

THE CONCEPTUAL STRUCTURE OF RESEARCH ON SUSTAINABILITY AND PHILANTHROPY

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Abstract

This study conducts a bibliometric analysis of international scientific research articles indexed in the Web of Science to explore how philanthropic organizations are represented in sustainability literature. The study aims to contribute to the conceptual understanding of research on philanthropy and sustainability, which are critical areas for addressing global issues such as poverty, social inequality, and climate change. The research questions addressed by the study include identifying productive authors and institutions, country productivity, collaboration patterns, and prioritized topics and trends. The analysis reveals the most productive countries in the field, as well as the universities and scholars that produce the most research. Researchers prioritize topics such as “corporate social responsibility,” sustainable development, and environmental sustainability. Collaboration patterns suggest a need for more cross-border collaboration to address global challenges effectively. The study's implications for policymakers, philanthropic organizations, and scholars include the development of more effective policies, the identification of areas for focus, and the advancement of the field's research agenda.

Keywords

Sustainability, philanthropy, corporate social responsibility, bibliometric analysis, pattern collaboration, trend

Introduction

Philanthropic organizations are voluntary non-profit associations that utilize their funds to achieve their objectives, rather than distributing them to members or stakeholders. Their main focus is to find solutions to problems and address social, environmental, and economic issues (Harvey, 2019; Li, 2019; Lopez, 2020). Moreover, Corporate Social Responsibility (CSR) aims to promote sustainability by encouraging for-profit companies to undertake voluntary actions that support economic, social, and environmental sustainability (Idowu, 2010; Weber, 2014; Bani-Khalid, 2017). While CSR and philanthropic organizations have different structures, they share the common goal of promoting sustainability. Philanthropic organizations may partner with companies to promote CSR activities and maximize the impact of sustainability efforts (Pearce, 2015; Stanislavská, 2020). This collaboration highlights how CSR and philanthropy complement each other and can be used together to achieve sustainable development.

The concept of CSR refers to a company's commitment to improving the areas in which it operates its businesses (Ali et al., 2017). Several factors contribute to the formation of CSR. Thanks to social media, companies can now keep their stakeholders informed about their activities in real-time. In today's world, environmental concerns like global warming, economic pressures such as market fluctuations, and socio-political issues such as diversity and equality are becoming increasingly important. These factors interact and influence what society perceives to be acceptable. This has led to changes in how firms approach CSR and has had a persuasive impact on organizations that used to operate reactively, forcing them to adapt to changing situations. During this compliance process, companies started integrating CSR studies into their normal operating procedures.

The foundation of CSR is ethics, which encompasses a broader concept than compliance (Simpson and Taylor, 2013). Ethical conduct in the workplace is characterized by integrity, respect, fairness, and adherence to the fundamental principles or values of the company (Singh, 2016). It is possible for organizations to prioritize ethical behavior and, at the same time, expect ethical behavior from their suppliers. Compliance should be viewed as conforming to regulations, and if a supplier breaches the agreement, the employer may be held accountable for the violation in three primary areas: child labor, workplace safety, and sustainability. Sustainability refers to a systematic process of developing policies and procedures that take into account their impact not only on people and the environment but also on financial gain (Elkington, 2006; Thiele, 2016; Wilkinson et al., 2001).

The success of a CSR program is largely dependent on strategic planning, which must begin with leadership commitment (Baumgartner, 2014). During the executive engagement phase, businesses should conduct a comprehensive analysis outlining how the CSR strategy will add value to the organization through financial growth from new product developments, cost savings from green initiatives, and improved risk management (Marques-Mendes and Santos, 2016; Negreiros et al., 2014). In the evaluation phase, companies should assess the sustainability of their current CSR systems and solicit feedback from stakeholders to gauge the effectiveness of their initiatives (Martinuzzi et al., 2011).

In addition, it is crucial to establish the infrastructure that will lead and support the CSR strategy. Human resources play a critical role in this process, as they can educate stakeholders on ethical management and serve as a liaison between the organization and the community (Mukhuty et al., 2022). Incorporating philanthropy and volunteerism into the CSR strategic plan can also be beneficial. Corporate philanthropy can take the form of charitable donations or the establishment of foundations that align with the company's values and support its ideals (Wang et al., 2015; Wulfson, 2001; Ziek, 2009).

Numerous research articles have been written on the theoretical and organizational operation of CSR, which includes its connection to the scope and needs of corporate sustainability (Orlitzky, 2011; Asemah, 2013; Khan, 2020; Battisti, 2022). Understanding the relevance of sustainability for corporations and philanthropic organizations highlights the importance of identifying the most prolific authors and institutions in this field. Recent scientific studies provide insights into the current state of affairs and the effectiveness of countries in implementing sustainability structures. Additionally, there has been a growing number of scholarly papers on collaboration patterns in this subject, allowing for the identification of prioritized subject areas and trends.

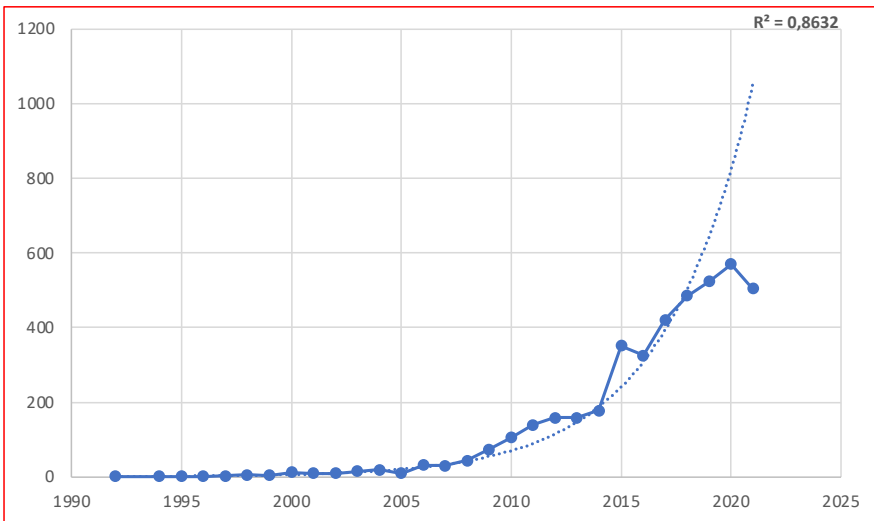
To gain a deeper understanding of philanthropic organizations and sustainability studies, we utilized a sociometric method to identify trends and areas for future development. The goal of this study was to comprehend the topic better and draw conclusions regarding the rise of relevant scientific publications up to this point.

Bibliometric Analysis

The study's methodology involved collecting bibliographic data from international scientific research documents indexed on the Web of Science (WoS), resulting in accessing information from 4,350 scientific documents. The data were then recorded in a relational database for analysis and examined based on basic bibliometric indicators. The research records were authored by a total of 12,421 individuals, with 777 articles being single-authored and the

largest number of authors contributing to a single study being 40. The increase after 2005 is very noticeable, and in the last 10 years, it has doubled the previous record. The literature growth test revealed that the related literature follows an exponential growth curve, indicating a geometric growth pattern that is likely to continue in the future ($R^2=0.8632$) (see figure 1). This suggests that CSR and sustainability are increasingly becoming important research areas with a promising future.

Figure 1: Literature Growth



In terms of author productivity, it is important to remember that productivity analysis is conducted on three levels. In the subsequent stage, the productivity indicator, which was first studied at the researcher level, was extended to include both research institutions and countries. By doing so, it is now possible to identify the researchers, research institutes, and countries that shape the field.

Table 1 presents the top 20 researchers in terms of their author productivity, based on the citation sum within h-core, all citations, all articles, and h-index. It is noteworthy that the top authors come from various countries, indicating the global nature of the field. All authors in the table have an h-index of at least 3, with the top five authors having an h-index of 7 or 8. In general, this analysis offers significant knowledge about the research environment of the discipline and recognizes the major contributors involved.

Table 1. Author Productivity

AUTHOR	Citation sum within h-core	All citations	All articles	h-index
SVENSSON, GORAN	120	146	14	7
SARKIS, JOSEPH	1004	1006	10	7
MANGLA, SACHIN KUMAR	776	780	9	8
LUTHRA, SUNIL	249	252	9	7
REZAAE ZABIHOLLAH	89	91	9	2
STUBBS WENDY	704	707	8	6
MOON, JEREMY	203	203	8	3
CAMILLERI MARK ANTHONY	119	122	7	5
RODRIGUEZ ROCIO	16	26	7	3
SPENCE, LAURA J	23	23	7	2
ULRICH DAVE	4	6	7	1
CHOFREH ABDOULMOHAMMAD GHOLAMZADEH	164	164	6	6
PEDERSEN ESBEN RAHBEK GJERDRUM	161	163	6	5
GONI, FEYBI ARIANI	153	153	6	5
KLEMES, JIRI JAROMIR	147	147	6	5
SILVESTRE BRUNO S	414	418	6	5
EVANS, STEVE	322	327	6	4
LEE, KI-HOON	36	36	6	4
JARDIM-GONCALVES, RICARDO	49	51	6	3
MAROUN, WARREN	180	180	5	5

Table 2 presents data on the citation sum within the h-core, all citations, all articles, and the h-index for notable research institutions. Erasmus University ranks first in the list, with an h-index of 21 and the highest number of all citations (2328) and citation sum within h-core (2228). The top 20 institutions are from various regions around the world, including the European Union, the United Kingdom, Brazil, Malaysia, Australia, and Finland. The institutions listed in the table have high citation scores and h-indices, which signify their significant contributions to the field through their research output. Specifically, these institutions have produced a substantial number of articles that have garnered high citation counts, highlighting their impact on the field. This data underscores the global nature of research in this field and emphasizes the importance of collaboration and knowledge exchange among researchers and institutions from different parts of the world.

Table 2. Organization Productivity

Unit	Citation sum within h-core	All citations	All articles	h-index
BUCHAREST UNIV ECON STUDIES	201	282	57	10
COPENHAGEN BUSINESS SCH	451	546	43	15
UNIV SAO PAULO	549	641	41	12
ERASMUS UNIV	2228	2328	36	21
UNIV CAMBRIDGE	2095	2153	32	17
UNIV TEKNOL MARA	79	113	32	5
UNIV MANCHESTER	441	517	29	11
MONASH UNIV	832	879	28	11
AALTO UNIV	313	346	26	9
KAUNAS UNIV TECHNOL	110	139	25	7
GRIFFITH UNIV	417	481	24	8
UNIV SAINS MALAYSIA	1442	1469	23	13
LUND UNIV	1241	1280	23	12
UNIV LEEDS	707	749	22	13
UNIV WATERLOO	359	421	22	11
ARIZONA STATE UNIV	881	904	22	11
POLITECN MILAN	345	363	22	10
UNIV OXFORD	849	883	21	11
UNIV MELBOURNE	438	480	21	10
UNIV TEKNOL MALAYSIA	242	268	21	8

Table 3 shows the country productivity data for research in this field, with the United States and United Kingdom ranking highest in all categories. Other countries such as Spain, India, Brazil, and Malaysia have also shown significant research output and impact. Finland and Denmark's inclusion in the list suggests they are making progress, despite their relatively low numbers compared to other countries. The data reveals a global effort, with countries from the European Union and Asia, including China and Malaysia, among the top performers. This highlights the importance of collaboration and knowledge exchange among researchers from different regions. Table 3 offers opinion into country productivity and emphasizes the need for continued research efforts and collaboration across regions.

Table 3. Country Productivity

Unit	Citation sum within h-core	All citations	All articles	h-index
USA	21034	33679	1107	80
UK	15402	26921	935	80
AUSTRALIA	5841	9661	433	49
SPAIN	2498	4429	429	32
INDIA	3968	6188	417	39
ITALY	2423	5014	406	34
BRAZIL	2164	3964	393	30
CANADA	7162	9864	348	50
GERMANY	6969	9072	296	53
NETHERLANDS	5061	7160	268	42
PEOPLES R CHINA	1794	3336	255	32
MALAYSIA	2696	3623	254	30
PORTUGAL	1039	1656	216	22
ROMANIA	644	1142	214	14
FRANCE	3984	5108	198	32
SWEDEN	4580	6115	197	41
RUSSIA	210	395	138	10
SOUTH AFRICA	808	1243	135	20
FINLAND	1632	2098	117	31
DENMARK	1460	2027	116	21

In academic research, co-occurrence analysis is a common content analysis technique. It involves correlating keywords based on their co-occurrence in a publication to uncover connected patterns between study topics (He, 1999). This method has been utilized in numerous sectors, including business and sustainability research. Sustainability, Business, Performance, Corporate Responsibility, Framework, and Strategy are some of the most common terms retrieved from scientific analysis in this sector, as displayed in Figure 2. These keywords are significant to the study of sustainability and corporate performance because they reflect the most often discussed subjects in the relevant literature. The co-occurrence of these phrases illustrates the interconnection of these issues and reveals the underlying themes and notions that define the discourse on sustainability and business. Hence, co-occurrence analysis is a useful tool for comprehending the intricate links between major concepts in this subject.

Figure 2. Keyword Analysis

According to the betweenness centrality statistics, the ideas of “Sustainability,”

Table 3. Social Network Analysis Parameters for Keyword Analysis

All Degree	Betweenness centrality	LAC	HAC
SUSTAINABILITY	SUSTAINABILITY	MORTALITY	SUPPLY CHAIN MANAGEMENT
MANAGEMENT	MANAGEMENT	SOUTH-AFRICA	FIRM PERFORMANCE
PERFORMANCE	PERFORMANCE	PATTERNS	SUSTAINABILITY
BUSINESS	BUSINESS	LINK	ANTECEDENTS
ORGANIZATIONS	ORGANIZATIONS	TRAVEL	ORGANIZATIONAL PERFORMANCE
FRAMEWORK	FRAMEWORK	RISE	PERFORMANCE
INNOVATION	INNOVATION	ENABLERS	MANAGEMENT
IMPACT	IMPACT	MULTILEVEL	SUSTAINABLE DEVELOPMENT
MODEL	MODEL	PUBLIC-PRIVATE PARTNERSHIPS	CONSTRUCTION
PERSPECTIVE	CORPORATE SOCIAL-RESPONSIBILITY	LIMITS	INNOVATION
GOVERNANCE	PERSPECTIVE	DEA	PARTICIPATION
CORPORATE SOCIAL-RESPONSIBILITY	GOVERNANCE	ORGANIZATIONAL RESILIENCE	BUSINESS PERFORMANCE
STRATEGY	STRATEGY	MICROFINANCE	PRODUCT INNOVATION
SYSTEMS	STRATEGIES	MAINTENANCE	HEALTH
STRATEGIES	SYSTEMS	ENVIRONMENTAL GOVERNANCE	ENVIRONMENTAL PERFORMANCE
CSR	CHALLENGES	MANAGERIAL SENSEMAKING	CONTEXT
DESIGN	CSR	PREVENTION	FINANCIAL PERFORMANCE
ORGANIZATION	DESIGN	STEWARDSHIP	KNOWLEDGE MANAGEMENT
INDUSTRY	ORGANIZATION	MYTH	CONSUMPTION
CHALLENGES	INDUSTRY	INDEX	CONSUMERS

The results shown in Table 3 illustrate the social network analysis keyword criteria. The analysis provides useful insight into the subject titles and subject categories that play vital roles within the keyword network. Sustainability, Business, Performance, Corporate Responsibility, Framework, and Strategy are the most commonly employed terms in scientific study. In addition, the analysis indicates the subject titles that are likely to encourage future scientific research, such as philanthropic organizations in the context of sustainability. The usage of ideas such as public-private partnerships, sustainable development, and environmental governance indicates the

multidisciplinary nature of the research field and highlights the necessity for collaboration and the exchange of knowledge between academics from other domains. In addition, the inclusion of terminologies such as corporate social responsibility, organizational resilience, and knowledge management emphasizes the significance of organizational behavior and management practices in accomplishing sustainability objectives.

Conclusion

The analysis of the conceptual structure of research on sustainability and philanthropy reveals that the topic has gained significant attention in recent years. The ranking of countries according to scientific qualification and advancement has a considerable impact on the effect of the scientific development index on sustainability and charity. The analysis of the conceptual structure of research on sustainability and philanthropy indicates that the literature on this topic is experiencing exponential growth, with the most productive authors publishing more than six pieces per year. "Sustainable," "management," "performance," and "business" is the organizing concepts for the most relevant issue areas and trends in this field. The conceptual framework of studies in this context prioritizes the management of supply chains and organizational performance. The study also examines how charitable organizations are treated in the global literature on sustainability, with the US and EU countries being home to the most productive authors and institutions in this field. of the research landscape on this topic and offer useful insights for future research endeavors.

References

- Ali, W., Frynas, J. G., and Mahmood, Z. (2017). Determinants of corporate social responsibility (CSR) disclosure in developed and developing countries: A literature review. *Corporate Social Responsibility and Environmental Management*, 24(4), 273-294.
- Asemah, E. S. (2013). Universities and Corporate Social Responsibility Performance: An Implosion of the Reality. *African Research Review*, 7(4), 195-224. <https://doi.org/10.4314/AFRREV.V7I4.12>
- Bani-Khalid, T. O. (2017). Corporate Social Responsibility (CSR): A Conceptual and Theoretical Shift. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 7(1), 203-212. <https://doi.org/10.6007/IJARAFMS/V7-I1/2626>
- Baumgartner, R. J. (2014). Managing corporate sustainability and CSR: A conceptual framework combining values, strategies and instruments contributing to sustainable development. *Corporate Social Responsibility and Environmental Management*, 21(5), 258-271.
- Battisti, E. (2022). Corporate venture capital and CSR performance: An extended resource based view's perspective. *Journal of Business Research*, 139, 1058-1066. <https://doi.org/10.1016/J.JBUSRES.2021.10.054>
- Elkington, J. (2006). Governance for sustainability. *Corporate governance: an international review*, 14(6), 522-529.
- Idowu, S. O. (2010). Professionals' perspectives of corporate social responsibility. *Social Science Research Network*. <https://doi.org/10.1007/978-3-642-02630-0>
- Harvey, C. (2019). Historical Perspectives on Entrepreneurship and Philanthropy. *Business History Review*, 93(3), 443-471. <https://doi.org/10.1017/S0007680519000953>
- He, Q. (1999). Knowledge discovery through co-word analysis. *Library trends*, 48(1), 133.
- Khan, M. (2020). A multi-level institutional perspective of corporate social responsibility reporting: A mixed-method study. *Journal of Cleaner Production*, 265, 0. <https://doi.org/10.1016/J.JCLEPRO.2020.121739>
- Li, K. (2019). Corporate Social Responsibility Practices in China: Trends, Context, and Impact on Company Performance. *Sustainability*, 11(2), 2. <https://doi.org/10.3390/SU11020354>
- Lopez, B. (2020). Connecting business and sustainable development goals in Spain. *Marketing Intelligence and Planning*, 38(5), 573-585. <https://doi.org/10.1108/MIP-08-2018-0367>
- Marques-Mendes, A., and Santos, M. J. (2016). Strategic CSR: an integrative model for analysis. *Social Responsibility Journal*, 12(2), 363-381.
- Martinuzzi, A., Krumay, B., and Pisano, U. (2011). Focus CSR: The new communication of the EU commission on CSR and national CSR strategies and action plans. *European Sustainable Development Network (ESDN), Quarterly Report No*, 23.

- Mukhty, S., Upadhyay, A., and Rothwell, H. (2022). Strategic sustainable development of Industry 4.0 through the lens of social responsibility: The role of human resource practices. *Business Strategy and the Environment*, 31(5), 2068-2081.
- Negreiros, D., Le Stradic, S., Fernandes, G. W., and Rennó, H. C. (2014). CSR analysis of plant functional types in highly diverse tropical grasslands of harsh environments. *Plant ecology*, 215(4), 379-388.
- Orlitzky, M. (2011). Strategic Corporate Social Responsibility and Environmental Sustainability. *Business and Society*, 50(1), 6–27. <https://doi.org/10.1177/0007650310394323>
- Pearce, C. L. (2015). Where do we go from here? Is responsibility sustainable? *Organizational Dynamics*, 44(2), 156–160. <https://doi.org/10.1016/J.ORGADYN.2015.02.010>
- Simpson, J., and Taylor, J. R. (2013). *Corporate governance ethics and CSR*. Kogan Page Publishers.
- Singh, J. (2016). The influence of CSR and ethical self-identity in consumer evaluation of cobrands. *Journal of Business Ethics*, 138(2), 311-326.
- Stanislavská, L. K. (2020). Corporate Social Responsibility and Social Media: Comparison between Developing and Developed Countries. *Sustainability*, 12(13), 13. <https://doi.org/10.3390/SU12135255>
- Thiele, L. P. (2016). *Sustainability*. John Wiley and Sons.
- Wang, S., Gao, Y., Hodgkinson, G. P., Rousseau, D. M., and Flood, P. C. (2015). Opening the black box of CSR decision making: A policy-capturing study of charitable donation decisions in China. *Journal of Business Ethics*, 128(3), 665-683.
- Weber, O. (2014). Corporate Social Responsibility of the Financial Sector – Strengths, Weaknesses and the Impact on Sustainable Development. *Sustainable Development*, 22(5), 321–335. <https://doi.org/10.1002/SD.1543>
- Wilkinson, A., Hill, M., and Gollan, P. (2001). The sustainability debate. *International Journal of Operations and Production Management*, 21(12), 1492-1502.
- Wulfson, M. (2001). The ethics of corporate social responsibility and philanthropic ventures. *Journal of Business Ethics*, 29(1), 135-145.
- Ziek, P. (2009). Making sense of CSR communication. *Corporate Social Responsibility and Environmental Management*, 16(3), 137-145.

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