations of stakeholders [69]. On the other hand, the structures and mechanisms of corporate governance influence the CSR practices of organizations [70] and, consequently, leads to subsequent accountability that is effective and efficient for the interested parties [71].

Du & Vieira (2012) highlighted the interconnection between business strategy, CSR practices and CSR communication to gain legitimacy [11]. Companies can acquire legitimacy through the presentation of sustainability reports, which constitutes an effective tool for companies to demonstrate their alignment with global standards and expectations [72]. In this sense, Belal & Owen (2007) analyzed the future prevalence of norms with regard to companies disclosing their CSR [73], as has been established through the Global Reporting Initiative (GRI), which is the standard for sustainability reporting that had very modest beginnings before becoming institutionalized [74], or the United Nations Global Compact. Currently, these are the two largest global frameworks for examining the adoption patterns of CSR by corporations and governments, and they are gaining more and more adherence [75].

5.2. Performance disclosure

Given the thematic coincidence of the blue and light-blue clusters, they were analyzed together. These blue clusters include 9 keywords, which are present in 367 documents and represent 7.39% of the sample, that refer to the disclosure of the organizations' performance.

The current complexity of the business world has led to organizations disclosing their contributions to the development of sustainability and informing their stakeholders of their economic and corporate governance performance, among others, through integrated reports that consistently summarize this information [76]. The disclosure of social and environmental performance has acquired such importance that, in certain countries and sectors, it has become an effective tool to justify the existence of certain companies and document their performance [65].

The increasing importance of accountability has led the researchers in this field to analyze the content that should be included in sustainability reports. This, in addition to the pressure exerted by interest groups, has caused further environmental, social and financial aspects, as well as different specific initiatives of each sector, to be added to CSR policies and ethical commitments [77]. Further aspects considered are related to personnel, ethics, and corporate governance [78], whose structures influence the different

performances in the field of CSR [70].

Various authors, such as Bouten et al. (2011), have advocated that sustainability reports need to be exhaustive, such as by including content related to the vision and objectives of the company, the management approach, and performance indicators [79]. However, Roca & Searcy (2012), who completed one of the first in-depth reviews on this issue, warned of the use of diversity of indicators in sustainability reports [69]. In this sense, Willis (2003) pointed out that the Global Reporting Initiative (GRI) is emerging as an important instrument that allows corporations to communicate their performance and responsibility, beyond just financial results [80].

5.3. Management of the organization

The green cluster refers to the management of organizations. It is made up of 7 keywords that are present in 565 scientific articles (11.37% of the total sample).

When it comes to communicating CSR, both the organizational management structure and the environment in which the operations are carried out take on a special importance. Latteman et al. (2009) stated that those companies that operate in a regulated government environment and that have corporate governance mechanisms, such as the duality between executive director and president or a percentage of external members on their boards of directors, report more CSR [81]. In fact, corporate governance structures influence CSR practices [70], with a direct relationship between corporate governance ownership and a company's level of CSR disclosure [82].

It is really interesting groups that push companies to disclose their sustainability performance, as shareholders' power, in this regard, is quite limited [83]. Likewise, various authors have commented on the pressure exerted by stakeholders for companies to be more transparent in terms of their CSR practices and in their CSR communication [84,85]. Transparency is also directly related to the independence and diversity of the managers of the organizations and the specialization of their functions [86]. In this sense, for Fernandez-Feijoo et al. (2014), transparency is a quality of CSR communication which enhances the relationship between investors and companies [85].

5.4. Corporate strategy

The yellow cluster refers to the corporate strategy research topic. It also includes 7 words, the same as the previous cluster, that are present in 513 articles, representing 10.33% of the sample.

Although there is a link between gender diversity in the composition of corporate governance bodies and CSR decision-making processes [87], it is global institutional pressure that fosters CSR [75] and the development of sustainability strategies. However, Tate et al. (2010) stated that it is each company that emphasizes the different facets of social, environmental and economic responsibility throughout its entire value chain [88], as it is the companies that are increasingly interested in obtaining a lasting strategic advantage through the improvement of their relationships with their stakeholders [89] because the promotion through strategic alliances is positively associated with the quality of sustainability reporting [90]. Taking this into account, as stated by Krosgaard et al. (2002), open communication and a coherent organizational policy boost the trust of interest groups and facilitate their participation in the business strategy, building networks and alliances and generating relevant knowledge for action [91], which is also what happens in transdisciplinary processes [92]. In this sense, various authors propose the integration of sustainability into business strategy [93], such as by combining environmental and social objectives and policies with their management and communication, in order to assess companies' degree of orientation towards sustainability [63], as well as the corresponding environmental and social indicators (KPI) [94]. Arjaliès & Mundy (2013) also proposed the identification and management of threats and opportunities associated with a company's CSR strategy so that companies can achieve their strategic objectives [95].

5.5. Corporate reputation

Finally, the purple cluster refers to the research topic of corporate culture. It is made up of 5 keywords that are integrated into 574 scientific articles, representing 11.55% of the total sample.

Authors such as Sparks et al. (2013) and Stanaland et al. (2011) stated that CSR is one of the strategies that most influences consumer perception [96,97], although Sparks et al. (2013) qualified this idea by pointing out that it generates more trust if sustainability is communicated by other consumers than by the company itself [96]. For their part, Stanaland et al. (2011) added that perceived CSR affects the perception of corporate reputation, which is why they consider it important for companies to focus on an ethical commitment and their long-term reputation [97]. Therefore, CSR generates reputation for companies, protecting them from corporate crises [98].

In recent years, companies have been strengthening their reputation using international standards and regulations in this area to implement sustainability policies and interact with their stakeholders [99]. One of these standards is the Global Reporting Initiative (GRI), which is the leading framework for companies to voluntarily report their CSR [100] and is a corporate reputation management tool [101], since, according to Michelin et al. (2015), the CSR disclosure that companies make following the GRI is likely to be balanced, comparable and accurate [102]. However, he questions whether a sustainability report serves to improve the perception of the company's responsibility [102]. In this sense, other authors have highlighted the inconsistencies between statements related to CSR in companies' corporate communications and actual practices [68,84]. However, Wagner et al. (2009) pointed out that through certain corporate communication strategies, these inconsistencies can be mitigated, thus preventing consumers from perceiving what they call "corporate hypocrite" [68].

6. Conclusions and discussion

This research work aimed to carry out a bibliometric analysis of the 4996 research articles on communication, reporting and CSR available in the Scopus database that were published during the period 2001–2021. Our findings show that this is an area of knowledge with a long scientific trajectory, since the first published article dates to the 1950s. Since then, scientific production has gradually grown, until starting in the 20th century it has experienced growth exponential, being currently of high scientific interest for many researchers. This will probably be motivated by the development of strategies and international regulation, including the approval of the United Nations Global Compact and its Ten Principles and different European policies to promote CSR in organizations. Additionally, the exponential growth experienced between 2014 and 2015 was motivated by the approval of Directive 2014/95/UE and the United Nations 2030 Agenda, which has helped companies to see CSR as a business strategy to achieve sustainability. Other bibliometric studies in other areas of knowledge have already shown how regulation usually leads to the generation of greater scientific production [36,38–40,58,103].

Our findings show that it is also a line of research that has great international relevance, with more than 5000 authors from multiple disciplines and more than 140 countries addressing the problem of communication and reporting of CSR actions. However, despite this, the 10 most productive countries publish more than 30% of the international scientific production, so there is a great concentration of scientific production. At the level of authors and institutions, the number is also especially high, although in this case there is not a high concentration, which is also indicating a wide multidisciplinary nature of researchers from different areas of knowledge who are addressing the challenges of CSR reporting from different dimensions. This argument is supported by the findings obtained in the analysis of the research areas, where, even though those related to the social sciences, especially those linked to business management, experience great representation, other areas such as sciences environmental or medical specialties also represent a high percentage of scientific production. The first of these could be fundamentally due to the traditional consideration of CSR as an instrument to face environmental challenges, which has generated a high volume of scientific production to reflect the positive impacts of companies.

On the other hand, the analysis of the cooperation networks shows findings that are in line with the results that we have just discussed. The high concentration of scientific production at the country level has led the main producers to act as precursors, adding other countries to the line of research and generating greater geographical diversification. For its part, multidisciplinary and low concentration at the level of authors and institutions translates into few international cooperation networks, in which the main producers do not appear, so that the results of international cooperation are determined by temporary collaborations, with a clear predominance of domestic collaborations in most cases.

Finally, our findings show five fundamental research themes around CSR reporting: (a) accountability; (b) performance disclosure; (c) management of the organization; (d) corporate strategy; and (e) corporate reputation. This information is valuable because it has made it possible to identify the key aspects of the CSR report. Namely, (a) the main elements to be communicated have been established, (b) the value that not only the development of CSR provides to the organization, but good communication and management of its impacts, (c) the importance of a good internal (both upward and downward) and external management of CSR, (d) the importance of a real belief in CSR for the generation of tangible (financial) and intangible (reputational) value. Based on these topics, the main future research gaps have been identified. The previous literature seems to have identified the key elements of the CSR performance report. However, new social, economic, and environmental challenges will raise important research questions for the future. Thus, important questions arise about how to integrate new actions in the area of circular economy or new blockchain applications into the report [104,105]. On the other hand, organizations have already integrated CSR as one more line of action within organizations, aware of the tangible and intangible value that it generates for them. However, there are productive sectors on which the effect of CSR has not been analyzed, such as energy [106], cosmetics [107], fashion [108] or the automotive sector [109] among others. And finally, social challenges are implying greater gender diversity in government bodies [110–112], so it will be necessary to answer: How is this new corporate governance configuration influencing the report and image of its new leaders on interest groups? However, the authors were able to find answers to some questions that we consider to be of interest and that the academy has not yet answered. Stakeholders are a very diverse group of the population, which are also determined by important social, political, and cultural implications. So, do all interest groups perceive the information in the same way? Is it relevant and does it generate greater value to present different types of reports depending on the specific interest group that is targeted? Derived from this, the new communication technologies have brought about an important change in the way in which we consume information, therefore, should the communication channels of CSR actions be diversified? Does this mean the expansion or suppression of the traditional key aspects of CSR?

So, this work has contributed to identify the fundamental characteristics of CSR reporting and communication, its main orientations, generating knowledge that can be useful for multiple agents. In the first place, for new researchers and experts in the line of research, who can find a general image of the state of the art, thus making it possible to address the main research gaps identified and thus contributing to the generation of new scientific knowledge that continues to give response to the main challenges posed. Secondly, our findings are relevant for organizations in general, and for CSR and corporate communication managers in particular, who can use this knowledge in various aspects: (a) now they can know what the differential aspects are and the value that they must convey to stakeholders regarding the CSR actions carried out by their organizations; (b) they could detect training gaps in certain aspects that would be useful for training and broadening their knowledge, thus contributing to the development of their talent and maximizing their professional performance; (c) have a basis for generating debate and developing new corporate strategies, regardless of the development of the regulatory framework, to standardize communication that generates two-way value with stakeholders. Third, our conclusions are useful for public policy makers, who can appreciate that the legislative effort at the supranational level has contributed to the generation of new knowledge that has led companies to give greater value to CSR, and, in consequence, to the report of its actions to the interest groups. However, multiple challenges continue to exist, and although CSR is characterized by actions that go

beyond legal actions, the development of a new regulatory framework more adjusted to the current reality is required. This should be characterized by guaranteeing greater governmental value and visibility to the responsible actions of the organizations. This could have a direct impact on an increase in the number of organizations interested in allocating resources to this type of action, as well as indirectly, generating greater individual and collective awareness of current social and environmental challenges. Finally, our findings are relevant for society in general and for the interest groups of the organizations, since we provide relevant information on which are the elements that add value to CSR actions, thus facilitating the discrimination of information and the assessment that is important to contribute with their purchase and investment decisions to the development of more socially committed organizations.

Finally, this research study presents some limitations that could be the basis for the development of future research, which would help to complement the results obtained. First, the use of other scientific repositories such as Web of Science or Google Scholar. The text files provided by the different repositories are different, so it is not possible to perform an optimal treatment through VOSViewer. The complementarity of the works available in other repositories could give rise to the breadth of the research topics detected, as well as the identification of research gaps that could not be detected because of this limitation. Second, broaden the variety of searchable documents, selecting, for example, book chapters or papers presented at conferences, which would increase the volume of information available and could help identify other relevant topics studied regarding communication management. of CSR. Third, the breadth of the keywords used to establish the search criteria could be interesting. Given that the objective was to analyze the communication of CSR, the incorporation of terms linked to communication channels could be interesting; For example: “social networks”, “Instagram”, “Facebook”, “Linkedin”, “web pages”. Other search terms that could also be complementary are those that refer to the different types of criteria already established in the CSR activities report; for example: “ESG criteria”, “Global Reporting Initiative (GRI)”, or, in more general terms, “impact reports”. It is likely that the inclusion of these more general terms would increase search results and thus slightly different results, especially in identifying the main research topics. Fourthly, the use of other mapping software than VOSViewer, such as, for example, SciMAT which could create slightly different thematic associations. Finally, the use of other research methodologies could help expand our findings. Namely, we recognize two: (a) the systematic review of the literature, which would carry out a deeper analysis of the main previous findings, thus contributing to a deeper conceptualization of certain aspects; and (b) the application of qualitative methodologies to know the opinion of the interest groups on whether, indeed, our findings are consistent or, on the contrary, it is necessary to develop new dimensions or instruments for communication that are influential in their purchase and investment decisions in socially responsible organizations.

Author contribution statement

All authors listed have significantly contributed to the development and the writing of this article.

Data availability statement

Data will be made available on request.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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