A BIBLIOMETRIC ANALYSIS OF CORPORATE SUSTAINABILITY PERFORMANCE: CURRENT STATUS, DEVELOPMENT AND FUTURE TRENDS

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ARTICLE INFO	ABSTRACT
	Purpose: This study aimed to focus on bibliometric analysis and the concept of corporate sustainability performance (CSP) to understand the evolutionary and developmental trends in the field of CSP. **Design/methodology/approach:** This study conducted a bibliometric analysis of 1,518 Scopus-indexed documents on CSP published from 1975 to August 2021 to provide meaningful insights for further discussions. For this purpose, the study used VOSviewer software for drafting the literature and Harzing's Publish or Perish software to obtain impact matrices and citation information. **Findings:** The findings revealed that the number of CSP-related publications has increased in recent years (1975-1991: 21 publications, 1992-2007: 206 publications, and 2008-2021: 1291 publications). Furthermore, the findings revealed a significant increase in interest in the CSP field. Business, management, and accounting (34 %) were the most studied subject areas, and the Journal of Business Ethics, with a TP of 150, as the most productive scientific journal. **Research, Practical & Social implications:** This study examines how academic interest in CSP has evolved and identifies areas for further exploration in the CSP context. This study contributes to the current literature in the CSP domain by providing a bibliometric analysis. Furthermore, this bibliometric analysis would aid in decision-making and policy formulation related to CSP. **Originality/value:** The overall findings revealed an increase in CSP development in the scientific field, linked to the continued expansion of empirical research papers, researchers/authors, and citations.

UMA ANALISE BIBLIOMETRICA DO DESEMPENHO DA SUSTENTABILIDADE CORPORATIVA: SITUAÇAO ATUAL, DESENVOLVIMENTO E TENDENCIAS FUTURAS

RESUMO

Objetivo: Este estudo teve como foco a análise bibliométrica e o conceito de desempenho em sustentabilidade corporativa (CSP) para entender as tendências evolutivas e de desenvolvimento no campo de CSP.

Desenho/metodologia/abordagem: Este estudo realizou uma análise bibliométrica de 1.518 documentos indexados pelo Scopus sobre CSP publicados de 1975 a agosto de 2021 para fornecer insights significativos para futuras discussões. Para tanto, o estudo utilizou o software VOSviewer para elaboração da literatura e o software Harzing's Publish or Perish para obter matrizes de impacto e informações de citação.

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Resultados: Os resultados revelaram que o número de publicações relacionadas a CSP aumentou nos últimos anos (1975-1991: 21 publicações, 1992-2007: 206 publicações e 2008-2021: 1291 publicações). Além disso, os resultados revelaram um aumento significativo no interesse no campo CSP. Negócios, gestão e contabilidade (34%) foram as áreas temáticas mais estudadas, e o Journal of Business Ethics, com um TP de 150, como o periódico científico mais produtivo.
Pesquisa, implicações práticas e sociais: Este estudo examina como o interesse acadêmico em CSP evoluiu e identifica áreas para exploração adicional no contexto de CSP. Este estudo contribui para a literatura atual no domínio CSP, fornecendo uma análise bibliométrica. Além disso, essa análise bibliométrica auxiliaria na tomada de decisões e na formulação de políticas relacionadas a CSP.
Originalidade/valor: Os achados gerais revelaram um aumento no desenvolvimento de CSP no campo científico, vinculado à contínua expansão de trabalhos de pesquisa empírica, pesquisadores/autores e citações.

Palavras-chave: Desempenho de Sustentabilidade Corporativa, Sustentabilidade Social Corporativa, Sustentabilidade Ambiental Corporativa, Sustentabilidade Econômica Corporativa, Bibliométrico.

UN ANALISIS BIBLIOMETRICO DEL DESEMPENO DE LA SUSTENTABILIDAD CORPORATIVA: ESTADO ACTUAL, DESARROLLO Y TENDENCIAS FUTURAS

RESUMEN
Propósito: Este estudio tuvo como objetivo centrarse en el análisis bibliométrico y el concepto de desempeño de sostenibilidad corporativa (CSP) para comprender las tendencias evolutivas y de desarrollo en el campo de CSP.
Metodología: Este estudio realizó un análisis bibliométrico de 1518 documentos indexados en Scopus sobre CSP publicados desde 1975 hasta agosto de 2021 para proporcionar información significativa para futuras discusiones. Para ello, el estudio utilizó el software VOSviewer para la redacción de la literatura y el software Publish or Perish de Harzing para obtener matrices de impacto e información de citas.
Conclusiones: Los hallazgos revelaron que el número de publicaciones relacionadas con CSP ha aumentado en los últimos años (1975-1991: 21 publicaciones, 1992-2007: 206 publicaciones y 2008-2021: 1291 publicaciones). Además, los resultados revelaron un aumento significativo del interés en el campo de la CSP. Negocios, administración y contabilidad (34 %) fueron las áreas temáticas más estudiadas, y la Revista de Ética Empresarial, con TP de 150, como la revista científica más productiva.
Implicaciones de la Investigación: Este estudio examina cómo ha evolucionado el interés académico en CSP e identifica áreas para una mayor exploración en el contexto de CSP. Este estudio contribuye a la literatura actual en el dominio CSP al proporcionar un análisis bibliométrico. Además, este análisis bibliométrico ayudaría en la toma de decisiones y formulación de políticas relacionadas con CSP.

Palabras clave: Desempeño de Sostenibilidad Corporativa, Sostenibilidad Social Corporativa, Sustentabilidad Ambiental Corporativa, Sostenibilidad Económica Empresarial, Bibliométrico.

INTRODUCTION

The concept of sustainability has gained more importance over time, as the world has become more concerned about its complete surprise on the environmental scenario. With the increasing consensus in society on the degrading environment that is slowly but surely appearing in public attention, such as climate change, pollution, globalisation, scarce resources efficient management and their erosion invite society to change traditional economic growth into more sustainable social and environmental growth. Sustainable development growth, which is expressed as a sustainable development that encounters the current needs without jeopardising the capability of upcoming generations to encounter their own needs (WCED, 1987), has now turned out to be one of the burning issues on solving those social-economic and environmental problems. Moreover, in 2015 the United Nations (UN) demonstrated the

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sustainable development goals (SDGs) and proposed a list of 17 goals and 169 targets which demonstrated the role of private corporations in achieving these goals and targeted with their innovations and inventions (United Nations, 2015), which were generally taken in the form of corporate sustainability performance (CSP). These goals had brought CSP into the mission of various corporations worldwide (Robert et al., 2005) and their concern and integration in the social sphere (Hasana et al., 2022; Reyes Menendez et al., 2018). In the corporation context, Savitz and Weber (2006) advised that "a sustainable corporation creates benefits for its shareholders and simultaneously protects the environment and social well-being." On this issue, the interdependence between ecological fortification, society and economic growth is a crucial component in the sustainability concept (Gimenez et al., 2012; Hutchins & Sutherland, 2008).

Corporate sustainability (CS) is an effective strategy through which corporations incorporate environmental and social concerns in their corporate processes and dealings with their stakeholder on a voluntary basis (Council, 2006; Kitsios et al., 2020). The concept does not only symbolises a desire for a good image or profit maximisation, but also a transparent approach to resource management that ensures the intended outcomes of corporate social, environmental, and economic performance. Generally, CS is based on the idea of mutual benefits in economics and ethical premise of non-renewable natural resources conservation (Linton et al., 2007). This is compatible with the coherence of activities taken for the purpose of gaining a competitive advantage (Nicolaescu et al., 2015). In this regard, the primary fundamental of CS is the intention to operate moral business activities that add value to society beyond the statutory guidelines (Portney, 2020). Finally, it is critical to comprehend how the concept of CS varies from country to country and why it evolves through time. Moreover, it is to understand the significance of sustainable economic development, considering social and environmental aspects and how CS covers these dimensions.

In this regard, the current study intends to explore the evolution of scientific knowledge based on CSP, as well as major trends and gaps in CSP discussions during the last several decades. Additionally, this study will provide clear recommendations for future researchers to address issues related to CSP. Thus, to achieve the above objective, the following research questions are formulated: *RQ1*. What are the CSP development trend in the academic domain and the number of publications over the years? *RQ2*. What is the more commonly known subject area for the distribution of CSP publications? *RQ3*. Which are the most productive journals on CSP? *RQ4*. What is the frequency of author keywords and term co-occurrence in the CSP domain? *RQ5*. Which are the most highly productive authors and co-authorship

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networks in the CSP domain? *RQ6.* Which countries and institutions are ranked as the most productive in terms of CSP research publications?

The current study determines how the academic interest in CSP has developed over time and it underlines fields, which require further exploration in the CSP context. By presenting a bibliometric analysis of existing studies, the current study contributes to current literature in the CSP domain. Furthermore, this bibliometric analysis could be beneficial for corporate decision makers and policy makers to understand the complexity of CSP. The added benefit of this study is the valuable general view of CSP in sustainable development, which underscores the problems in CSP research. However, given that a comprehensive overview of existing literature from divergent perspectives was not employed in the current bibliometric analysis, and thus it is an excellent initiative for further investigations. As compared to past studies, which only focused on systematic mapping literature review and created awareness in the CSP area, this is a bibliometric analysis study that presents a broader research view in the CSP domain, its development and links amongst different studies, with the purpose of taking the initiative for future research. The current study would approach the central studies from three different views: social, environmental and economic dimensions of CSP. Consequently, in the following section, this study presents the most appropriate literature review in CSP context. Section 3 analyses the data and methodology used for the bibliometric analysis. Then, results and discussions are presented in Section 4, while conclusion is provided in Section 5.

LITERATURE REVIEW

The social perspective is usually identified as a fragile dimension of sustainability (Meseguer-Sanchez et al., 2021), which means that there is no comprehensibility in the scientific community regarding its definition, measurement tools and standards (Colantonio, 2009). This view indicates that issues regarding the social dimension of sustainability are often counted as secondary importance (Bostrom, 2012). Notwithstanding this ambiguity, Landorf (2011) reconciled that basic needs and justice were critical problems in social sustainability. Similarly, McKenzie (2004) demonstrated social sustainability as "a positive condition within communities and a process within communities that could attain that condition." Labuschagne et al. (2005) considered that social perspective invoked a corporation's influence on the social system and stakeholder. In contrast, Bramley et al. (2009) studied it as a binominal amongst community sustainability and social equity. Concentrating on this social perspective, various researchers from the international community explored the social aspect of sustainability. Schwartz et al. (2006) proposed a technique to examine the advantages and drawbacks to human

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health in the per capita gross national product, while Tanzil and Beloff (2006) and Hunkeler (2006) incorporated social factors in the environmental analysis. Inevitably, increased pressure from stakeholders led corporations to consider social issues profoundly (Cretan & Obrien, 2020). Today, the social pillar of CS confers issues such as internal human resources, health and safety practices, job stability, development of abilities and capacities, human rights, gender equality, and labour rights (Meseguer-Sanchez et al., 2021).

Corporate policies studies have underscored the role of CS as the integration of environmental factors for growth and the continually changing corporate environment (Ikram et al., 2019). Corporations with social and environmental certifications can persuade more customers because their established sustainable policies create positive social perceptions (Awan et al., 2019). Wang et al. (2016) deliberated that CS policies and strategies could contribute to the impacts of environmental reduction. Similarly, Ikram et al. (2019) contributed to recognising the effect of sustainable strategies to establish environmental sustainability. Accordingly, various studies had recognised the role of innovation with regard to CS and financial performance (Anser et al., 2018; Zhu et al., 2019), which gave rise to the origin of new concepts (green innovation and circular economy) that positively affected the binomial financial gain and environmental sustainability. Researchers have extensively discussed these concepts (Domenech et al., 2019; Gomez et al., 2018; Kuzma & Sehnem, 2021), whereby it allowed recognition of new industrial development chances and sustainable practices (Tseng et al., 2019). Evidently, studies have increasingly advanced in current years. Therefore, it is anticipated that corporations will employ these innovations to improve outcomes of the traditional economic model (Nunez-Cacho et al., 2020).

For more than a decade, studies explained the relation amongst corporate financial performance and sustainable corporate development. It can be noticed that if corporations identify a positive connection between sustainable corporate development and corporate financial performance, they will be highly determined to incorporate sustainability strategies with the aim of environmental and social enhancement (Porter & Kramer, 2019). However, empirical research on the economic outcome impacts in implementing sustainability policies and strategies is not convincing. Some researchers have found a significant association amongst CS and corporate financial performance (Saeidi et al., 2015; Wagner, 2010). In contrast, Mahoney and Roberts (2007) and Parast and Adams (2012) found a negative relation amongst CS and corporate financial performance.

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METHODOLOGY

This study used bibliometric analysis technique to implement the research. Bibliometric analysis is a structured process to describe all published documents in a particular field of science by identifying, organising, analysing in terms of quality, numbers, productivity, connection and citations. Block and Fisch (2020) advised that by providing only reference tables, which include leading research articles surveyed by a short discussion, authors-name and institutions, did not meet the criteria of bibliographic research and that the bibliographic research should concentrate on assessing the structure of a specific research field. Therefore, this study followed the guidelines provided by Block and Fisch (2020) to organise an impressive bibliometric analysis study and explore the CSP evolution.

Defining Searching Terms

Block and Fisch (2020) recommended that it was essential for bibliometric analysis studies to have clarity and transparency in the searching process. This section discusses the data mining transparently. In August 2021 data collection was conducted from the SCOPUS database. Several parallel research studies were conducted by searching different areas in the SCOPUS database, such as biochemical engineering and management (Khudzari et al., 2018; Zheng & Kouwenberg, 2019). It is worth noting that the SCOPUS database is the most significant citation database which encompasses a broad spectrum of subjects and is therefore highly recommended for bibliometric analysis studies. After examining relevant publications, definitions, and categories about CSP, this study created a central theme for the search string. Since CSP is a broad topic, the primary theme keyword search was limited. Therefore, the study central theme was articles from all journals, which included corporate sustainability performance, environmental, social and governance (ESG) performance, corporate environmental performance, corporate social performance and corporate social responsibility (CSR) in terms of title, abstract and keywords and the research protocol is summarised in Table 1.

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Table 1: Research Protocol

Criteria	Protocol Description
Database	Scopus
Search Phrase	Corporate Sustainability Performance, ESG Performance, Corporate Environmental Performance, Corporate Social Performance, and CSR
Boolean Operator	OR between groups
Search String	("corporate sustainability performance" OR "ESG Performance" OR "corporate environmental Performance" OR "corporate social Performance " OR "corporate social responsibility" AND (LIMIT-TO (DOCTYPE, "ar") OR (LIMIT-TO (DOCTYPE, "cp") OR (LIMIT-TO (DOCTYPE, "re") AND (LIMIT-TO (SRCTYPE, "J") OR (LIMIT-TO (SRCTYPE, "P"))
Location	Article title, abstract, and keywords
Languages	All

Demarcating Criteria of Search

The query string produced a total of 1,638 published documents from 1975 to 2021, limiting the search from journal articles, reviews and conference papers published in English language. In the detailed analysis (years, subject area, more active source title, country/territory, most active authors and most active institutions) all journal articles, reviews, conference papers were utilised. However, only 1,518 documents were investigated for the analysis. A total of 120 less relevant documents which consisted of trade journals and book series were excluded. Following the PRISMA flow diagram similar to Moher et al. (2009), the summary on the flow of information for the study is presented in Figure 1 below.

Figure 1: Flow of Information Through the Different Phases (PRISMA Flow Diagram)

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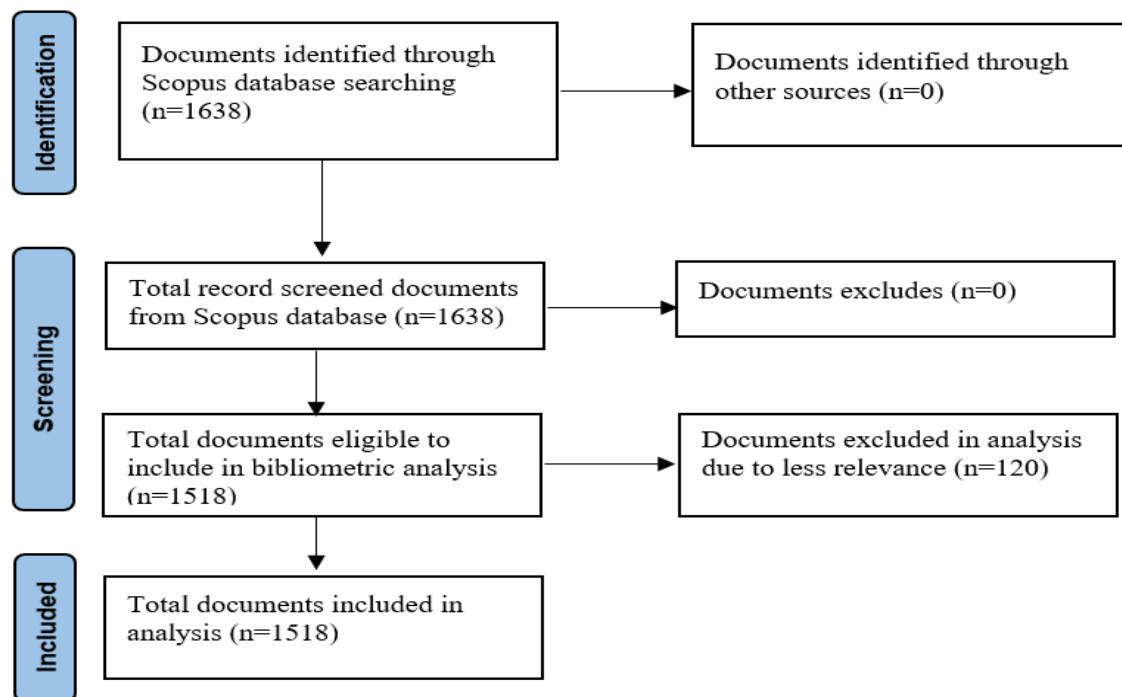
Bibliometric Analysis Methods

This study used VOSviewer for drafting the literature as it is a robust software to create a visual sketch based on object relevance. The software has been extensively used in bibliometric analysis for social science research (Hamada et al., 2020). In this way, the year of publications, author keywords, subject area, co-authorship, term co-occurrence network, country and institution that were used in the present study were analysed through the VOSviewer software (Belmonte-Urena et al., 2020). This tool creates a network map for each variable used, allowing group and processing of words. Other analysis software, such as Harzing's Publish or Perish and Microsoft Excel were also used in the current study. For instance, Harzing's Publish or Perish was used to obtain impact matrices (h-index and g-index) and citation information, while Microsoft Excel was used to calculate the average and percentages of data.

RESULT AND DISCUSSION

Total Number of Publications over the Years

Table 2 shows the CSP development trend and the total number of publications over the years. A total of 1,518 documents were published in the SCOPUS database between 1975 and 2021. Conferring to the data collected, it was noticed that the first CSP article was published in 1975. Furthermore, the total number of publications showed a significant increasing trend until today. The increasing trend also showed that CS was gaining consideration from the present and future researchers. Additionally, 71% of the articles were published from 2012 to 2021, and 52% of the articles were published in the past six years (2016–2021). This trend showed the uniqueness of research related to CSP. The total number of publications from 2016 to 2019 was 461, which was significantly more than the prevailing years (2020–2021) and from 2020 to 2021 the total publications were 337, which was less than the previous years (2016–2019). The reason behind this was that the data collection date of the current study was 10 August 2021. Consequently, the later publications that should be published in 2021 were not included in the dataset.
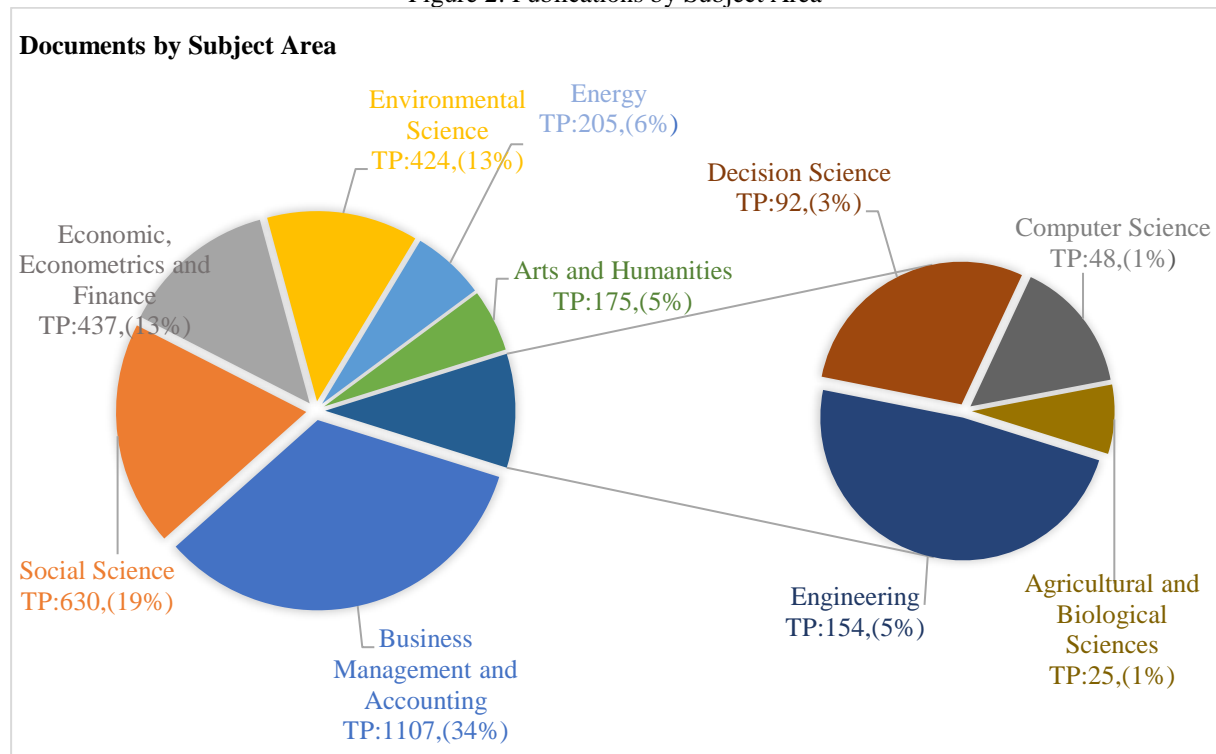
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Table 2: Number of Publication Per Year

Year	TP	%Age	Cumm (%)	NCP	TC	C/P	C/CP	h	g
1975-1979	3	0.1976	0.19763	166	499	166.333	3.006	3	3
1980-1983	5	0.3294	0.52701	18	93	18.6	5.1667	3	5
1984-1987	7	0.4611	0.98814	77	543	77.5714	7.0519	6	7
1988-1991	6	0.3953	1.3834	129	775	129.167	6.0078	6	6
1992-1995	17	1.1199	2.50329	12	213	12.5294	17.75	6	14
1996-1999	57	3.7549	6.25823	275	15690	275.263	57.055	34	57
2000- 2003	56	3.6891	9.9473	158	8894	158.821	56.291	36	56
2004-2007	76	5.0066	14.9539	114	8710	114.605	76.404	76	40
2008-2011	200	13.175	28.1291	69	13956	69.78	202.26	58	116
2012-2015	293	19.302	47.4308	71	14288	48.7645	201.24	65	112
2016-2019	461	30.369	77.7997	38	7753	16.8178	204.03	48	67
2020-2023	337	22.2	100	6	1361	4.03858	226.83	17	20
Total	1518	100							

Note: TP = Total number of publications, NCP= number of cited publications; TC= Total citations; C/P= Average citation per publication; C/CP= Average citation per cited publication; h= h-index; g=g-index.

Dissemination of Published Documents by Subject Area

During 1975–2021 there were 21 subject areas in which 3,397 research documents were analysed with regard to CSP. Figure 2 represents the percentage of the 10 most popular subject areas, in which SCOPUS has fit these published documents. Therefore, business management and accounting were the maximum number of published papers accepted during the analysed period, with a total of 1,107 papers. This showed 34% of the total publication. In order of precedence, they were social science (630, 19%), economic, econometrics and finance (437, 13%) and environmental sciences (424, 13%).

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Figure 2: Publications by Subject Area

Documents by Subject Area

- Environmental Science TP:424,(13%)
- Energy TP:205,(6%)
- Decision Science TP:92,(3%)
- Computer Science TP:48,(1%)
- Economic, Econometrics and Finance TP:437,(13%)
- Arts and Humanities TP:175,(5%)
- Social Science TP:630,(19%)
- Business Management and Accounting TP:1107,(34%)
- Engineering TP:154,(5%)
- Agricultural and Biological Sciences TP:25,(1%)

Most Productive Journals for Publications

This section explains the dissemination of publications from various journals. Table 3 represents the top 10 journals, which have published papers about CS performance. It also includes information about publishers and other citation indexes. It was noticed that 1,518 documents related to CSP were published in 160 journals during 1975–2021. The most productive journal CS was *Journal of Business Ethics*, which published 150 articles, followed by *Sustainability Switzerland* (87), *Journal of Cleaner Production* (75) and *Business and Society* (72) as shown in Table 3. In addition to this, the *Journal of Business Ethics* documented the highest number of citations of 15,057 with the highest h-index (67) and g-index (121). Furthermore, seven of these 10 highly productive journals were in the first quartile (Q1) of the SClmago Journal Rank (SJR) index in 2020.

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Table 3: Most Productive Journals for Publication

Source Title	TP	TC	C/P	Publisher	Cite score (2020)	SJR (2020)	SNIP (2020)	Quartile	h	g
Journal of Business Ethics	150	15057	100.38	Springer Netherlands	9	2.209	2.534	Q1	67	121
Sustainability Switzerland	87	956	10.9885	MDPI	3.9	0.612	1.242	Q2	16	27
Journal of Cleaner Production	75	2852	38.0266	Elsevier	13.1	1.937	2.475	Q1	31	52
Corporate Social Responsibility and Environmental Management	72	1482	20.5833	John Wiley and Sons Ltd.	8	1.519	2.227	Q1	19	37
Business and Society	58	10906	188.034	SAGE Publications	11	2.983	2.96	Q1	39	90
Business Strategy and the Environment	52	1825	35.0961	John Wiley and Sons Ltd.	10.3	2.123	2.598	Q1	24	42
Social Responsibility Journal	39	346	8.87179	Emerald	3.5	0.528	0.816	Q2	13	16
Strategic Management Journal	20	7679	383.95	John Wiley and Sons Ltd.	12.5	11.035	3.882	Q1	17	20
Journal of Business Research	17	419	24.6470	Elsevier	9.2	2.049	2.852	Q1	12	20
Corporate Reputation Review	11	386	35.0909	Palgrave Macmillan Ltd.	1.7	0.314	0.721	Q3	10	11

*Note: TP= total number of publications; TC=total number of citations*

Frequency of Authors Keywords

This section describes the frequency of keywords and term co-occurrence that were used in each published document, during the analysed study period (1975–2021). VOSviewer was used to denote the most commonly used keywords in the 1,518 papers and their connections. The network visualisation of authors keywords shown in Figure 3 illustrates the relations between keywords, and thus indicates three different keyword clusters that were found on CSP. The first cluster specified by yellow colour included corporate social performance. The second

red cluster implied keywords, which consisted of sustainability, CSP, ESG performance and innovation.

Additionally, the third blue cluster implied keywords of environmental sustainability, environmental performance, corporate environmental performance, climate change, triple bottom line and environmental disclosure. Moreover, in the keywords sample, association amongst all author keywords was also observed. This relation was observed with the help of co-occurrence method by using VOSviewer software. Therefore, according to the number of co-occurrences, the colour nodes differentiated different clusters, and thus different colour clusters were noticed, which could be interlinked with a different line of the considered research area. However, it was worth to note that it was a traverse line of research. The current study has found links between every keyword: CSP, CSR, stakeholder, sustainability, and ESG performance. Firstly, the yellow cluster showed CSP with total link strength of 546 items and CSR performance with total link strength of 520 items. Secondly, the red cluster showed a link with sustainability with total link strength of 153 items. Thirdly, the blue cluster was linked with corporate environmental performance with total link strength of 133 items.

Figure 3: Network Visualization of Keywords

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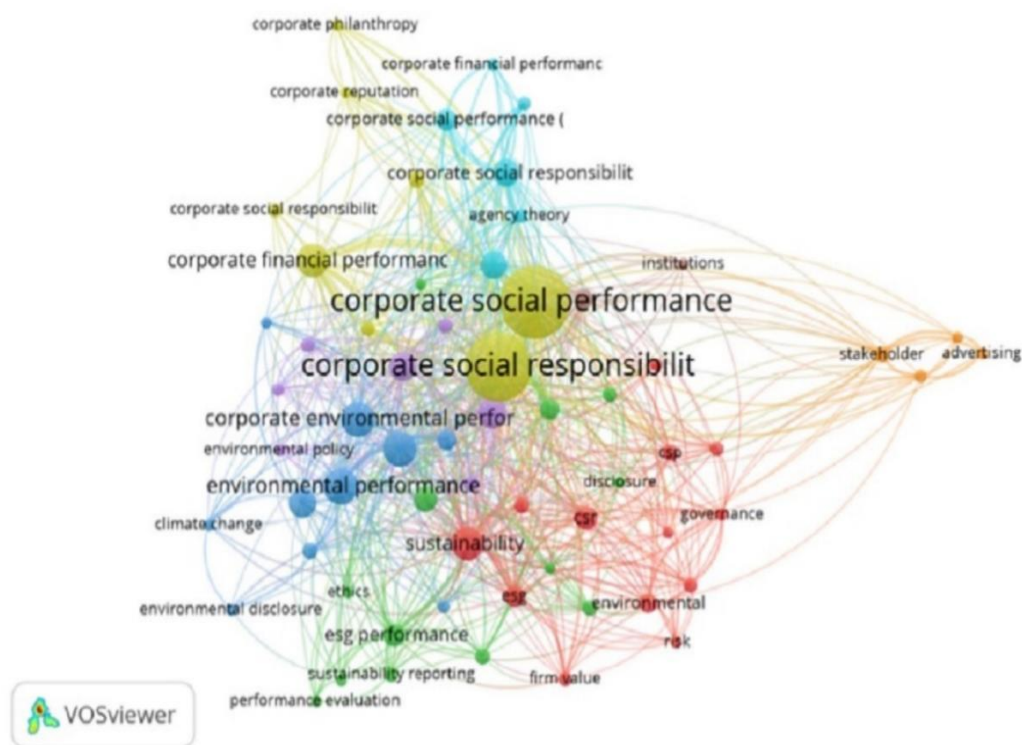
Additionally, Figure 4 represents the main research development/evolution in current years, and thus form today's main research areas and in forthcoming decades. Result showed that within the "corporate social performance", cluster trends were oriented to corporate reputation and corporate philanthropy. Next, "corporate social responsibility" had a primary cluster of trends which were oriented to socially responsible investment, supply chain management, and corporate financial performance and executive compensation. Most importantly, "sustainability" cluster trends mainly focused on environmental management, policy, environmental economies and greenwashing.

Figure 4: Development of keyword cluster based on co-occurrence
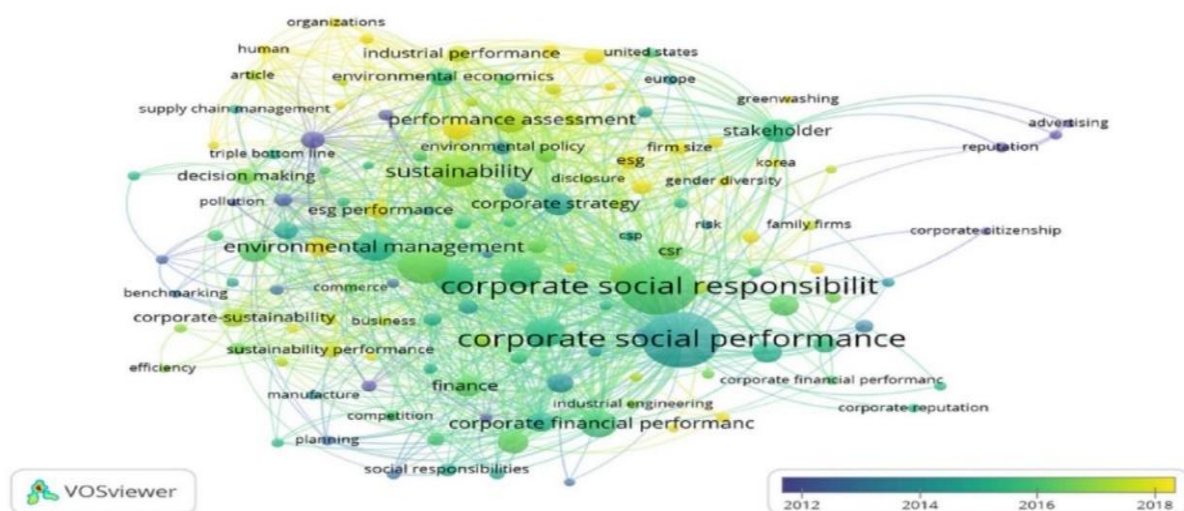
Highly Productive Authors and Co-authorship

This section demonstrates the highly productive authors of CSP during the 1975–2021 period. Table 4 represents the main examined variables of the 15 highly productive authors of CSP. Observing contributions in terms of publications, Orlitzky, M., from Universidad de Zaragoza had a maximum number of CSP publications based on SCOPUS index, with a total of 14 publications. This was followed by Ortas, E., who is affiliated with Tilburg University, and contributed 9 publications. Concerning total citations (TP) and average citations (C/P) per paper, Graves, S.B. has maximum TC of 3,523 and C/P of 587, followed by Brammer, S. with TC of 1,799 and C/P of 244. In terms of h-index and g-index, Brammer, S. has the highest h-index (10) and g-index (11), followed by Orlitzky, M. with h-index (7), and g-index (10).

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Table 4: Highly Productive Author

Authors' Name	Affliation	Country	TP	NCP	TC	C/P	C/CP	h	g
Orlitzky, M.	Universidad de Zaragoza	United States	14	27	275	19	10.19	7	10
Ortas, E.	Tilburg University	China	9	22	204	22.667	9.273	8	9
Brammer, S.	Technische Universität Dresden	United Kingdom	8	163	1799	224.88	11.04	10	11
Guenther, E.	The University of Queensland	Australia	8	39	358	44.75	9.179	6	9
Kocmanová, A.	KEDGE Business School	Spain	8	13	160	20	12.31	6	12
Pavelin, S.	University of Groningen	Canada	8	157	1259	157.38	8.019	7	8
Takehara, H.	Shanghai Jiao Tong University	France	8	3	23	2.875	7.667	3	5
Francoeur, C.	The George Washington University	Germany	7	44	314	44.857	7.136	5	7
Gond, J.P.	University of Reading	Italy	7	61	430	61.429	7.049	6	7
Suto, M.	Universidad de Salamanca	Netherlands	7	2	19	2.7143	9.5	2	4
Wood, D.J.	HEC Montréal	South Korea	7	161	1131	161.57	7.025	5	7
Graves, S.B.	The University of Texas at Austin	Hong Kong	6	587	3523	587.17	6.002	5	6
Guiral, A.	University of Pittsburgh	India	6	11	71	11.833	6.455	4	6
Kang, J.	Universidad del Pais Vasco	Malaysia	6	31	223	37.167	7.194	6	7
Martínez-Ferrero, J.	University of Cambridge	Taiwan	6	9	57	9.5	6.333	3	6

Note: TP = Total number of publications, NCP= number of cited publications; TC= Total citations; C/P= Average citation per publication; C/CP= Average citation per cited publication; h= h-index; g=g-index

Productivity of Countries and Institutions

This section describes the highly productive institutions and countries, which contributed immensely to the CSP expansion in the area of CSP. Broadly, a total of 82 countries were included in the present analysis based on search results. Table 5 represents the ranking of 15 most productive countries in terms of the number of CSP publications during 1975–2021. According to classification it was quite clear that the United States had the most publications (425) with TC of 31671. China was the second country with the most publications (180) with TC of 2,589. The United Kingdom had third most publications (147) with TC of 10,558, which was higher than TC of China. Similarly, in terms of h-index and g-index, the United States had the highest h-index (85) and g-index (176), and the United Kingdom had the second-highest h-index (43) and g-index (102).

Table 5: Ranking of Top Fifteen productive Countries Contributed to Publications

Country	TP	NCP	TC	C/P	C/CP	h	g
United States	425	158	31671	74.52	200.4494	85	176
China	180	14	2589	14.38333	184.9286	26	26
United Kingdom	147	71	10558	71.82313	148.7042	43	102
Australia	111	53	5987	53.93694	112.9623	35	76
Spain	111	39	4389	39.54054	112.5385	30	65
Canada	98	54	5293	54.0102	98.01852	31	72
France	87	29	2535	29.13793	87.41379	25	49
Germany	82	49	3541	43.18293	72.26531	31	59
Italy	62	21	1303	21.01613	62.04762	20	35
Netherlands	61	46	2809	46.04918	61.06522	25	52
South Korea	51	21	1084	21.2549	51.61905	16	32
Hong Kong	36	29	1091	30.30556	37.62069	17	33
India	36	16	483	13.41667	30.1875	10	24
Malaysia	36	14	526	14.61111	37.57143	13	22
Taiwan	36	20	735	20.41667	36.75	26	13

Note: TP = Total number of publications, NCP= number of cited publications; TC= Total citations; C/P= Average citation per publication; C/CP= Average citation per cited publication; h= h-index; g=g-index.

Additionally, Table 6 shows the 12 most productive institutions with a minimum of 15 CSP publications during 1975–2021. In this case, Tilburg University (China) was found to be a highly productive institution with 15 published research articles during the analysed period. Followed by Technische Universitat Dresden (United Kingdom) and University of Queensland (Australia). Additionally, the University of Pittsburgh (India) ranked the highest number of TC (1,355) with C/P 123. Similarly, considering the influence level, University of Groningen (Canada) ranked highest with h-index of 10 and g-index of 14.

Table 6: Ranking of Top Twelve Productive Institutions Contributed to Publications

Affiliation	Country	TP	NCP	TC	C/P	C/CP	h	g
Tilburg University	China	15	44	661	44.1	15.023	5	15
Technische Universität Dresden	United Kingdom	14	22	176	12.6	8	5	8
The University of Queensland	Australia	14	251	161	11.5	0.6414	5	7
KEDGE Business School	Spain	14	19	250	17.9	13.158	9	13
University of Groningen	Canada	13	49	693	53.3	14.143	10	14
Shanghai Jiao Tong University	France	13	14	102	7.85	7.2857	4	7
The George Washington University	Germany	12	37	300	25	8.1081	6	8
University of Reading	Italy	12	108	1300	108	12.037	9	12
HEC Montréal	South Korea	11	50	601	54.6	12.02	7	12
University of Pittsburgh	India	11	104	1355	123	13.029	10	13
Hong Kong Polytechnic University	Turkey	10	12	121	12.1	10.083	7	10
University of Cambridge	Taiwan	11	49	539	49	11	6	11

Note: TP = Total number of publications, NCP= number of cited publications; TC= Total citations; C/P= Average citation per publication; C/CP= Average citation per cited publication; h= h-index; g=g-index.

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CONCLUSION

This study was conducted to analyse the emergence and development of research in the CSP field at the international level between 1975 and 2021. In this regard, bibliometric analysis was carried out on 1,518 published documents from the SCOPUS database. Most importantly, the overall analysis of the study demonstrated upsurge of CSP development in the scientific field, which are related to the ongoing expansion of empirical research papers, researchers/authors and the number of citations. This study also underscore the increase in the number of research journals, institutions and countries in the past six years to be considered in evaluating the insinuations of attaining the SDGs. Additionally, CSP publications have promptly increased in the past few years with the most prevailing subject about business, management and accounting**.**

The analysis of the subject area in the current study showed that business management and accounting had accepted the highest number of publications throughout the period considered. Regarding the analysis of scientific journals, the most productive journal in the CSP domain was *Journal of Business Ethics*. In terms of keyword analysis during the analysed period, the most commonly used author keywords in CSP literature were corporate social performance, corporate social responsibility, sustainable development, sustainability, environmental performance and corporate environmental performance. Moreover, contribution in terms of publications by most productive CSP author during the entire analysed period was Orlitzky, M., from Universidad de Zaragoza. Meanwhile, analysis in the geographical distributions of CSP studies in terms of countries showed that the United States had the highest number of publications. In term of institution, Tilburg University (China) was found to be a highly productive institution. It was also recognised that the execution of sustainability policies and strategies have a central line of research, such as corporate strategy, sustainable growth, environmental management, business ethics, decision-making corporate governance and stakeholders, which they acted cross-sectionally to the economic, social and environmental perspectives.

Along these lines, potential directions of research were encountered. In view of the aforementioned, future researchers could expand the research on CS by integrating corporate strategies and policies using decision-making methods and identifying external and internal drivers that affect CS strategies and policies. This domain was in the initial phase and studies provided inadequate guidance regarding corporate sustainable strategic management planning, decision-making and CSP. Future researchers can bridge this gap by collecting data from several industries and test the validity of the theory employed and examining the problems and

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challenges of integrating sustainability in the business model. On the research strings to be established in the upcoming few years, it would be exciting to study the CSP and related SDGs, green innovations and CSP, advances in environmental and social dimensions and external and internal drivers that affect CSP. Concerning the implication of CS, upsurge development of published articles, scientific journals, citations, authors, countries and inspired by the ISO 26000 standard were demonstrated in the past few years. Specifically, the SDGs 2030 agenda may encourage researchers and policy makers to expand their perspectives on sustainability challenges.

Furthermore, the significance of 17 SDGs ought to be emphasised, which indicates the significance of improving international alliances for sustainable growth. Notably, to know and assess the usefulness of several interested parties who assemble, share knowledge and capabilities, a bibliometric analysis provides indications and creates connections between clusters and relevant lines of research in the future. Lastly, this study has some limitations. The study focused on quantitative analysis while the qualitative facet was not studied. Together with the usage of other software, future analysis may give marginally diverse results. Similarly, the current bibliometric analysis had concentrated entirely on the publications of scientific research papers between 1975 and 2021, but did not review the book series, trade journals and book chapters. Therefore, combing a broader range of research materials could lead to contradictory results. Furthermore, the SCOPUS database is considered a well-known database, particularly on social sciences. However, the present analysis might overlook other pertinent studies on the subject area.

ACKNOWLEDGEMENT

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