



Review

Social Value Trends in Construction Research: A Bibliometric Review of the Past Decade

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Abstract: This study explores the current landscape of social value (SV) research in the construction industry, analyzing global trends and identifying future research directions. Using bibliometric analysis, research published in Elsevier Scopus database from 2013 to 2023 was extracted using the keywords "social value" AND "construction industry." The results indicate fluctuating but growing interest in the subject area of social value in construction research over the past decade with 2020 recording the highest number of publications. Our findings show a focus on social value indicators, socioeconomic impacts, project management, innovative practices, and cross-sector collaborations. Additionally, there is a strong tendency in social value (SV) research in the construction sector to favor the social procurement and measurement of social value variables in construction projects. This study contributes to the academic literature by examining the research focuses and identifying the trends in social value research within the construction sector over the previous ten years, as well as by emphasizing new knowledge areas. It suggests the need for guidelines for the integration in construction processes in both developing and developed countries and advocates for further research on social value in the built environment. The study also reveals a lack of attention to social value (SV) in African countries' construction sectors. Additionally, it calls for innovative strategies to be employed for the creation of social value in the sector globally.

Keywords: construction industry; social value; qualitative research; social procurement; social innovation; project management; social benefits

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1. Introduction

The construction sector plays a vital role in society by creating buildings, structures, and environments that connect communities, provide employment opportunities, and improve overall social well-being. This sector is pivotal in global efforts to attain sustainable development by 2030, prioritizing projects that are environmentally conscious and socially accountable [1]. Despite this, the industry has a history of environmental harm and a confrontational stance towards clients and communities [2,3]. Research has also highlighted economic hurdles that have been encountered in the execution of large-scale projects [4–6]. Consequently, there is a growing demand for a new project and construction management approach, emphasizing a safeguarded environment, community-centered development, and economic advancement [1,7], giving rise to the integration of the social value concept within the industry.

Construction sites not only endanger the environment but also interfere with locals' daily lives [8]. As a result, there is growing demand for the construction industry to show how it supports the community in addition to conducting business. Firms have traditionally been thought to have obligations beyond maximizing profits [9]. Common social effects of construction projects include the eviction of locals, health problems brought on by

poor waste management, and land acquisition [10,11]. However, by focusing on larger social goals, infrastructure projects can produce advantages that exceed these fundamental functions, adding more "social value."

According to literature, three main thematic areas have been identified in the evolution of the concept of social value (SV), as stated in [12]; the first is morality and ethics, which delves into the theoretical foundation of duty-based ethics that broadly support the SV agenda [13]. Subsequently, the importance of social efficacy and the sense of community was highlighted by [14]. Also, the theory of value, where authors like [15–17] discuss SV in terms of generating benefits to society by ensuring "value for money" in service delivery. This concept of value primarily considers the worth placed on a product or service by the end user [18]. These themes are interconnected and often overlap with various other related concepts. Ref. [14] highlight that social capital and the sense of community bear resemblances. Similarly, refs. [19,20] find a positive correlation between corporate social responsibility and shared value. These concepts align with the triple bottom line of sustainability, encompassing social, environmental, and financial aspects. They all concur on the need to bolster the social dimension to drive community improvements.

Social value has gained significant attention across various sectors, including health, hospitality, corporate business, and a third sector (Non-Governmental-Organizations, civil societies), as well as the built environment [21–27]. This increased focus extends to the construction industry, where there is a growing demand for the industry to give its support to the community while carrying out day-to-day activities. Further, measuring and communicating social value and integrating it into project procurement and implementation has been emphasized. While construction contractors have traditionally considered the social aspects of Corporate Social Responsibility (CSR) [2], the concept of SV is relatively new, and there are limited long-term success stories related to its implementation [28–30]. Buildings generate both economic and social value, impacting owners and users in various ways. Owners experience the building's financial impact, while users see it as a social and productive space. However, in the construction process, the focus tends to be on value creation rather than understanding what adds value for the end user. The concept of value is multifaceted, subjective, and challenging to define or measure, hence the challenge of its definition and execution [20].

The term 'social values' has been used in various contexts, with a focus on its relationship with landscape values in participatory Geographic Information Systems (GIS) by refs. [31,32]. Landscape values are non-monetary, location-specific values grouped into categories like spiritual, aesthetic, and subsistence values. Bryan et al. [33] expanded the concept of 'social values' to include the benefits people derive from ecosystems, both tangible and intangible, while 'ecological values' were solely based on ecological characteristics. Wood and Leighton [16] defined SV as the intangible, non-financial effects of organizations, work programs, and investments, encompassing community, individual, and environmental well-being. Zainuddin et al. [34] proposed that social value represents positive outcomes resulting from specific organizational activities that are significant to stakeholders. The Public Services (Social Value) Act 2012 defines SV as the enhancement of additional social results through the procurement of goods and services, reflecting varying perspectives. The Public Services (Social Value) Act 2012 in the UK is an Act that requires public authorities and organizations to consider the economic, social, and environmental benefits of their procurement decisions. The Act encourages public bodies to prioritize "social value" when commissioning services, promoting sustainable and beneficial community outcomes. This legislation aims to enhance the well-being of society by integrating social value considerations into public procurement processes. Gidigah et al. [30] described SV as additional outcomes from public sector-funded investment initiatives aimed at local communities, including engaging local suppliers, utilizing local labor, and creating lasting apprenticeship opportunities.

Therefore, it can be argued that the concept of social value centers on recognizing and quantifying the positive impacts organizations and activities have on society,

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communities, individuals, and the environment, extending beyond financial gains. These benefits encompass non-monetary outcomes like community development, environmental conservation, social well-being, and contributions to local economies, prioritizing the holistic welfare of stakeholders.

Despite numerous studies, the concept of social value (SV) remains in its early stages of development and has yet to establish a strong global presence. In the construction industry, SV research has primarily focused on non-digital environments. For instance, ref. [19] examined the potential of Lean construction to generate SV in construction project delivery. The authors of [20] investigated diverse approaches to assessing SV among various stakeholders in the construction sector. Meanwhile, ref. [25] delved into the optimization of social procurement policies through cross-sector collaborations to enhance SV in construction. The authors of [12] explored how the digitalized construction industry could contribute to SV, expanding the discussions beyond the non-digitalized sector among several other studies on the subject area.

While previous studies on SV in construction have made significant contributions, they have often had a narrow focus and relied on subjective findings. In contrast, this paper takes a more comprehensive and innovative approach to review existing SV research in the construction industry. It employs bibliometrics to analyze articles on social value in construction published in the last decade (between 2013 and 2023). This method allows for the identification of research trends, key areas of focus, prominent publications, leading authors in the field, and levels of collaboration. Additionally, the paper explores the latest trends in this research area and offers practical recommendations in the ongoing discourse. The paper is structured as follows: Section 2 comprises a detailed research methodology; Section 3 presents the results of the bibliometric analysis and discusses the research trends and focus areas on SV and displays bibliometric visualization maps. In Section 4, a summary of the key findings is discussed, and some closing remarks and future research areas are suggested.

2. Research Methods

The primary objective of this research was to investigate the primary focal points within the published literature related to social value research in the construction field. This was accomplished through the utilization of a bibliometric methodology, which facilitated the identification and visualization of main knowledge areas and co-occurring keywords, thus revealing research trends and patterns [35]. Bibliometric analysis is a popular and rigorous method for exploring and analyzing large volumes of scientific data and has been used extensively in scientific literature [36]. This technique enables researchers to uncover the evolutionary nuances of a specific field and highlight emerging areas within that field [37]. Although the use of bibliometric analysis is relatively new in construction research, it is a valuable tool for measuring scientific activity based on statistical data [38] and illustrating the evolution of scientific publications in a study area [39]. Albacete-Sáez et al. [40] noted that it can be applied across various knowledge areas. According to Olawumi and Chan [41], bibliometric analysis facilitates concisely identifying and mapping scientific patterns and boundaries within a particular knowledge domain. The technique has gained significant popularity due to the availability and utility of bibliometric software and databases, which simplify the acquisition and assessment of large volumes of scientific data [42].

This study employs a four-step bibliometric analysis process, following the methodology outlined by [43,44]. These steps encompass data collection, data processing using bibliometric techniques, data analysis and visualization, and a subsequent discussion of the bibliometric findings. The data collection phase relied on existing literature accessible through the Scopus database. In recent times, Scopus has gained widespread acceptance due to its comprehensive coverage of various scientific fields, making it a prominent choice for literature retrieval, as noted by [4]. Scopus is widely acknowledged for its extensive coverage and inclusion of high-quality web sources. It serves as one of the largest databases, encompassing peer-reviewed

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books, book chapters, journals, and conference proceedings. Notably, Scopus is recognized for its expeditious index processing compared to other prominent scholarly databases like Google Scholar and Clarivate Web of Science, which also renders it a primary choice for scientific research [35,45]. Furthermore, the Scopus database offers comprehensive coverage of abstracts and citations from peer-reviewed literature spanning multiple disciplines. It is equipped with intelligent tools for tracking, analyzing, and visualizing research. In searching the database, meticulous attention was dedicated to formulating the search statement to ensure that crucial documents of significance were not overlooked, as shallow searches might omit important materials. As stated by various researchers on the use of bibliometric reviews, the use of Scopus as a single search engine is justified as it is more recent and it is considered to be a major research database with a wider coverage than its counterparts [4,42,46-50]. The retrieval schema (TITLE-ABS-KEY) ("social value") AND ("construction industry") was placed into the Scopus catalog by using the Scopus database. The "TITLE-ABS-KEY" indicates either a journal or conference article title, abstract, and keywords. For this study, the date range considered was between 2013 and 2023. In September 2023, the literature search yielded 68 documents containing the keywords. Three parameters were taken into consideration when refining the 68 retrieved documents: the field (construction industry), the publishing language (English), and the publication type (books, journals, articles, conference proceedings, and reviews). These three criteria were utilized for manual screening, producing 44 articles that were extracted into a CSV file and used for the study. The extracted articles' metadata were stored in a CSV file. It included details such as the articles' titles, publishing year, authors, affiliations, abstracts, keywords, volume and page counts, citation information, references, and Digital Object Identifiers (DOIs) of the extracted articles. To investigate the concept of social value and its research emphasis within the construction industry, this research utilized the VOS Viewer text-mining tool for an in-depth analysis of bibliometric relationships, drawing insights from specific findings. It includes (1) an analysis of the number of publications; as indicated in Figure 1, the following analyses have been conducted: (2) publications by country; (3) publications per document source; (4) most cited publications; (5) co-occurrence of keywords analysis; and (6) focus areas depending on publication year. A description of the analysis performed, the instruments employed, and the results that led to the adoption of these tools is shown in Table 1.

Table 1. Summary of bibliometric analysis conducted.

Analysis	Bibliometric Tool	Purpose
Analysis of the number of publications	VOS Viewer	To check the rate of publication of SV studies in construction
Altarysis of the number of publications	vO3 viewei	research
Analysis of publications per country	VOS Viewer	To reveal regions where SV in construction research has been
Analysis of publications per country	VO3 Viewei	predominant
Publications per document source analysis	VOS Viewer	To reveal the leading sources of SV in construction research
Most cited publications analysis	VOS Viewer	To identify SV in construction publications with the greatest
wost cited publications analysis		impact
Analysis of the publications per author	VOS Viewer	To identify the leading authors and collaborators in published SV
Allarysis of the publications per author	VO3 Viewei	in construction research.
Analysis of co-authorship	VOS Viewer	To reveal the authors and collaborators in published SV in the
Analysis of co-authorship		construction research domain and their affiliated countries
Analysis of co-occurrence of keywords	VOS Viewer	To identify the main research themes within SV in construction
Research focus based on year of publication	VOS Viewer	To identify the thematic trends in SV in construction research

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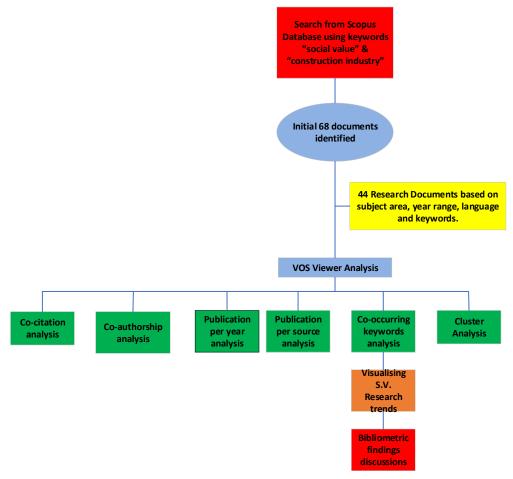


Figure 1. Research methodology.

3. Results and Discussions

In this section, a comprehensive bibliometric analysis and discussions of our findings are presented. As stated earlier, analyses were carried out on the number of publications per year, publications by country, publications per document type, most cited documents during the time frame, and publications per authors, in addition to a co-authorship network analysis, a co-occurrence of keywords cluster analysis, and a trend analysis based on the publication years. The publications per year and per country section details the number of papers published in a specific year and country. This presents the performance of researchers in the subject area over the period and the leading countries in social value research. The citation analysis details the relationships among publications and presents the most influential publications in the subject area. The keyword co-occurrence analysis also highlights existing relationships between authors' research works, revealing thematic connections. It details how frequently co-occurring words indicate common research themes. Finally, research focuses over the last decade and future studies are suggested in the discussion.

3.1. Publication by Year

Of the forty-four extracted articles on social value in construction research, twenty-eight (64%) were journal articles, fourteen (32%) were conference papers, and 1 (2%) was a review paper, as depicted in Figure 2. Figure 3 shows the number of publications on SV in construction between 2013 and 2023. Figure 3 shows that there has been a fluctuating but growing interest in the subject area over the past ten years. Beginning in 2014, there

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have been sporadic increases in the number of publications on social value in construction from one article being published to four articles the next year, until 2020, when there was a major uptick, accounting for 23% of all publications for the decade and a 100% increase from the year before. This indicates an increase in interest in the subject, which may have been impacted by the increased focus on SV in construction since 2012 [27,51-53]. The publication of Social Value in Construction by Raiden, Loosemore, King, and Gorse in 2019 significantly raised awareness about the importance of social value in the construction industry. Thus, the combination of heightened awareness from influential publications [13], the impetus for post-pandemic recovery, the drive towards sustainable practices, and supportive policy changes collectively propelled the increase in research on social value in construction during 2020 [25,54,55]. Social value research is still an embryonic area in the construction sector and needs to be explored further. Nevertheless, considering how vast and intricate the concept is, there is currently only a little research on it in the building sector, and it is still quite difficult to gain a specific definition [30]. Overall, the results emphasize the need for further study of SV in this sector because it is still in its early stages and has much untapped potential.

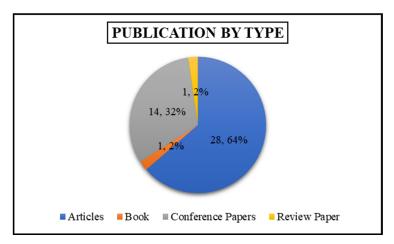


Figure 2. Number of documents by type.

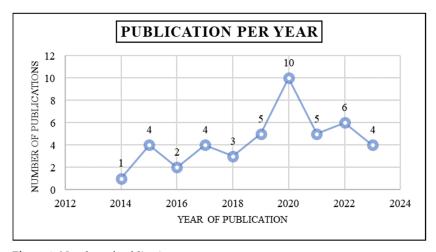


Figure 3. Number of publications per year.

The results are consistent with the studies of [12,25] who noted that research on social value in the built environment, especially the construction industry, has been scarce, yet there has been an increase in SV publications within the period under review.

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3.2. The Network of Publications per Country

A selection criterion that required each country of origin to have at least one publication and at least two citations was used because the VOS Viewer provided only three countries when the threshold was set beyond at least one publication and at least two citations per country. Therefore, the research adopted a threshold of at least one publication per one country. This can be attributed to how nascent the concept of SV is in the construction research domain globally. These criteria were applied to identify the eight countries that met the established threshold. The five countries leading in social value studies in construction with at least one document are Australia (twenty-six articles, one hundred and fifty-seven citations), the UK (thirteen articles, one hundred and forty-nine citations), the Netherlands (one article, fifty-six citations), Sweden (three articles, twentysix citations), and Ghana (one article, three citations). Table 2 indicates that Australia has the most published articles with the most citations, which implies that researchers from Australia currently lead the research community in discussions on social value in construction. The findings in the literature [25,26,29], and the results for the publications per author and their country of affiliation from the VOS Viewer analysis, show that Australia is followed by the United Kingdom with a total of 13 articles. Despite having only one article on the subject area, the Netherlands has received over 56 citations, demonstrating the publication's substantial influence. Our findings also suggest that, except for Ghana, no other African nation met the criterion, demonstrating a significant knowledge gap in the research on social value in construction. Table 2 below provides the number of publications per country in the past decade. Figure 4 gives a pictorial presentation of the spread of social value in construction research in the eight countries

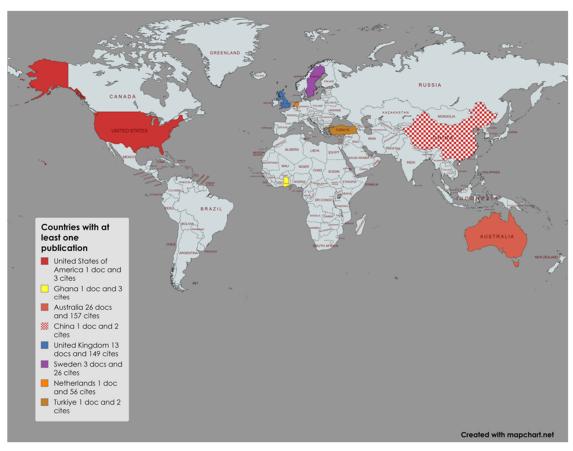


Figure 4. Number of publications per country.

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Table 2. Number of publications per country.

Country of Publication	Number of Articles	Number of Citations
Australia	26	157
The United Kingdom	13	149
The Netherlands	1	56
Sweden	3	26
Ghana	1	3
The United States	1	3
Turkey	1	2
China	1	2

3.3. Number of Document Sources per Publication

Next, an analysis was conducted to determine the total number of papers extracted based on the source title. This analysis aimed to specify researchers and provide insights into the most prominent journal articles related to social value in the construction industry [43]. Out of the 44 extracted articles, 21 met the established threshold. These documents were published across nine different journal articles and conference proceedings, with two of them having only one publication within the specified timeframe. Among these sources, the Construction Management and Economics journal stood out with the highest number of publications, featuring 10 documents and amassing 108 citations, showing the significant contribution it is making in the research domain. This journal is known for publishing high-quality original research focused on the management and economics of activities within the construction industry. It emphasizes expanding the concept of construction beyond on-site production to encompass a broad spectrum of value-adding activities involving diverse stakeholders, including clients and users, which evolve over time. Table 3 shows a breakdown of only those sources with at least two published papers. The journal with the highest impact factor was Building Research and Information, with a score of 4.967, which highlights its significance in the scientific community. The Sustainability journal has the highest H-index indicating it has a high citation impact in the research domain.

Table 3. Number of publications per source.

Journal Articles/Book/Conference/Review Title	Number of Documents (2014–2023)	Number of Citations	Journal Impact Factor	H-Index
Arcom 2020—Association of researchers in construction	2	1		2
management, 36th annual conference 2020—proceedings	3	1		
Association of Researchers in Construction Management	, 2	8	0.13	5
Arcom – 33rd annual conference 2017, proceeding	۷	0	0.13	3
Association of Researchers in Construction Management	3	20	0.11	2
Arcom 2019 - proceedings of the 35th annual conference	3	20	0.11	2
Building Research and Information	3	47	4.967	92
Buildings	2	3	3.8	45
Construction Management and Economics	10	108	0.947	105
Engineering, Construction, and Architectural	5	25	3.85	68
Management	3	25	3.83	00
Proceedings of the 32nd annual Arcom conference,	2	11	0.24	9
Arcom 2016	2	11	0.24	9
Sustainability (Switzerland)	3	13	3.9	136

3.4. The Most Cited Publications

The analysis also delved into identifying the most cited documents, aiming to shed light on the publications on social value in construction with the greatest impact within the specified timeframe. This analysis focused on publications cited at least 10 times, as

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they are considered to have garnered significant visibility. Out of the 44 extracted documents, 14 publications met this criterion. From the findings presented in Table 4, it is evident that the majority of the highly cited social value publications center around topics such as social value measurement in construction projects, cross-collaborations, the impact of social procurement, and the application of the Social Return on Investment (SROI) framework within the built environment, among others. For example, Loosemore et al. [56] explored a case study that included 35 stakeholders from different sectors (construction, government, not-for-profit, social enterprises, and education) based on a distinctive collaborative intermediary known as the Connectivity Centre, established by an international contractor to coordinate its social procurement strategies. This study indicates the potential of cross-collaborative efforts in social procurement processes aimed towards social value outcomes. Furthermore, the research by Watts et al. [57] also explores how the broader and more advanced aspects of social value, which are not captured by financial metrics, can be measured and communicated in a manner that is simultaneously understandable for multiple stakeholders. This demonstrates the growing importance and recognition of SV; in particular, the leading research articles with most citations shown in Table 4 are from Australia and the United Kingdom, where there has been a surge in research efforts within the social value domain in construction. The prevalent methods used in SV research are qualitative which include case studies and content analysis, as well as mixed methods. Research in this subject area is still emerging and is imperative in the construction sector. It also shows the knowledge gap in the research when taking into consideration the global context, especially the African context, as there is no reference to articles from that context.

Table 4. Most cited publications.

Source	Source Title	Cites	Research Method	Study Focus
Loosemore et al., (2021) [56]	Optimizing social procurement policy outcomes through cross-sector collaboration in the Australian construction industry	15	Case Study	Cross sector collaboration
Watts et al., (2019) [20]	Paradox and legitimacy in construction: How CSR reports restrict CSR practice	12	Qualitative content analysis	CSR communication and legitimacy
Watts et al., (2019) [57]	Measuring social value in construction	16	Mixed Methods (Qualitative and Quantitative)	Measuring subjective social value
Loosemore et al., (2020) [25]	The risks of and barriers to social procurement in construction: a supply chain perspective	32	Quantitative Approach (survey	Subcontractor perspectives on social procurement policies
Kurdve M.; De Goey H. (2017) [58]	Can Social Sustainability Values be Incorporated into a Product Service System for Temporary Public Building Modules?	11	Case Study	Integrating social sustainability into Product Service Systems (PSS)
Bridgeman et al., (2015) [59]	Putting a value on young people's journey into construction: Introducing SROI at construction youth trust	10	Desk study	Measuring social value
Solaimani S.; Sedighi M. (2020) [60]	Toward a holistic view on lean sustainable construction: A literature review	56	Systematic Literature Review (SLR)	Lean philosophy,= and sustainability
Troje D.; Gluch P (2020) [61]	.Beyond policies and social washing: How social procurement unfolds in practice	12	Qualitative approach	Social procurement Impact
Loosemore et al., (2021) [62]	Preventing youth homelessness through social procurement in construction: A capability empowerment approach	11	Exploratory Case Study	Cross sector collaborations
Barraket J.; Loosemore M. (2018) [26]	Co-creating social value through cross-sector collaboration between social enterprises and the construction industry	41	Case Study	Cross sector collaboration
Loosemore M.; Reid S. (2019) [29	The social procurement practices of tier-one construction]contractors in Australia	16	Qualitative approach	Social procurement strategies and barriers

Watson K. J.; Whitley T. (2017) [63]	Applying Social Return on Investment (SROI) to the built environment	36	Mixed Methods (Qualitative and Quantitative)	Social Return on Investment (SROI)
Wright T. (2015) [27]	New development: Can 'social value' requirements on public authorities be used in procurement to increase women's participation in the UK construction industry?	18	Qualitative approach	Social Value Act 2012 on addressing gender inequality
Bridgeman et al., (2016) [53]	Demonstrating the social value of a school engagement programme: Introducing young people to the construction professions	10	Qualitative approach	Social Return on Investment (SROI)

3.5. Analysis of Co-Authorship and Publications per Author

The co-author analysis aimed to find out the evolution of the collaborative relationship between academic communities or individuals who have made significant contributions to SV research in the construction sector. The co-authorship analysis identified 14 authors, including lead authors and collaborators, who contributed to the 44 extracted articles. The threshold for inclusion was set at a minimum of one document per author, resulting in 14 authors meeting this criterion, as displayed in Table 5. The top five authors who have made significant contributions to the field and received substantial citations are [60] with 56 citations, [26] with 41 citations, [63] with 36 citations, [27] with 18 citations, and [20] with 16 citations. Notably, most of the articles authored by these individuals have garnered substantial attention in terms of citations. The co-authorship network visualization was ignored since there was a link between just two countries under analysis which were Australia and the United Kingdom, unlike other studies that showed a larger network [4]. Loosemore and co-authors can be seen to be leading the research on SV in the construction sector [25,26,28,29,64–67]. It is also noteworthy that many of these leading authors on SV in the construction industry are affiliated with universities in Australia. This confirms the results of the number of publications per country in the previous Table 2 which revealed Australia as the leading country with the most publications. and the United Kingdom. Additionally, some collaborations between authors from Australia and the United Kingdom highlight the pivotal roles played by both countries in advancing SV research during the specified period. The collaborative details have been illustrated in Table 5.

Table 5. Number of publications per author.

Author	Country/University Affiliated	Document	Citations
	University of Technology, University of New South Wales, Sydney, University	У	
Loosemore et al., (2021) [56	of Technology, La Trobe University, Southern Cross University-Australia	;1	15
	Lincoln University—United Kingdom		
Watts et al., (2019) [20]	Loughborough University – United Kingdom	1	12
Watts et al., (2019) [57]	University of Salford, Loughborough University—United Kingdom	1	16
Loosemore et al., (2020) [25	South Wales—Australia	^v 1	32
Kurdve M.; De Goey F (2017) [58]	H. Mälardalen University—Sweden	1	11
	Cardiff University, London South Bank University—United Kingdom	1	10
Solaimani S.; Sedighi M (2020) [60]	Nyenrode Business University; Delft University of Technology—Netherlands	1	56
Troje D.; Gluch P. (2020) [63	1]Chalmers University of Technology—Sweden	1	12
Loosemore et al., (2021) [62	University of Technology Sydney; Southern Cross University-Australia; Cardif University—United Kingdom	f ₁	11
(2018) [26]	A.Swinburne University of Technology, Hawthorn; University of New South Wales, Sydney — Australia	¹ 1	41
Loosemore M.; Reid S. (2019 [29]	⁹⁾ University of New South Wales, Sydney Australia	1	16

Watson K. J.; Whitley T. University of Manchester—United Kingdom (2017) [63]	1	36
Wright T. (2015) [27] Queen Mary University of London—United Kingdom	1	18
Bridgeman et al., (2016) [53] Cardiff University, London South Bank University – United Kingdom	1	10

3.6. Analysis of Co-Occurrence of Keywords (Research Focus Based on Co-Occurring Keywords)

The study employed a bibliographical approach to analyze the most occurring keywords, shedding light on the focal points and trends in the concept of SV. The VOS Viewer software version 1.6.20 made it possible to create a network visualization of the most frequent keywords over the specified timeframe; this is a software that aids the creation of a literature review by providing basic functions for bibliometric studies [4]. A co-occurrence map was constructed based on the collected bibliographic data. This method entailed collecting keywords from the indexed sources that appeared at least five times—the software's preset minimum or default. As a result, for a keyword to be displayed on the map, it must be referenced in at least five articles [68]. The 44 retrieved articles produced a total of 369 keywords, of which 16 satisfied the criteria and provided the best visual representation. These keywords were categorized into three clusters based on their co-occurrence relationships, with the node size indicating frequency of their occurrence and the line thickness representing the strength of the relationships indicated in Figure 5 (co-occurrence map). Figure 5 further reveals that "construction industry" and "social value" were central keywords with which the other keywords were connected, occurring 40 and 33 times, respectively. This is unsurprising given that these were the main keywords searched for. Table 6 shows the number of occurrences of a keyword and the total link strength derived from the data-mining software. The total link strength shown depicts the significance of the keyword in SV in construction research.

Table 6. List of clusters and co-occurring keywords.

Cluster Label	Keywords	Number of Occurrence	Total Link Strength
	construction industry	40	170
	construction projects	5	21
	contractors	8	42
Cluster 1 (red)	economic and social effects	10	52
	project management	17	83
	social innovation	6	33
	semi-structured interviews	5	33
	social value	33	155
	employment	8	36
Cluster 2 (green)	corporate social responsibility	9	50
	profitability	5	22
	social procurement	25	131
	social values	27	129
Clarete = 2 (lalare)	cross sector collaborations	6	40
Cluster 3 (blue)	supply chains	8	51
	construction	5	24

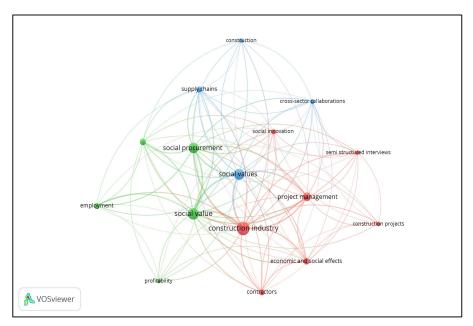


Figure 5. network visualization of co-occurring keywords.

Cluster 1—Socioeconomic Impact and Innovative Construction Practices: The theme "Socioeconomic Impact and Innovative construction practices" is represented by the red cluster on the map which covers various dimensions associated with seven keywords. The keywords include construction industry, construction projects, contractors, economic and social effects, project management, semi-structured interviews, and social innovation. The cluster can be seen to be related to the broad themes, revealing that several studies depict the multifaceted effects of construction projects on both the economy and society. Thus, research focuses on how construction activities influence communities, stakeholders, and innovation within the industry. Additionally, it reveals that research is being carried out on the broader repercussions on communities and individuals, addressing factors like well-being, social inclusion, and environmental sustainability [25,29]. It also highlights that research has revealed the significance of project management in optimizing impacts and fostering positive outcomes [25]. "Innovative Construction Practices" revolves around studies on the adoption of novel and advanced methods, technologies, and strategies within the construction industry. A study by [69] noted that studies on construction usually are focused on technological and economic innovation with the social innovation aspects being largely ignored. This area of research encompasses studies on several innovative approaches, including but not limited to, digitalization, sustainable construction techniques, cutting-edge project management, and social innovation [12,58]. Therefore, more researchers must shine their searchlights into this vital area as embracing creativity and forward-thinking in construction enhances efficiency, sustainability, and overall project outcomes. Overall, this cluster offers a comprehensive view of the research focused on how construction projects extend beyond physical structures, impacting the social and economic fabric of society.

Cluster 2—Socially Responsible Construction: The green cluster comprises five keywords. Based on this set of keywords the "Socially Responsible Construction" theme was created. The focus of this cluster encompasses various aspects of the construction industry that focus on social value, employment, social procurement, profitability, and corporate social responsibility. It suggests that research focused on the construction sector increasingly recognizes its role in creating positive social impacts while maintaining profitability and adhering to ethical standards. As highlighted in the findings of a survey study conducted on 61 construction workers in Australia [70], construction companies create social value when they provide employment that promotes 'work benefits' and 'culture benefits.

Also, it depicts the continuous research focus on the importance of social procurement, which involves considering social value and employment as integral components of tendering construction projects and integrating them into government policies to ascertain social outcomes [64,66,71]. The current studies reflect a growing commitment within the construction industry to contribute positively to society, both economically and socially, while upholding corporate social responsibility principles [20,72]. Hence, there is a need for a balanced and responsible approach to construction practices and this must be considered in future research works.

Cluster 3—Sustainable Construction Partnerships: "Sustainable Construction Partnerships" represent the region highlighted blue on the map with four co-occurring keywords indicating that collaborations and alliances within the construction industry are aimed at promoting sustainability. The keywords include construction, cross-sector collaborations, social values, and supply chains. This theme highlights the studies focused on the significance of working together across sectors offering insights on risks and opportunities, to achieve environmentally friendly and socially responsible construction practices [25,61,73]. Ref. [26]'s aim was to explore how collaborative practices between public, private, and social enterprises within supply chain in the construction industry can contribute to the joint creation of social value. Thus, there is a call for more studies from the construction industry on how the sector can advance sustainable construction methods and principles aimed at creating positive impacts on society through partnerships between various other stakeholders such as construction companies, government agencies, contractors, and subcontractors, non-profit organizations, and communities.

3.7. Research Trends Established in the Year of Publication

An overlay visualization network map for the co-occurring keywords is presented in Figure 6. Various publishing years were considered in this instance. The blue and purple clusters on the map indicate the prevalence of research on the socioeconomic impact of, innovative construction techniques, and sustainable construction partnerships in social value between 2018 and 2021, each with at least five occurrences. Some of the most prominent keywords during this period include project management, social innovation, crosssector collaborations, economic and social effects, and social values. Also, between 2021 and 2022, the research was more aligned toward social procurement and employment for social value creation in the construction industry as shown in the yellow cluster revealing the current trends in research. Figure 7 shows a summary of the research focuses over the last decade of SV in construction studies. The green rectangle reveals that studies in the construction sector have mostly been centered on contractors and subcontractors as a unit of analysis among several sectors; this corroborates the findings in the light green cluster on the visualization map (Figure 6) between the years 2019 and 2020. The brown rectangle also exposes that research over the years has identified the economic and social effects of the construction sector globally and a call for managing both positive and negative effects through principles of project management as seen between the years 2018 and 2019; research trends were more focused on these because the construction sector began to realize the need for studies on the impacts of its activities on the society aside the economy hence the research on social value in the domain [1,20,74]. Next, researchers started to focus on the positive impact the sector could provide as it goes about its day-to-day activities in society, especially for communities. The yellow rectangle shows the research on social responsibility, social procurement, employment, and innovative construction ensuring that SV is currently trending in discussions [25,29,66,67,69,73]. This aligns with the VOS Viewer results shown below in the visualization map as indicated by the light green to yellow network region (Figure 6) depicting the current research focus (2020–present). Current research has been focusing on how the sector can give value more than profitability. A thorough assessment of several studies carried out on SV in the construction sector reveals that the methodology adopted by various researcher are qualitative. This includes case studies, thematic analysis, content analysis, the use of documentaries and semi-

structure interviews, interviews, and surveys among other qualitative and mixed methods [20,25,30,75].

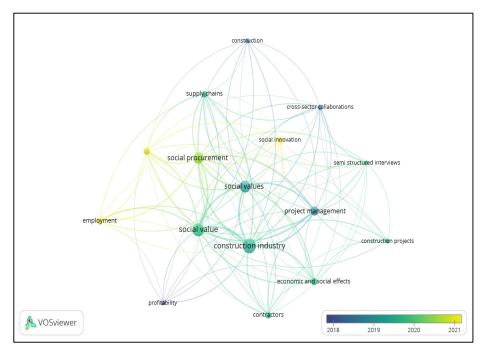


Figure 6. Overlay visualization for co-occurring keywords.

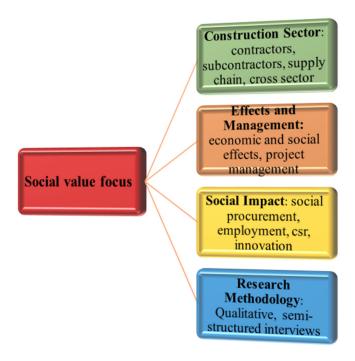


Figure 7. Focus areas in social value studies based on co-occurring keywords.

4. Summary of Key Findings and Conclusions

The comprehensive trends in the literature on SV in construction have been discussed based on a bibliometric analysis and a review of the clustering results for the SV literature. Although a handful of researchers have made efforts in the research on social value in

construction, there are still some knowledge gaps that can be explored both contextually and geographically. Presently, the initiative of incorporating SV principles into the construction sector is gradually being recognized and valued in European countries.

This paper bibliographically reviewed the status quo and trends and revealed the gaps in SV research in the construction industry, and an analysis of the findings was carried out. Of the 68 articles retrieved from the initial search of the Elsevier Scopus database, a total of 44 articles from the refined search were used in this bibliometric study. Then, based on the VOS Viewer results, we carried out a bibliographic analysis of the publication per year profile, publication per document source, most cited publications, and co-authorship per publication, and we derived one network of co-occurring keywords map and one visualized bibliographic timeline map, and we identified the key research focuses and trends from clustering.

The results reveal that, in 2020, ten articles were published, an increase from five articles in the previous year. The journal *Construction Management and Economics* had the highest number of publications on social value in construction research, followed by *Engineering*, *Construction, and Architectural Management*, which had five publications within the search timeframe. The analysis of co-occurring keywords indicates that research has primarily focused on the socio-economic effects of construction projects. Studies on social value creation emphasize how initiatives like social procurement and social responsibility can generate positive societal impacts by creating employment opportunities, ensuring project sustainability, and enhancing community well-being. The main findings are as follows:

One key finding of the study is that Australia and the United Kingdom are at the forefront of SV research in the building sector, with the highest number of published articles and citations. This may indicate a rising interest in considering larger societal advantages in these nations' development initiatives. Except for Ghana, the study also finds a sizable research deficit among African nations, highlighting the need for additional study and awareness in this area. Investigating SV in the African environment could uncover challenges and opportunities. Collaboration between nations within existing research and those looking to advance their understanding could result in more environmentally and socially responsible building methods being used globally.

Another significant finding of the study is the identification of key authors who have made substantial contributions to SV research in the construction sector. Martin Loosemore stands out as the leading author in this field, with a strong presence in publications affiliated with Australia and collaborations with authors from the United Kingdom. Another notable pair of authors, Solaimani S. and Sedighi M., hailing from Sweden, have also made significant contributions and received substantial citations for their work. It is noteworthy that many of these leading authors are associated with universities in Australia and the United Kingdom, underscoring the pivotal roles these countries play in advancing social value research in construction. This finding emphasizes the importance of international partnerships and collaborations in advancing the global field of SV research in construction.

The study employed the data mining tool VOS Viewer to categorize the keywords into three clusters, resulting in three distinct themes. The first theme is "Socioeconomic Impact and Innovative Construction Practices". It explores how construction activities influence communities, stakeholders, and industry innovation, emphasizing the role of effective project management. Future research should consider interdisciplinary approaches and delve into social innovation within the construction sector. The second theme is "Socially Responsible Construction" which highlights the increasing importance of ethics and social responsibility in construction. Researchers can further investigate innovative ways to measure and communicate these impacts. Then, the third, "Sustainable Construction Partnerships" centers on environmentally friendly and socially responsible construction practices. Future studies can examine different models and approaches for fostering collaborations across sectors and borders in construction projects. There is also a call for research on the effectiveness of existing policies and the development of new

regulatory measures to promote such collaborations and assess their impact on community well-being.

The study identified trending research areas in SV in construction, including social procurement, community engagement, employment for social value creation, in-depth case studies of cross sector collaborations, maintaining profitability while contributing to social well-being, and diverse research methods. These trends offer opportunities to shape industry practices, policy development, and socially conscious construction projects. African scholars are encouraged to contribute to this field.

Research on social value in the construction industry represents a significant shift from the traditional focus on value for money or economic returns on investment towards prioritizing the societal benefits of construction projects. Construction projects are recognized for their societal value not only through the primary services they provide but also through their sustained impacts and benefits to communities' well-being. These projects are increasingly viewed as instrumental in achieving sustainable development objectives by integrating community needs and well-being into construction processes. Consequently, social value creation necessitates the collaboration of all stakeholders directly or indirectly involved in a project to achieve intended outcomes that positively impact communities' social, environmental, and economic well-being. Efforts to achieve social value outcomes through construction procurement processes, including creating sustained opportunities for apprenticeships, employment, skills training, sourcing building materials from local suppliers, and building trust with communities.

This study's limitation was that it only looked at the Scopus database. Therefore, caution must be exercised when extrapolating the results of this study. Even though this study's findings have significantly expanded the corpus of knowledge, future research can be carried out to compare them to data from other databases to obtain a more comprehensive picture of the role of SV in construction. This strategy can assist in removing any gray regions that were highlighted during this investigation.

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References

- Fei, W.; Opoku, A.; Agyekum, K.; Oppon, J.A.; Ahmed, V.; Chen, C.; Lok, K.L. The Critical Role of the Construction Industry in Achieving the Sustainable Development Goals (SDGs): Delivering Projects for the Common Good. Sustainability 2021, 13, 9112. https://doi.org/10.3390/su13169112.
- Barthorpe, S. Implementing Corporate Social Responsibility in the UK Construction Industry. Prop. Manag. 2010, 28, 4–17. https://doi.org/10.1108/02637471011017145.
- Ajayi, S.O.; Oyedele, L.O.; Bilal, M.; Akinade, O.O.; Alaka, H.A.; Owolabi, H.A.; Kadiri, K.O. Waste Effectiveness of the Construction Industry: Understanding the Impediments and Requisites for Improvements. Resour. Conserv. Recycl. 2015, 102, 101–112. https://doi.org/10.1016/j.resconrec.2015.06.001.
- 4. Aghimien, D.O.; Aigbavboa, C.O.; Oke, A.E.; Thwala, W.D. Mapping out Research Focus for Robotics and Automation Research in Construction-Related Studies: A Bibliometric Approach. *J. Eng. Des. Technol.* **2019**, *18*, 1063–1079. https://doi.org/10.1108/JEDT-09-2019-0237.
- 5. Arıoğlu Akan, M.Ö.; Dhavale, D.G.; Sarkis, J. Greenhouse Gas Emissions in the Construction Industry: An Analysis and Evaluation of a Concrete Supply Chain. *J. Clean. Prod.* **2017**, *167*, 1195–1207. https://doi.org/10.1016/j.jclepro.2017.07.225.
- 6. Tunji-Olayeni, P.; Omuh, I.; Afolabi, A.; Ojelabi, R.; Eshofonie, E. Effects of Construction Activities on the Planetary Boundaries. J. Phys. Conf. Ser. 2019, 1299, 012005. https://doi.org/10.1088/1742-6596/1299/1/012005.
- 7. Gyadu-Asiedu, W.; Ampadu-Asiamah, A.; Fokuo-Kusi, A. A Framework for Systemic Sustainable Construction Industry Development (SSCID). *Discov Sustain* **2021**, *2*, 25. https://doi.org/10.1007/s43621-021-00033-y.
- 8. Ayarkwa, J.; Acheampong, A.; Hackman, J.K.; Agyekum, K. Environmental Impact of Construction Site Activities in Ghana. *ADRRI* **2014**, *9*, 131. https://doi.org/10.55058/adrrij.v9i9.131.

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9. Carroll, A.B.; Shabana, K.M. The Business Case for Corporate Social Responsibility: A Review of Concepts, Research and Practice. *Int J Manag. Rev.* **2010**, *12*, 85–105. https://doi.org/10.1111/j.1468-2370.2009.00275.x.

- 10. Mathur, H.M. Social Impact Assessment: A Tool for Planning Better Resettlement. *Soc. Chang.* **2011**, *41*, 97–120. https://doi.org/10.1177/004908571104100105.
- 11. Patil, N.A.; Tharun, D.; Laishram, B. Infrastructure Development through PPPs in India: Criteria for Sustainability Assessment. *J. Environ. Plan. Manag.* **2016**, *59*, 708–729. https://doi.org/10.1080/09640568.2015.1038337.
- 12. Salazar-Vela, J.; Blay, K.; Demian, P. List of References of Social Value Definitions in the Digitalised Construction Environment 2020, 189229 Bytes. Available online: https://repository.lboro.ac.uk/articles/dataset/List_of_references_of_Social_Value_definitions_in_the_Digitalised_Construction_Environment/12117993 (accessed on 2 May 2024).
- 13. Raiden, A.; Loosemore, M.; King, A.; Gorse, C. Social Value in Construction; 1st ed.; Routledge, 2018; ISBN 978-1-315-10080-7.
- 14. Cartigny, T.; Lord, W. Defining Social Value in the UK Construction Industry. *Proc. Inst. Civ. Eng.-Manag. Procure. Law* **2017**, *170*, 107–114. https://doi.org/10.1680/jmapl.15.00056.
- 15. Choi, Y.; Na, J.H.; Walters, A.; Lam, B.; Boult, J.; Jordan, P.W.; Green, S. Design for Social Value: Using Design to Improve the Impact of CSR. J. Des. Res. 2018, 16, 155. https://doi.org/10.1504/JDR.2018.092818.
- 16. Wood, C.; Leighton, D. Measuring Social Value: The Gap between Policy and Practice. *Undercurrent* **2010**, 7–9. https://doi.org/10.3316/informit.608274328337959.
- 17. Burke, C.; King, A. Generating Social Value through Public Sector Construction Procurement: A Study of Local Authorities and SMEs. In Proceedings of the 31st Annual Conference Association of Researchers in Construction Management (ARCOM), Lincoln, UK, 7–9 September 2015; ARCOM, Association of Researchers in Construction Management c/o School of Construction Management and Engineering, University of Reading; Reading, UK, 2015; Volume 1, p. 387.
- 18. Husted, B.W.; Allen, D.B.; Kock, N. Value Creation Through Social Strategy. Bus. Soc. 2015, 54, 147–186. https://doi.org/10.1177/0007650312439187.
- 19. Daniel, E.I.; Pasquire, C. Creating Social Value within the Delivery of Construction Projects: The Role of Lean Approach. *Eng. Constr. Archit. Manag.* **2019**, *26*, 1105–1128. https://doi.org/10.1108/ECAM-06-2017-0096.
- 20. Watts, G.; Fernie, S.; Dainty, A. Paradox and Legitimacy in Construction: How CSR Reports Restrict CSR Practice. *Int. J. Build. Pathol. Adapt.* **2019**, *37*, 231–246. https://doi.org/10.1108/IJBPA-05-2018-0037.
- 21. Arslan, A.; Buchanan, B.G.; Kamara, S.; Al Nabulsi, N. Fintech, Base of the Pyramid Entrepreneurs and Social Value Creation. *J. Small Bus. Enterp. Dev.* **2022**, *29*, 335–353. https://doi.org/10.1108/JSBED-10-2020-0370.
- 22. Ratten, V. Coronavirus (COVID-19) and Social Value Co-Creation. *Int. J. Sociol. Soc. Policy* **2022**, 42, 222–231. https://doi.org/10.1108/IJSSP-06-2020-0237.
- 23. Sinkovics, N.; Vieira, L.M.; Van Tulder, R. Working toward the Sustainable Development Goals in Earnest—Critical International Business Perspectives on Designing and Implementing Better Interventions. *Crit. Perspect. Int. Bus.* **2022**, *18*, 445–456. https://doi.org/10.1108/cpoib-05-2022-0059.
- 24. Selçuk Çıdık, M. Politics of Social Value in the Built Environment. Build. Cities 2023, 4, 475–487. https://doi.org/10.5334/bc.334.
- 25. Loosemore, M.; Alkilani, S.; Mathenge, R. The Risks of and Barriers to Social Procurement in Construction: A Supply Chain Perspective. *Constr. Manag. Econ.* **2020**, *38*, 552–569. https://doi.org/10.1080/01446193.2019.1687923.
- 26. Barraket, J.; Loosemore, M. Co-Creating Social Value through Cross-Sector Collaboration between Social Enterprises and the Construction Industry. *Constr. Manag. Econ.* **2018**, *36*, 394–408. https://doi.org/10.1080/01446193.2017.1416152.
- 27. Wright, T. New Development: Can 'Social Value' Requirements on Public Authorities Be Used in Procurement to Increase Women's Participation in the UK Construction Industry? *Public Money Manag.* **2015**, *35*, 135–140. https://doi.org/10.1080/09540962.2015.1007708.
- 28. Loosemore, M. Social Procurement in UK Construction Projects. Int. J. Proj. Manag. 2016, 34, 133–144. https://doi.org/10.1016/j.ijproman.2015.10.005.
- 29. Loosemore, M.; Reid, S. The Social Procurement Practices of Tier-One Construction Contractors in Australia. *Constr. Manag. Econ.* **2019**, *37*, 183–200. https://doi.org/10.1080/01446193.2018.1505048.
- 30. Gidigah, B.K.; Agyekum, K.; Baiden, B.K. Defining Social Value in the Public Procurement Process for Works. *Eng. Constr. Archit. Manag.* 2022, 29, 2245–2267. https://doi.org/10.1108/ECAM-10-2020-0848.
- 31. Sherrouse, B.C.; Clement, J.M.; Semmens, D.J. A GIS Application for Assessing, Mapping, and Quantifying the Social Values of Ecosystem Services. *Appl. Geogr.* **2011**, *31*, 748–760. https://doi.org/10.1016/j.apgeog.2010.08.002.
- 32. Brown, G.; Weber, D. A Place-Based Approach to Conservation Management Using Public Participation GIS (PPGIS). *J. Environ. Plan. Manag.* 2013, 56, 455–473. https://doi.org/10.1080/09640568.2012.685628.
- 33. Bryan, B.A.; Raymond, C.M.; Crossman, N.D.; Macdonald, D.H. Targeting the Management of Ecosystem Services Based on Social Values: Where, What, and How? *Landsc. Urban Plan.* **2010**, *97*, 111–122. https://doi.org/10.1016/j.landurbplan.2010.05.002.
- 34. Zainuddin, N.; Russell-Bennett, R.; Previte, J. The Value of Health and Wellbeing: An Empirical Model of Value Creation in Social Marketing. *Eur. J. Mark.* 2013, 47, 1504–1524. https://doi.org/10.1108/EJM-10-2011-0564.
- 35. Aliu, J.; Aigbavboa, C. Reviewing the Trends of Construction Education Research in the Last Decade: A Bibliometric Analysis. *Int. J. Constr. Manag.* **2023**, *23*, 1571–1580. https://doi.org/10.1080/15623599.2021.1985777.
- 36. Weinberg, B.H. Bibliographic Coupling: A Review. *Inf. Storage Retr.* **1974**, 10, 189–196. https://doi.org/10.1016/0020-0271(74)90058-8.

37. Donthu, N.; Kumar, S.; Mukherjee, D.; Pandey, N.; Lim, W.M. How to Conduct a Bibliometric Analysis: An Overview and Guidelines. J. Bus. Res. 2021, 133, 285–296. https://doi.org/10.1016/j.jbusres.2021.04.070.

- 38. Lawani, S.M. Bibliometrics: Its Theoretical Foundations, Methods and Applications. *Libri* **1981**, 31, 294–315. https://doi.org/10.1515/libr.1981.31.1.294.
- 39. Gaviria-Marin, M.; Merigo, J.M.; Popa, S. Twenty Years of the *Journal of Knowledge Management*: A Bibliometric Analysis. *J. Knowl. Manag.* 2018, 22, 1655–1687. https://doi.org/10.1108/JKM-10-2017-0497.
- 40. Albacete Sáez, C.A.; Del Mar Fuentes Fuentes, M.; Carmen Haro-Domínguez, M. La investigación española en turismo con impacto internacional (1997–2011). Una perspectiva desde la economía y la dirección de la empresa. *Cuad. De Econ. Y Dir. De La Empresa* 2013, 16, 17–28. https://doi.org/10.1016/j.cede.2012.05.003.
- 41. Olawumi, T.O.; Chan, D.W.M. A Scientometric Review of Global Research on Sustainability and Sustainable Development. *J. Clean. Prod.* **2018**, *183*, 231–250. https://doi.org/10.1016/j.jclepro.2018.02.162.
- 42. Fingerman, S. Web of Science and Scopus: Current Features and Capabilities. *Issues Sci. Technol. Librariansh.* **2006**. https://doi.org/10.29173/istl2081.
- 43. Hosseini, M.R.; Martek, I.; Zavadskas, E.K.; Aibinu, A.A.; Arashpour, M.; Chileshe, N. Critical Evaluation of Off-Site Construction Research: A Scientometric Analysis. *Autom. Constr.* **2018**, *87*, 235–247. https://doi.org/10.1016/j.autcon.2017.12.002.
- 44. Zhang, X.; Estoque, R.C.; Xie, H.; Murayama, Y.; Ranagalage, M. Bibliometric Analysis of Highly Cited Articles on Ecosystem Services. *PLoS ONE* **2019**, *14*, e0210707. https://doi.org/10.1371/journal.pone.0210707.
- 45. Meho, L.I.; Rogers, Y. Citation Counting, Citation Ranking, and *h* -index of Human-computer Interaction Researchers: A Comparison of Scopus and Web of Science. *J. Am. Soc. Inf. Sci.* **2008**, *59*, 1711–1726. https://doi.org/10.1002/asi.20874.
- 46. Akinlolu, M.; Haupt, T.C. A Bibliometric Review of Trends in Construction Safety Technology Research. *Proc. Int. Struct. Eng. Constr.* **2020**, 7. https://doi.org/10.14455/ISEC.2020.7(2).CPM-08.
- 47. Guz, A.N.; Rushchitsky, J.J. Scopus: A System for the Evaluation of Scientific Journals. *Int. Appl. Mech.* 2009, 45, 351–362. https://doi.org/10.1007/s10778-009-0189-4.
- 48. Chadegani, A.A.; Salehi, H.; Yunus, M.M.; Farhadi, H.; Fooladi, M.; Farhadi, M.; Ebrahim, N.A. A Comparison between Two Main Academic Literature Collections: Web of Science and Scopus Databases. *arXiv* **2013**, arXiv:1305.0377. https://doi.org/10.48550/ARXIV.1305.0377.
- 49. Olawumi, T.O.; Chan, D.W.M.; Wong, J.K.W. Evolution in the Intellectual Structure of Bim Research: A Bibliometric Analysis. *J. Civ. Eng. Manag.* **2017**, 23, 1060–1081. https://doi.org/10.3846/13923730.2017.1374301.
- 50. Aliu, J.; Aigbavboa, C.O. Structural Determinants of Graduate Employability: Impact of University and Industry Collaborations. *J. Eng. Des. Technol.* **2021**, *19*, 1080–1100. https://doi.org/10.1108/JEDT-05-2020-0189.
- 51. Doloi, H. Assessing Stakeholders' Influence on Social Performance of Infrastructure Projects. Facilities 2012, 30, 531–550. https://doi.org/10.1108/02632771211252351.
- 52. Tam, V.W.Y.; Hao, J.L.; Zeng, S.X. What Affects Implementation of Green Buildings? An Empirical Study in Hong Kong. *Int. J. Strateg. Prop. Manag.* **2012**, *16*, 115–125. https://doi.org/10.3846/1648715X.2011.645559.
- 53. Bridgeman, J.; Maple, P.; Murdock, A.; Hardy, S.; Townley, C. Demonstrating the Social Value of a Schools Engagement Programme: Introducing Young People to the Construction Professions. In Proceedings of the 32nd Annual ARCOM Conference, Manchester UK, 5–7 September 2016; ARCOM, Association of Researchers in Construction Management c/o School of Construction Management and Engineering: Manchester, UK, 2016; Volume 2, pp. 1007–1016.
- 54. Cidik, M. Project-Managing the Social Value of Built Assets: A Call for a Focus on Value Manifestation. In Proceedings of the 36th Annual ARCOM Conference, 7–8 September 2020, Glasgow, UK; ARCOM, Association of Researchers in Construction Management c/o School of Construction Management and Engineering: Glasglow, UK, 2020; pp. 35–44.
- 55. Watt, G. Forgetting Social Value and Other Good Practices in Construction Supply Chains: Procurement in Pandemics. *Int. J. Constr. Supply Chain. Manag.* **2020**, *10*, 221–233. https://doi.org/10.14424/ijcscm100420-221-233.
- Loosemore, M.; Denny-Smith, G.; Barraket, J.; Keast, R.; Chamberlain, D.; Muir, K.; Powell, A.; Higgon, D.; Osborne, J. Optimising Social Procurement Policy Outcomes through Cross-Sector Collaboration in the Australian Construction Industry. *Eng. Constr. Archit. Manag.* 2021, 28, 1908–1928. https://doi.org/10.1108/ECAM-04-2020-0221.
- 57. Watts, G.N.; Dainty, A.; Fernie, S. Measuring Social Value in Construction. In Proceedings of the 35th Annual ARCOM Conference, Leeds, UK, 2–4 September 2019; ARCOM, Association of Researchers in Construction Management c/o School of Construction Management and Engineering: Leeds, UK, 2019; pp. 54–63.
- 58. Kurdve, M.; De Goey, H. Can Social Sustainability Values Be Incorporated in a Product Service System for Temporary Public Building Modules? *Procedia CIRP* **2017**, *64*, 193–198. https://doi.org/10.1016/j.procir.2017.03.039.
- 59. Bridgeman, J.; Murdock, A.; Maple, P.; Townley, C.; Graham, J. Putting a Value on Young Peoples's Journey into Construction: Introducing SROI at Construction Youth Trust. In Proceedings of the Association of Researchers in Construction Management (ARCOM) 31st Annual Conference, Lincoln, UK, 7–9 September 2015; Volume 1, pp. 207–216.
- 60. Solaimani, S.; Sedighi, M. Toward a Holistic View on Lean Sustainable Construction: A Literature Review. *J. Clean. Prod.* **2020**, 248, 119213. https://doi.org/10.1016/j.jclepro.2019.119213.
- 61. Troje, D.; Gluch, P. Beyond Policies and Social Washing: How Social Procurement Unfolds in Practice. *Sustainability* **2020**, 12, 4956. https://doi.org/10.3390/su12124956.
- 62. Loosemore, M.; Bridgeman, J.; Russell, H.; Zaid Alkilani, S. Preventing Youth Homelessness through Social Procurement in Construction: A Capability Empowerment Approach. *Sustainability* **2021**, *13*, 3127. https://doi.org/10.3390/su13063127.

63. Watson, K.J.; Whitley, T. Applying Social Return on Investment (SROI) to the Built Environment. *Build. Res. Inf.* **2017**, 45, 875–891. https://doi.org/10.1080/09613218.2016.1223486.

- 64. Reid, S.; Loosemore, M. Motivations and Barriers to Social Procurement in the Australian Construction Industry. In Proceedings of the 33rd Annual ARCOM Conference, Cambridge, UK, 4–6 September 2017; Association of Researchers in Construction Management (ARCOM): Cambridge, UK, 2017; Volume 1, pp. 4–6.
- 65. Loosemore, M.; Keast, R.; Barraket, J. How Are Social Procurement Actors Shaping a New Field of Professional Practice in the Australian Construction Industry? *Eng. Constr. Archit. Manag.* **2023**, *30*, 4192–4209. https://doi.org/10.1108/ECAM-02-2022-0111.
- Loosemore, M.; Keast, R.; Barraket, J.; Denny-Smith, G.; Alkilani, S. The Risks and Opportunities of Social Procurement in Construction Projects: A Cross-Sector Collaboration Perspective. Int. J. Manag. Proj. Bus. 2022, 15, 793–815. https://doi.org/10.1108/IJMPB-11-2021-0300.
- 67. Loosemore, M.; Alkilani, S.Z.; Murphy, R. The Institutional Drivers of Social Procurement Implementation in Australian Construction Projects. *Int. J. Proj. Manag.* **2021**, *39*, 750–761. https://doi.org/10.1016/j.ijproman.2021.07.002.
- Nazir, F.A.; Edwards, D.J.; Shelbourn, M.; Martek, I.; Thwala, W.D.D.; El-Gohary, H. Comparison of Modular and Traditional UK Housing Construction: A Bibliometric Analysis. J. Eng. Des. Technol. 2021, 19, 164–186. https://doi.org/10.1108/JEDT-05-2020-0193.
- 69. Bailey, S.; Carnemolla, P.; Loosemore, M.; Darcy, S.; Sankaran, S. A Critical Scoping Review of Disability Employment Research in the Construction Industry: Driving Social Innovation through More Inclusive Pathways to Employment Opportunity. *Buildings* **2022**, *12*, 2196. https://doi.org/10.3390/buildings12122196.
- 70. Denny-Smith, G.; Loosemore, M. What's in a Job? Indigenous Construction Workers' Employment Preferences. In Proceedings of the 45th AUBEA Conference, Sydney, Australia, 23–25 November 2022; AUBEA; Perera, S., Hardie, M., Eds.; Western Sydney University: Sydney, Australia, 2022; pp. 42–46.
- 71. Lou, C.X.; Natoli, R.; Goodwin, D.; Bok, B.; Zhao, F.; Zhang, P. A Systematic Literature Review of Research on Social Procurement in the Construction and Infrastructure Sector: Barriers, Enablers, and Strategies. *Sustainability* **2023**, *15*, 12964. https://doi.org/10.3390/su151712964.
- 72. Yates, J.K.; Castro-Lacouture, D. Sustainability in Engineering Design and Construction, 1st ed.; CRC Press: Boca Raton, FL, USA, 2018; ISBN 978-1-315-36866-5.
- 73. Natoli, R.; Lou, C.X.; Goodwin, D. Addressing Barriers to Social Procurement Implementation in the Construction and Transportation Industries: An Ecosystem Perspective. *Sustainability* **2023**, *15*, 11347. https://doi.org/10.3390/su151411347.
- 74. Denny-Smith, G.; Loosemore, M.; Barwick, D.; Sunindijo, R.; Piggott, L. Decolonising Indigenous Social Impact Research Using Community-Based Methods. In Proceedings of the 35th Annual Conference Association of Researchers in Construction Management, Leeds, UK, 2–4 September 2019; University of Technology Sydney/Faculty of Design, Architecture and Building/School of Built Environment: Leeds, UK, 2019; pp. 64–73.
- 75. Medina, E.M.; Fu, F. A New Circular Economy Framework for Construction Projects. *Proc. Inst. Civ. Eng.-Eng. Sustain.* **2021**, 174, 304–315. https://doi.org/10.1680/jensu.20.00067.

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