

Navigating methodological frontiers: Simulating systematic literature review on sustainability reporting

Ari Budi Kristanto

ari.kristanto@uksw.edu

Faculty of Economics and Business, Satya Wacana Christian University, Indonesia

School of Accounting, Economics, and Finance, Curtin University, Australia

June Cao

J.Cao@soton.ac.uk

Department of Accounting, Southampton Business School, University of Southampton, UK

Abstract

This paper aims to structure methodological steps for conducting a systematic literature review (SLR) using comprehensive, advanced and quantitative approaches. This study contributes to the state of SLR methodological references by offering more comprehensive insights from a broader range of bibliometric analyses and a scientific approach for structuring future research agendas. In addition, this study presents a comprehensive simulated literature review and leveraging advanced text-mining technology for bibliometric data processing. Our demonstration exposes the full cycle of methodological protocols comprising data collection, cleaning, descriptive analysis, and bibliometric analysis. This paper utilises cutting-edge tools to present 23 insightful visualisations and three tabulated metrics. We employ a range of bibliometric analyses to identify current research streams and formulate future research directions. Therefore, this study provides scholars with comprehensive, advanced, scientific, and replicable methodological guidance to conduct, present, and publish a high-quality SLR.

Keywords: systematic literature review; advanced methodology; text mining; bibliometric analysis; simulation

“If a craftsman wants to do good work, he must first sharpen his tools.”

— Confucius, The Analects

1. Introduction

Scholars stand on the shoulders of giants to discover novel insights. This philosophy metaphors the academic efforts in pursuing new knowledge are not solely by their excellence but are

Abbreviation list

SLR: Systematic Literature Review

ABDC: Australian Business Dean Councils

GCS: Global Citations Score

TP: Total Publications

TC: Total Citations

ACP: Average Citations per Document

SJR: Scimago Journal Rank.

elevated by others' extant works (Chen, 2003). Knowledge is discovered incrementally by filling gaps between "known-knowns" and "known-unknowns". Scholars carefully portray the existing body of knowledge as the basis for their effort to acquire new academic acumen. A systematic literature review provides a panoramic view of the existing scholarly landscape to identify the trends, patterns, contradictions, and gaps (Tshabangu et al., 2021). A well-executed literature review potentially improves the research field by providing an overarching overview, identifying the research gap, and gaining insight into new contributions (Donthu et al., 2021). Further, the insights from existing literature can be translated into guidance for future potential research agendas (Snyder, 2019). By considering the existing knowledge, academics push the boundaries of what is known to refine their research question, contribution, and methodology.

The literature review calls for an advanced strategy to synthesize the established knowledge in the vast growth of scholarly publications (Nightingale, 2009). The unsystematic manner of reviewing scholarly articles can lead to challenges in discovering the novelty and understanding the theoretical framework (Rowley & Paul, 2021). An unsystematic approach also carries the inherent risk of selection bias and yields non-comprehensive synthesis results, as this approach possibly leaves the relevant evidence behind the analysis (Linnenluecke et al., 2020a). Therefore, academic society has embraced a systematic technique to address the challenges in literature review. The structured approach in the systematic literature review (SLR) offers a transparent and replicable methodology (Boell & Cecez-Kecmanovic, 2016). While the systematic approach has gained significant recognition in various disciplines, particularly medical science, its application in accounting and finance research remains comparatively underexplored (Massaro et al., 2016). Lately, SLR has harnessed cutting-edge technology and data analytics to analyze large volumes of academic materials. This article aims to provide methodological guidance for presenting SLR based on best practices carried out by academics in leading accounting and finance journals. Previous systematic literature review guides by Snyder (2019), Linnenluecke et al. (2020a), and Donthu et al. (2021) have employed bibliometric analysis to synthesize a large amount of literature. However, there are unaddressed needs to derive comprehensive insights from diverse visualizations and to systematically employ bibliometric analysis for discerning future research agendas. Therefore, this study demonstrates the broader range of potential bibliometric analyses and offers a logical framework for structuring future research agendas. Additionally, this methodological paper acknowledges the current advancement of technology and data analytics into the SLR strategy.

This study finds that bibliometric data hold great potential for multi-dimensional analyses. Descriptive metrics can be insightful to see the association between academic endeavours and empirical phenomena. In addition, it helps to map the scholarly interest associated with the topic under discussion. A more in-depth analysis of textual data can uncover valuable perspectives through thematic evolution and the interconnected networks among topics, documents, and authorship backgrounds. However, an efficient data analytics approach is essential to analyze relatively complex bibliometric data. Therefore, this methodological paper sheds light on the SLR by embracing advanced analytical approaches to produce insightful data visualizations and tabulations. This paper also guides advancing bibliometric analyses by incorporating well-structured narrative analyses. In particular, this paper explores the usage of four bibliometric analysis software tools: VOSviewer, CiteSpace, HistCite, and Bibliometrix. This paper also explains methodological protocols and presentation strategies using demonstrated simulation based on real data. Specifically, this paper simulates SLR on sustainability reporting within the business research area.

This paper makes a valuable contribution to advancing SLR methods by acknowledging cutting-edge data analysis approaches. This comprehensive scientific protocol can facilitate future research endeavours in replicating and enhancing existing SLRs, thus contributing to the

incremental growth in knowledge. Our study also contributes by harnessing advanced bibliometric analysis to enhance the efficiency and comprehensiveness of SLRs. This paper also complements the methodological explanations by demonstrating an SLR based on real data. Therefore, this research provides comprehensive, advanced, scientific, and replicable methodological guidance. This methodological reference will benefit early career researchers and research students to synthesize extant knowledge in their research area.

This article is organized as follows: the next section presents the theoretical background of the literature review. Subsequently, we present a section that discusses key components of systematic review. This section covers protocols for data collection, data cleaning, descriptive analysis, and bibliometric analysis. The following section presents the discussion and conclusion.

2. Literature background

A literature review presents a clear contextual boundary and theoretical foundation by analyzing, evaluating, and synthesizing extant studies' findings, theories, and practices (Efron & Ravid, 2018). This analysis presents a foundation to portray the existing body of knowledge from voluminous and scattered evidence. Understanding established scholars' work will help articulate a reasonable research problem requiring further investigation (Machi & McEvoy, 2016). Additionally, literature review justifies novel research avenues and steers scholars away from unrewarding endeavours.

Literature reviews usually present their analysis in a particular pattern: chronological, author, conceptual, or methodological-centric. A chronological review demonstrates a topic's historical development in a time-based sequence (Nayak et al., 2022). A literature review may present its analysis using the author-centric approach, mainly due to a limited number of selected papers (Kaiser et al., 2021). A concept-centric review analyzes the commonalities in central themes or keywords discussed within the articles (Cavallaro & Nocera, 2022). This approach may involve a comprehensive discussion of the relevant theoretical perspectives used in articles or even incorporate semantic analysis using text mining tools. Lastly, the methodological-centric review is considered a less explored approach. It typically aims to uncover potential methodological gaps for future studies (Santa-Eulalia et al., 2011).

Literature review techniques develop from the traditional narrative review to a systematic literature approach. Scholars conduct narrative reviews by qualitatively interpreting existing knowledge and establishing narrative assessments or critical overviews (Anderson & Lemken, 2023; Paré & Kitsiou, 2017). The narrative approach often provides a deep insight into the articles' discussion and covers diverse topics and methods (Greenhalgh et al., 2018; Turnbull et al., 2023). Additionally, a narrative review can present the development and progression of a particular discussed topic (Snyder, 2019). Articles using narrative review are often considered the best avenue to present philosophical perspectives written by well-experienced experts (Green et al., 2006). These articles are more relevant in providing a deep understanding of the specific subject area as they consolidate many articles into single readable manuscripts. However, it has limitations, such as bias in the corpus inclusion or exclusion and subjective interpretation (Barry et al., 2022; Turnbull et al., 2023).

Further development in the literature review addresses the replicability issue of the traditional narrative approach by employing a systematic method. SLR offers a systematic methodological approach, explicit procedures, and comprehensive scope to all relevant materials and is replicable by other scholars (Okoli, 2015). SLRs likely have focused research questions and are less biased than narrative reviews (Greenhalgh et al., 2018). Systematic review can use either qualitative or quantitative analysis, which both equally collect and

analyze primary studies in a systematic manner. A qualitative systematic review mitigates the bias by putting selection criteria (Macaro, 2019) and synthesizes the findings using narrative style (Okoli, 2015). On the other hand, a quantitative systematic review or meta-analysis uses a statistical approach to analyze a set of research collections on specific topics (Ratten, 2023). Therefore, quantitative review limits the bias by using a stringent statistical analysis. Literature reviews lately embrace quantitative techniques to obtain insights from large volumes of bibliometrics data such as citations, references, and authorship (Donthu et al., 2021).

3. Methodology

This methodological paper provides a comprehensive guide for conducting an SLR, offering clear steps for data collection, cleaning, analysis, and presentation of findings. This paper enhances the methodological explanation by incorporating comprehensive simulation in structuring a whole SLR. In particular, our simulation focuses on research about sustainability reporting research. Our guidance for presenting the bibliometric analysis is structured based on the advanced practices found in current publications of SLR. Specifically, we use a number of software, namely, VOSviewer, Bibliometrix, HistCite, and CiteSpace. VOSviewer is a software to create graphical representations of bibliographic maps, such as keyword co-occurrence, co-authorship, co-citation, and bibliographic coupling (van Eck & Waltman, 2010). Bibliometrix is an open-source tool that operates within the R environment, facilitating comprehensive science mapping analysis (Aria & Cuccurullo, 2017). We also employ HistCite to analyze the chronological map of the bibliographic data set (Garfield, 2009). Lastly, this paper utilizes CiteSpace to visualize thematic clusters and their evolution (Chen, 2016).

4. Key components of systematic review

4.1. Data collection and cleaning

A structured collection method is crucial to ascertain its potential for replication and methodological reliability (Lehmann & Bengart, 2016). Therefore, it is essential to set data boundaries in SLR, which are typically based on article databases such as Scopus, EBSCO, Science Direct, Emerald, and Web of Science (Carvalho & Alves, 2023; Trejos et al., 2023). A limitation to specific databases improves the data quality control, as these databases offer advanced search capabilities and continually expand their coverage (Dantas & Fleck, 2023). Relying on a well-established database also facilitates maintaining data consistency and completeness. Flaws in the data structure can hinder the ability to perform specific bibliometric analysis. Furthermore, academic search engines such as Google Scholar offer a broader document coverage, including non-peer-reviewed sources such as newspapers, magazines, and government archives (Massaro et al., 2016). However, utilizing search engines in data collection comes with particular data cleaning and validation challenges.

Once the data source has been identified, the next crucial step is establishing precise search criteria. These criteria cover keywords, year ranges, document types, preferred journal sources, and other specific attributes aligned with the research plan. These carefully chosen criteria play a pivotal role in shaping the resulting literature, affecting the number of articles retrieved and the depth of thematic exploration (Senivongse et al., 2017). Utilizing broad keywords and more lenient search criteria may yield a larger number of articles but tends to yield more generalized thematic content. Conversely, when researchers opt for specialized keywords, prioritize high-quality journals, and target narrower research areas, they might expect fewer articles. However, these will likely yield more specific themes. The process of keyword-based searches often involves employing particular exact phrases or using Boolean logic techniques (Abdulla & Krishnamurthy, 2016). Researchers should strategically plan and fine-tune these criteria to align with the desired level of depth of their literature review.

The data collection phase aims to acquire bibliometric data from relevant articles, such as authorship, titles, abstracts, keywords, affiliations, journals, and references cited within each paper. Well-established article databases usually have features for extracting bibliometric data in various formats. However, researchers may employ data mining applications such as Publish or Perish when sourcing data from search engines like Google Scholar (Nirmal et al., 2023). Before performing the bibliometric analysis, data cleaning is mainly required to ensure data quality and consistency. This may include eliminating irrelevant articles, document type filtering, keyword refinement, and standardization of data fields (Lardo et al., 2022). Data cleaning is usually necessary when managing data acquired from multiple databases or search engines, that come with inconsistent structures.

We simulate a systematic literature review to demonstrate the methodological protocols explained in this paper. For this purpose, our simulation intends to portray extant discussions of sustainability reporting within the business research area. We perform data collection and cleaning based on actual data from the Web of Science. Further, we determine the search criteria includes keywords, publication years, document type, language, and journal. We use SUSTAINABILITY REPORT* as the keyword for our topical-based search. The asterisk symbol is used as the wildcard character to capture variations of report-related terminologies, such as reporting, report, or reports. Our data query returns a total of 25,092 articles. This demonstration also limits the document criteria to only articles written in English and published by academic journals during 2010–2023. We retain only journal articles published by the Australian Business Dean Councils (ABDC) with A* and A ranks. These filters are intended to obtain high-quality articles that focus on business research. The applications of these criteria maintain 1,542 articles. Subsequently, we do a data cleaning to remove false positive articles from our data. We manually examine the articles' titles, keywords, and abstracts to ascertain whether they discuss sustainability reporting. Finally, our final data set consists of 381 articles. We conducted descriptive and bibliometric analyses based on this final data set. This methodological demonstration is visualized in Figure 1.

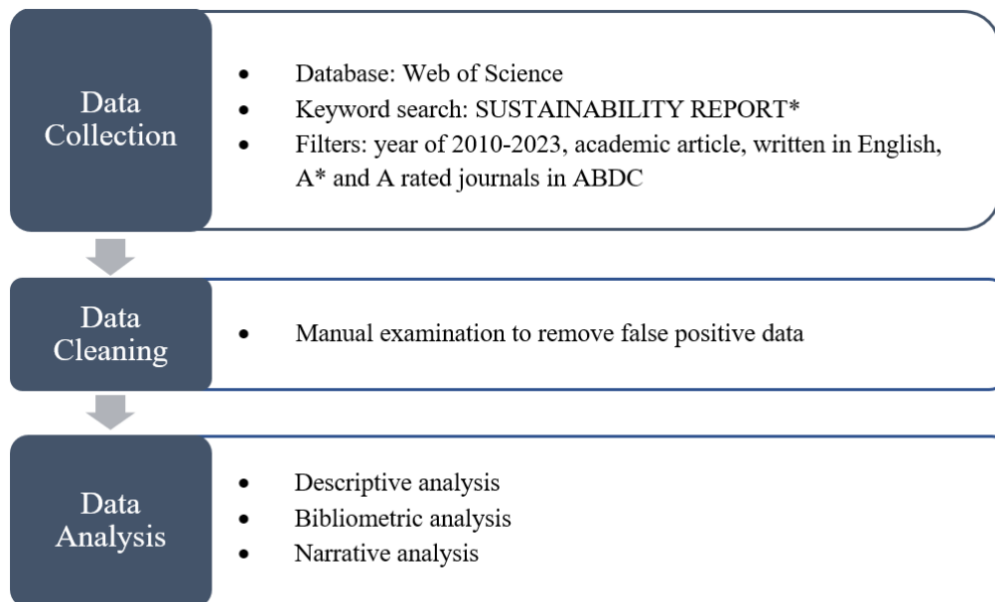


Figure 1. Methodological Protocol of the SLR

4.2. Presenting the analysis

SLR mainly presents data interpretation through descriptive and bibliometric analysis. In addition, narrative analysis carries an important message that significantly contributes to research development in particular areas. Figure 2 presents the structure of SLR presentation.

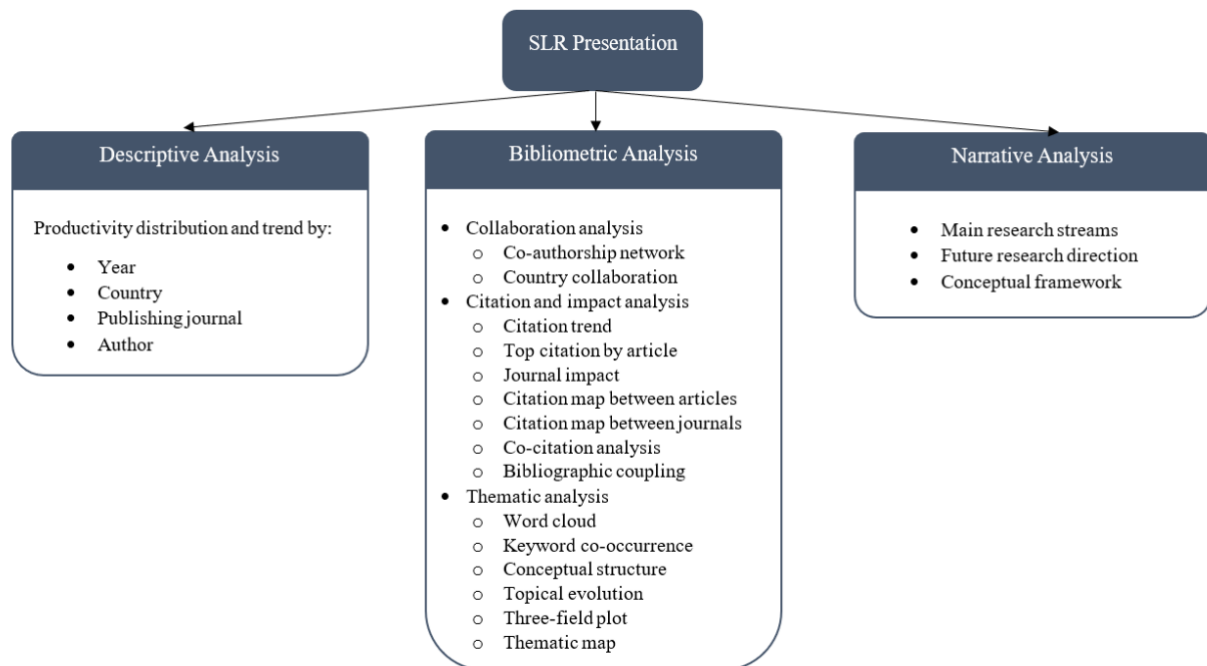


Figure 2. Presentation of the SLR

4.3. Descriptive analysis

4.3.1. Annual productivity

Annual productivity demonstrates the number of published article numbers for each period within the observed time frame. SLR can present this analysis either using visual graphics or tables. Some authors exhibit the trends using bar charts, such as the works of Shekhar and Gupta (2022) and Vermiglio et al. (2022). Bar charts are more suitable for visualizing trends over a short time interval. Presenting long-spanning periods using bar graphs might put excessive complexity into the visualization. Some articles, such as Manetti et al. (2021), Borghei (2021), and Tarquinio and Posadas (2020), prefer to present publication trends using line charts. This visual format is better suited for illustrating trends over a more extended period and highlighting volatility patterns. Additionally, some SLRs present publication trends in table format, such as the articles by Mody et al. (2021) and Hossain et al. (2023). The tabular format is usually preferable in presenting data with more than one dimension, for example, publication number by year and by publishing journals at once.

Narratives on the trend of publication quantity can offer insights into the timeline of a particular topic being initiated, emerging, reaching the peak, or potentially declining. Analyzing this pattern allows researchers to discern the potential for further research or determine if it has become overly saturated. Researchers can also establish connections between the publication's trends and societal dynamics. For example, Figure 3 presents an example of annual productivity visualization based on our SLR data demonstration. The SLR simulation reveals a notable surge in research activity concerning sustainability reporting following the commencement of the Paris Agreement 2015. From the ontological perspective, we can see the interplay between societal phenomena and academic efforts to understand them.

As another example, the SLR by Shahana et al. (2023) indicates that research on financial fraud detection started to develop significantly in 2005 after the high-profile fraud cases involving Enron and WorldCom.

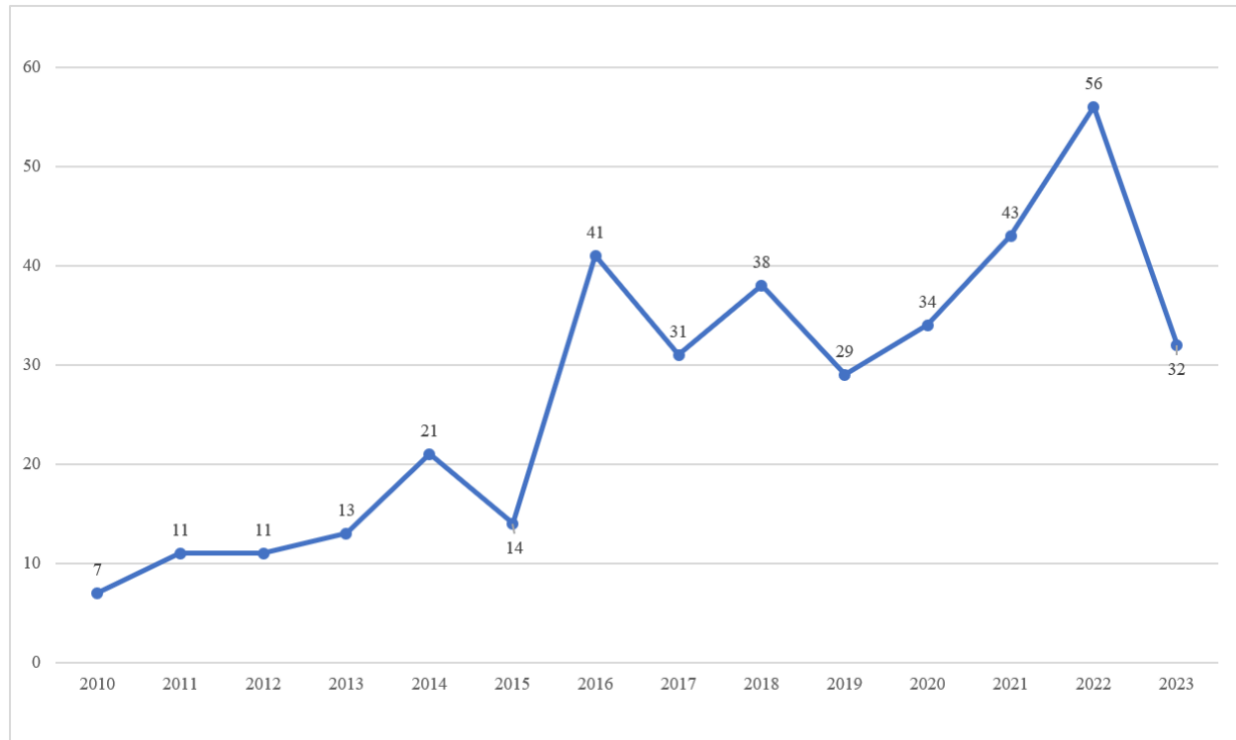


Figure 3. Annual Productivity

4.3.2. Country productivity

Country productivity presents the distribution of publications based on the authors' country affiliations. SLR can depict country productivity through either tabulated data or graphical representations. Lardo et al. (2022) and Mody et al. (2021) present country productivity through bar charts and pie charts. Careful consideration should be given to selecting the appropriate chart type to prevent ineffective communication caused by hard-to-read graphics. For instance, three-dimensional charts should be carefully managed as they can diminish reader comprehension (Stewart et al., 2009). Developing features in bibliometric analysis software opens up opportunities to create more attractive visualizations. For example, we simulate country productivity visualization using a geographic heatmap in Figure 4. This type of visualization only takes up a little space, making it particularly useful when researchers intend to showcase numerous countries simultaneously. However, obtaining exact distribution data in a geographic heatmap can be challenging. Alternatively, SLRs can also represent country productivity through tabular formats, as demonstrated in the publication by Lombardi et al. (2022). Displaying data in tabular format might consume significant space when presenting many countries. As a substitute, the tabular presentation might selectively include only countries with the highest publication counts.

Country distribution analysis can provide insight into countries actively addressing a specific issue. This analysis can also unveil the pioneering country in researching a particular topic. Furthermore, country distribution data can be a foundation for comparing their research progress. This insight would enable future research to draw insights from more experienced countries. However, researchers need to acknowledge the potential limitations. The diversity

of publications' languages can risk omitting valuable research in the analysis (Lardo et al., 2022).

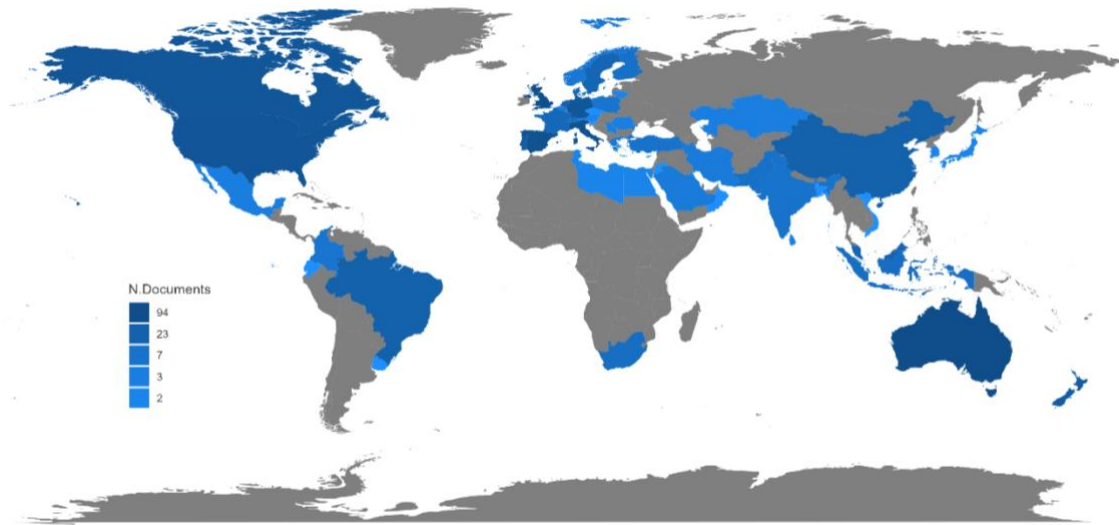


Figure 4. Country Productivity Presentation using Geographic Heatmap

Notes: We produce this geographical heatmap using Bibliometrix based on the bibliometric data from the Web of Science.

4.3.3. *Journal productivity*

Journal productivity presents the distribution of the number of publications across different journals. SLR articles commonly present journal productivity data in tabular format, for instance, in Table 1. In addition to capturing the publication counts per journal, the table can be enhanced by incorporating additional attributes, including publication years (Marrone et al., 2020; Mody et al., 2021) and journal rankings (Hossain et al., 2023; Lombardi et al., 2022). The distribution of publications often relates to the specificity of the discussed topic. SLR addressing a broad topic might result in a more evenly distributed publication pattern across various journals. For instance, the SLR on auditing conducted by Lombardi et al. (2022) illustrates a more balanced distribution of articles among the journals in the analysis. Conversely, when the SLR topic is relatively narrow, the distribution concentrates on several specific journals. This pattern typically occurs due to journals specializing in selective scopes. For instance, Shabbir et al. (2022), focusing on entrepreneurship education, exhibit more concentrated articles in three of the 26 journals in the SLR. This distribution provides valuable insights into the journals with significant influence within a specific field. Researchers can use this information to prioritize certain journals for in-depth analysis when exploring the development of a particular topic. We can also get insights from the distribution by journal rank to assess whether a topic is relevant to top-tier journals. This pattern can provide input for future research planning, especially when evaluating the potential for publication in well-reputed journals.

Table 1

Journal Productivity

Source	Articles count	ABDC
Journal of Cleaner Production	147	A
Business Strategy and the Environment	65	A
Meditari Accountancy Research	55	A
Journal of Business Ethics	48	A

British Accounting Review	8	A*
Managerial Auditing Journal	8	A
Qualitative Research in Accounting and Management	7	A
Energy Policy	6	A
Other 12 journals	37	
Total articles	381	

Notes: Table 1 summarizes each journal's performance regarding publication number.

In addition to the descriptive table, bibliometric analysis utilizes Bradford's Law distribution, categorizing articles into three zones: core, middle, and tail (Nash-Stewart et al., 2012). Each zone comprises an equal one-third of the total articles, sorted according to their relevance (Obregon et al., 2022). The core zone is the primary focal point for researchers within the discussed field, as it includes a few journals that receive many citations (Delwiche & Hall, 2007). The middle zone consists of moderately essential journals. In contrast, the tail zone comprises journals that infrequently publish the topic under SLR focus. Identifying these journal groups enables researchers to obtain scientific reasons to prioritize journals that require further analysis and attention. Figure 5 illustrates the journal zoning within our SLR data demonstration using Bradford's Law analysis. Our analysis shows that the *Journal of Cleaner Production* is the only core source. However, researchers must acknowledge that the journals' categorization can vary depending on the research scope and data collection approach.

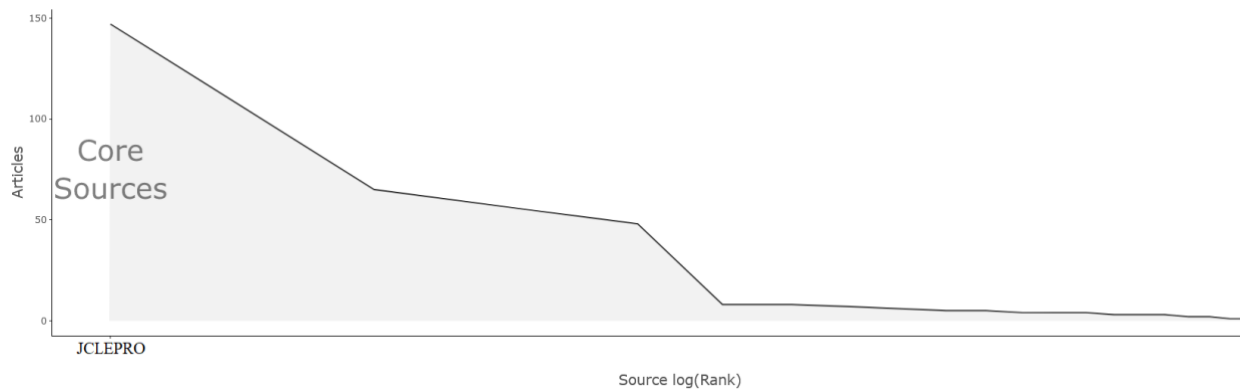


Figure 5. Bradford's Law of Scattering Graphic

Notes: We visualize Bradford's Law of scattering using Bibliometrix. *Journal of Cleaner Production* (JCLEPRO) is the only core journal out of 20 journals in the data set.

4.3.4. Author productivity

SLR data set typically consists of many authors who have contributed articles. Therefore, to maintain presentation readability, author productivity typically highlights a selection of the most productive authors within the data set. SLR articles usually present author productivity in table or chart format. For instance, Belloque et al. (2021) and Linnenluecke et al. (2020b) employ a bar chart format to present author productivity, focusing solely on the top ten most influential authors. In contrast, Modem et al. (2021) present author productivity in a tabular format. This format provides a more comprehensive overview, makes displaying many authors easier, and possibly includes additional details such as affiliations and the journals' names. Based on our SLR data, we demonstrate the top authorship graphic in Figure 6.

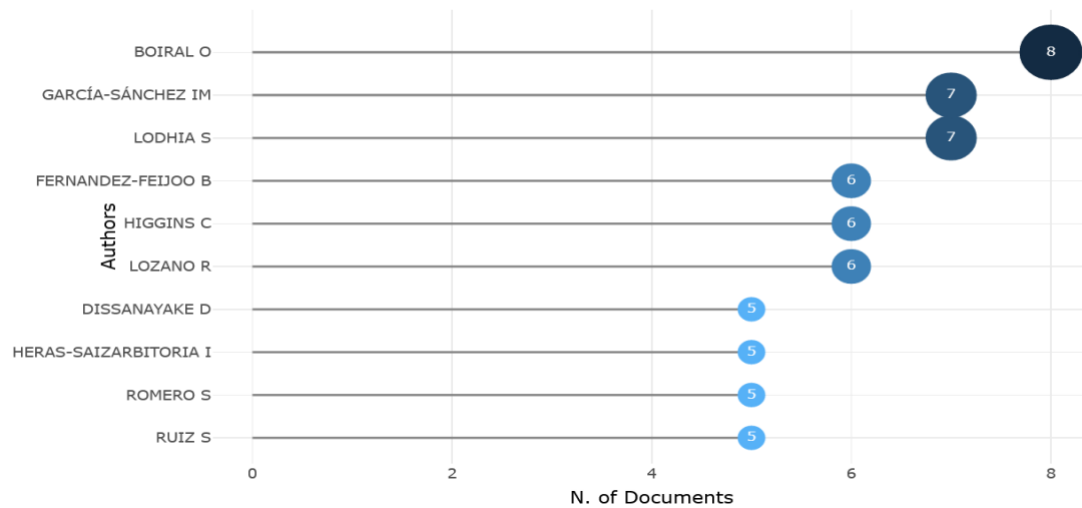


Figure 6. Top Authorship

Notes: Figure 6 is produced using Bibliometrix.

In addition to the descriptive data presented earlier, author productivity can be subject to scientific analysis by applying Lotka's Law. This analysis evaluates author productivity by distributing the number of relevant publications across individual authors (Qiu et al., 2017). Lotka's Law principle asserts that only a few authors make substantial contributions, while the majority make only limited publications (Asatullaeva et al., 2021). Quantitatively, Lotka's Law posits that approximately 60% of authors publish just one article in a specific research area (Obregon et al., 2022). This analysis can help researchers scientifically identify the authors with the most influence on the topic. Furthermore, Lotka's Law can assist in determining the developmental stage of a specific research area. Developing research area typically has a percentage of authors with only one publication more than Lotka's 60% threshold (Fiaz et al., 2023). We visualize Lotka's law distribution based on our SLR data demonstration in Figure 7. Our analysis demonstrates that 86.1% of authors have a single publication, exceeding the theoretical distribution. This finding implies that research in sustainability reporting is still in the development phase.

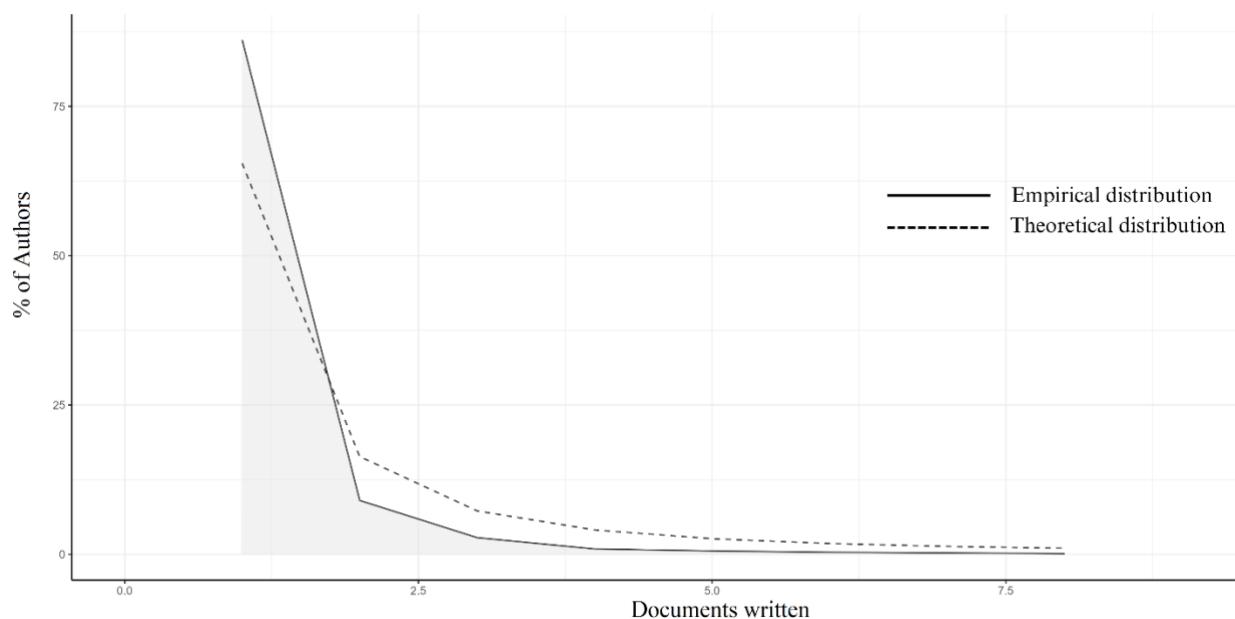


Figure 7. Lotka's Law Distribution Graphic

Notes: Figure 7 visualizes the Lotka's Law distribution that is produced using Bibliometrix.

Researchers can gain insight into how a topic was initiated and developed by examining the publication history of the most productive authors. They are usually authors who have devoted their research to a particular topic. Additionally, SLR can have a more comprehensive insight from publication trends by author, as published by Belloque et al. (2021). We demonstrate the authors' publication over time in Figure 8 to help researchers discern each author's evolving contribution. This time-based productivity helps to identify the author's contribution to the topical evolution, which can be related to specific societal dynamics.

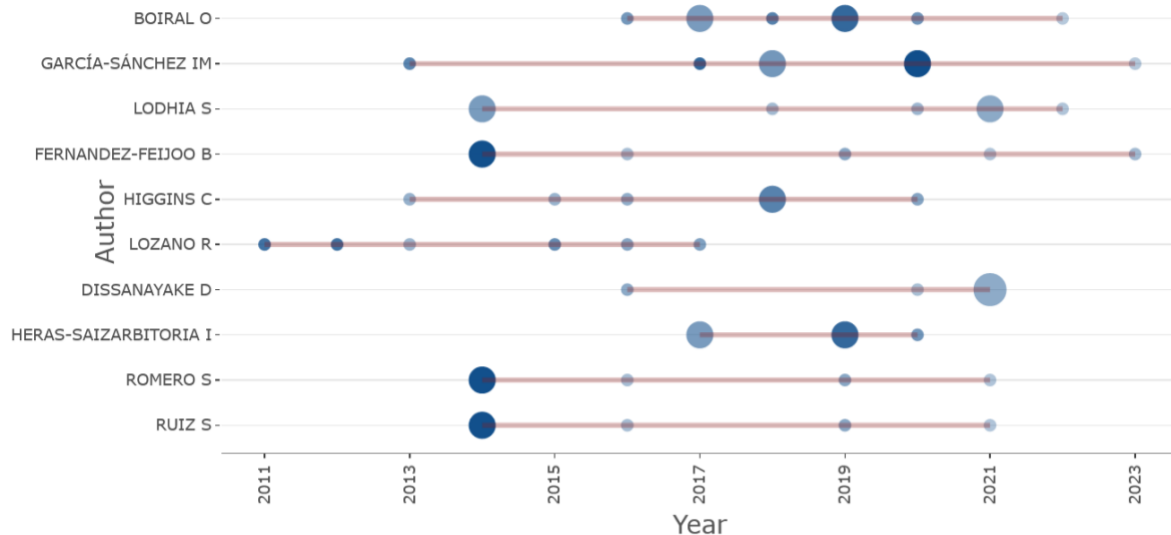


Figure 8. Top Authors' Productivity Over Time

Notes: Figure 8 is produced using Bibliometrix.

4.4. Bibliometric analysis

4.4.1. Collaboration network analysis

Bibliometric data possesses the potential for more profound analysis than simple descriptive examination. A deeper analysis of the authors and country affiliation data can reveal valuable insight from co-authorship and country networks. A co-authorship network visually represents the collaborative relationships among authors who typically have shared areas of interest (Zainuldin & Lui, 2022). Figure 9 illustrates a co-authorship analysis visualized using VOSviewer. Each author is represented by a node, with its size corresponding to the number of authors' publications within the SLR dataset (Zhang et al., 2023). Additionally, the connecting lines between nodes signify collaborations, with the line thickness reflecting the extent of collaboration among authors. VOSviewer also organizes the network into clusters based on the proximity of co-authorship relationships. These clusters are marked with distinctive colours. This functionality assists researchers in categorizing authors' expertise within the SLR dataset. It simplifies the theme examination by directing attention to the group of relevant experts.

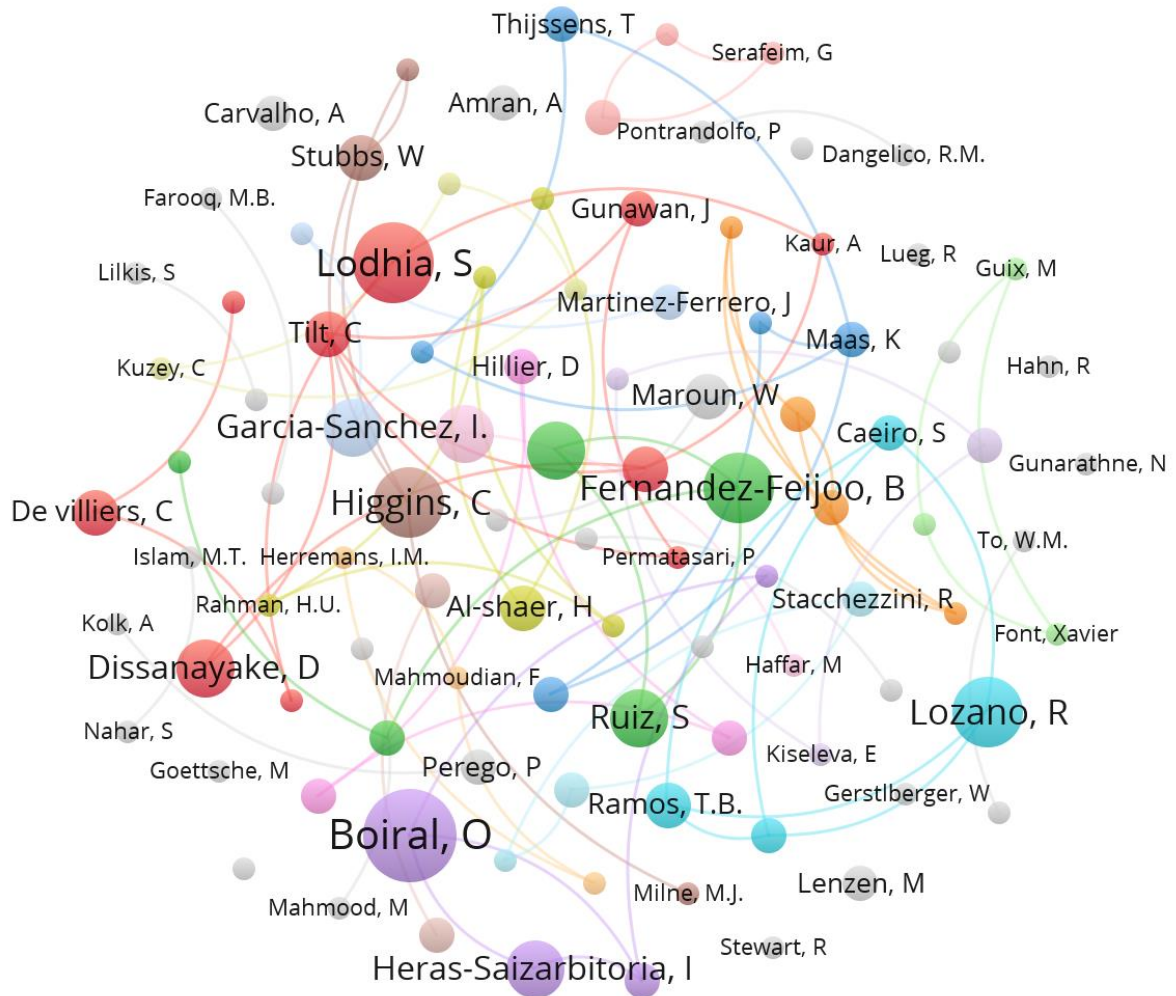


Figure 9. Co-Authorship Network

Notes: The co-authorship network in Figure 9 is visualized using VOSviewer. This network displays top 100 authors with the highest citations.

The examination of collaboration networks can extend to considering authors' affiliated countries, as demonstrated by Zainuldin and Lui (2022) and Zhang et al. (2023). A country collaboration network visualizes connections between countries where authors who collaborate on joint publications are affiliated. Figure 10 is an illustrative example of a country network visualization generated through VOSviewer. This graph implies the geographical dispersion of research contributions related to the themes discussed in the SLR (Burki et al., 2022). Researchers might gain insights into the extent of geographical coverage for a specific research topic. This insight can be valuable for finding research opportunities in distinctive country settings with less attention. In addition, these connections can shed light on the relationship patterns among various country characteristic groups.

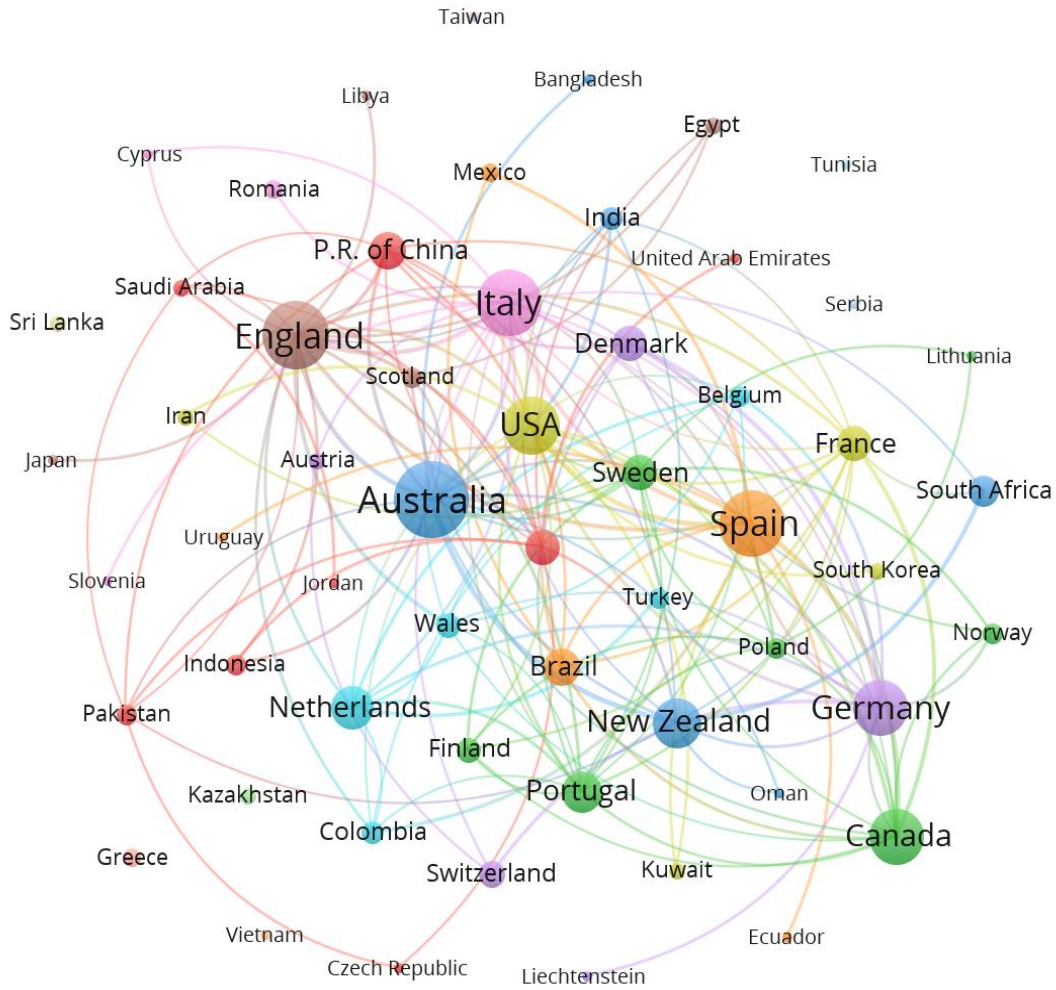


Figure 10. Country Collaboration Network

Notes: We produce Figure 10 using VOSviewer to visualize the country collaboration network.

4.4.2. Citation impact analysis

The number of citations an article receives reflects its importance and contribution to a particular research area. Figure 11 provides a clear visual representation of the annual citation trends. Lombardi et al. (2022) offer an alternative metric to understand the density of articles' conversations. This metric calculates the annual citations divided by the number of publications in the corresponding year. In addition, Lardo et al. (2022) suggest comparing the average citation count with the maximum number of citations received for each year. This approach can help researchers detect whether specific publications dominate the discussions in a particular research area. Researchers can concentrate on the most highly cited articles to gain valuable insights if a few publications dominate the discussion. Conversely, a smaller gap between average and maximum citations suggests a more even distribution of article discussions. This scenario implies that the discussed topic is relatively more saturated.

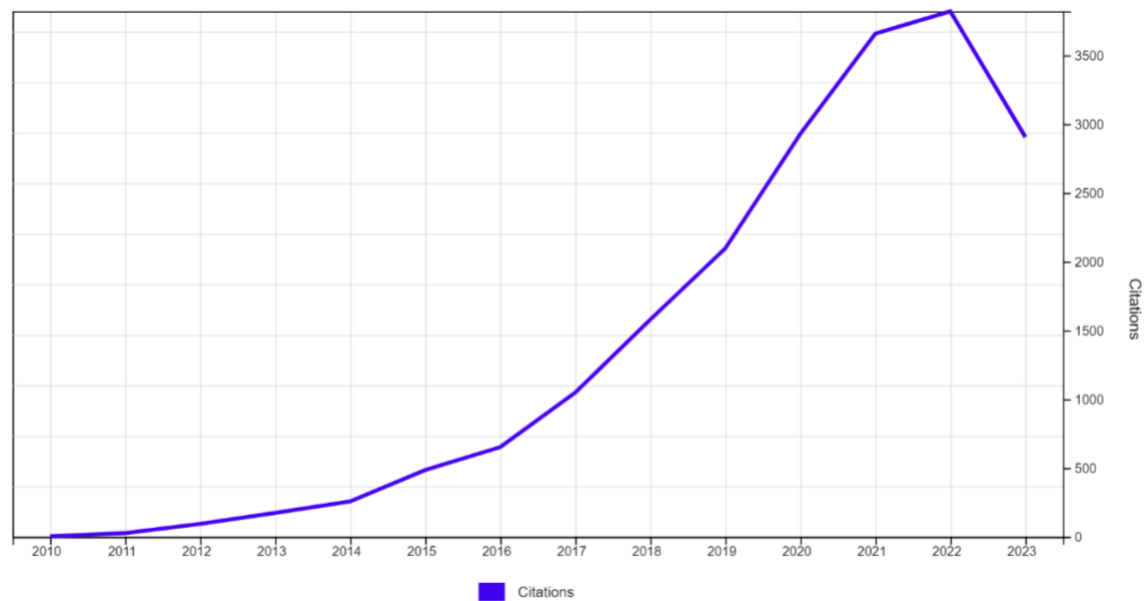


Figure 11. Citation Trend

Notes: We obtain Figure 11 using the analytical feature in the Web of Science.

Citation analysis can also be structured to evaluate the impact of individual articles. Table 2 provides an illustrative representation of the top ten most influential articles, determined by the number of citations they have received from other publications. Article impact data is typically based on the Global Citation Score (GCS). GCS represents the total number of citations an article accumulates from all published articles (Linnenluecke et al., 2020a). This analysis helps researchers identify the articles with the most significant impact on the discussed field. The number of citations an article receives signifies the relevance of its ideas for developing research in the subsequent period. Nevertheless, it is important to recognize the common trend that articles tend to accumulate more citations when published earlier.

Table 2

Article Citation Table

Document	Outlet	GCS
Milne and Gray (2013)	Journal of Business Ethics	557
Bos-Brouwers (2010)	Business Strategy and the Environment	424
Hussain et al. (2018)	Journal of Business Ethics	422
Kolk and Perego (2010)	Business Strategy and the Environment	362
Roca and Searcy (2012)	Journal of Cleaner Production	345
Lozano and Huisingh (2011)	Journal of Cleaner Production	323
Amran et al. (2014)	Business Strategy and the Environment	302
Lozano (2012)	Journal of Cleaner Production	302
Perego and Kolk (2012)	Journal of Business Ethics	264
Fernandez-Feijoo et al. (2014)	Journal of Business Ethics	263
Other 371 articles		16,137
Total GCS		19,701

Notes: Table 2 presents ten of the most cited articles in detail. This rank is based on the GCS count received by each article.

The impact of publications can also be assessed on a journal-by-journal basis. For instance, Shekhar and Gupta (2022) provide an example of how journal impact is presented. Presentation in tabular format is a common choice because it allows for the simultaneous presentation of multiple metrics, such as total publications, total citations, average citations, and impact factor scores. This analysis provides insights to identify the most influential journals that lead discussions within the observed field. Focusing on the most influential journals enables researchers to understand the perspectives that receive the greatest attention when discussing a topic (Lardo et al., 2022). This comprehension helps find gaps if extant research has not explored a reasonable perspective. In Table 3, we demonstrate the presentation of journal impact indicators.

Table 3
Journal Impact

Source	TP	TC	ACP	SJR	Publisher
Journal of Cleaner Production	14,499	177,782	11.90	1.98	Elsevier
Business Strategy and the Environment	619	9705	14.88	2.87	Wiley
Meditari Accountancy Research	157	805	5.14	0.79	Emerald
Journal of Business Ethics	1,093	9,971	8.11	2.59	Springer
British Accounting Review	118	714	5.20	1.28	Elsevier
Managerial Auditing Journal	145	531	3.40	0.61	Emerald
Qualitative Research in Accounting and Management	68	153	2.54	0.42	Emerald
Energy Policy	2,018	19,235	9.50	2.29	Elsevier
Total articles	381				

Notes: Here in Table 3, TP is the total publications, TC refers to the total citation, and ACP is average citations per document. While we get this data from Scimago, the SJR score refers to the Scimago Journal Rank.

4.4.3. Citation map

A citation map is a bibliometric analysis investigating a topic by evaluating the influential impact of its contributing articles (Liang, 2023). The cross-citation between articles indicates their influential relationship (Linnenluecke, Birt, et al., 2017). An article's impact becomes increasingly significant as it receives more citations from other publications. Visualization of citation maps can be generated using several tools, such as HistCite and VOSviewer. Both applications visualize the relationship between articles by analyzing the reference records contained in bibliometric data. Two articles are connected in the map if one cites the other.

Several studies employ HistCite for visualizing citation maps, such as the works by Linnenluecke et al. (2020b), Liang (2023), Belloque et al. (2021), Linnenluecke, Birt, et al. (2017), and Linnenluecke, Chen, et al. (2017). Figure 12 provides an example of a citation map visualization generated using HistCite. Citation maps in SLR articles typically avoid visualizing too many articles to maintain their readability. HistCite visualizations are usually set up to highlight a limited number of articles with the highest local citation scores (LCS). LCS is a quantitative measure determined by the frequency at which an article is cited by other papers within the examined SLR dataset (Donthu et al., 2021). Article selection to the highest LCS scores enables visualizing the connections between articles in a citation map. In the citation map, individual articles are depicted as nodes, with larger nodes denoting higher LCS scores (Linnenluecke et al., 2020a). The HistCite-generated citation map arranges the articles chronologically. It posits earlier publications in the upper section and proceeds downward for

later ones. A citation map allows researchers to discern which articles have the most significant impact on the observed research theme.

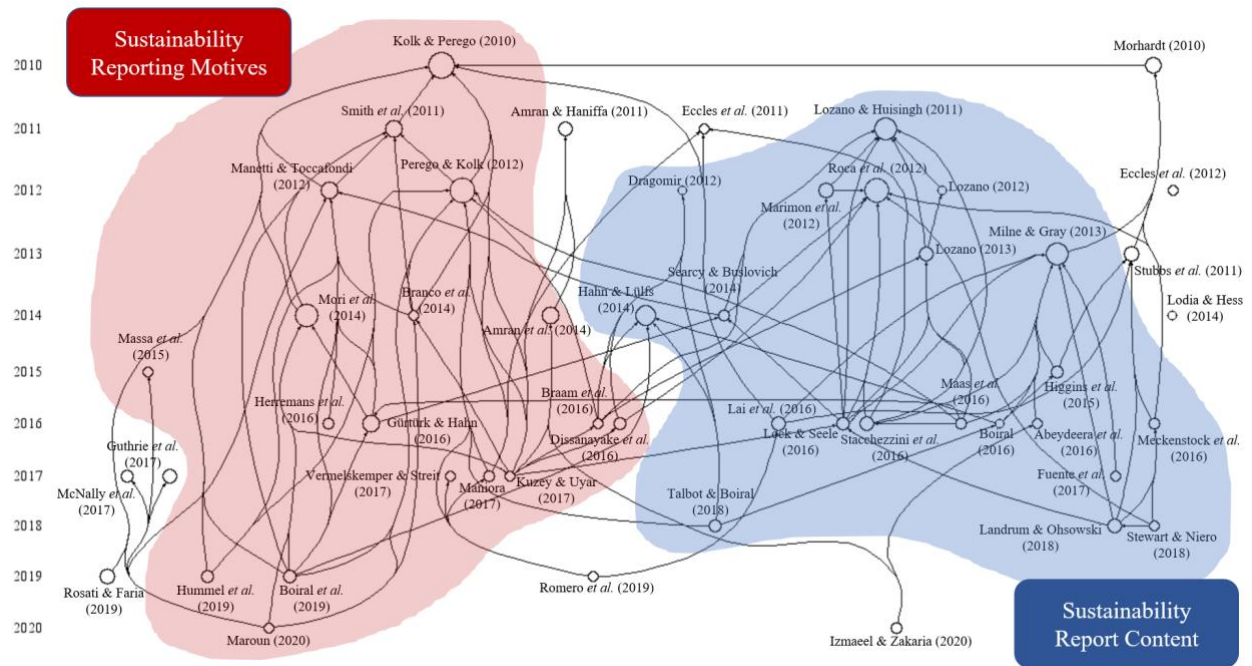


Figure 12. Citation Map between Articles

Notes: We visualize the citation map between articles in Figure 12 using HistCite. Further, we put shades and labels on the strongly connected articles' group. Each group represents the similarity of topics among publications arising from cross-citations between articles within the defined boundaries.

In addition to the citation map between articles, we can also gain meaningful insights from the citation map between journals. This network visualizes the journal centrality that enables researchers to pinpoint the most influential journals within the subject of interest (Yang & Thoo, 2023). The connection intensity with other journals indicates journal centrality. More connection suggests a higher level of 'conversation' between those journals. Leading journals that publish seminal papers should exhibit more centrality, as these influential publications provide foundational building blocks for particular research subjects. However, the citation map may disregard the less-cited new publications that bring important insights into the research field (Pandey et al., 2023). Furthermore, we demonstrate the citation map among journals using VOSviewer in Figure 13. The nodes in the network represent journals, with larger nodes indicating a greater number of respective publications included in the SLR data set. The lines connecting the nodes represent citation relationships, and the thickness of these lines reflects the intensity of the relationship between the connected journals.

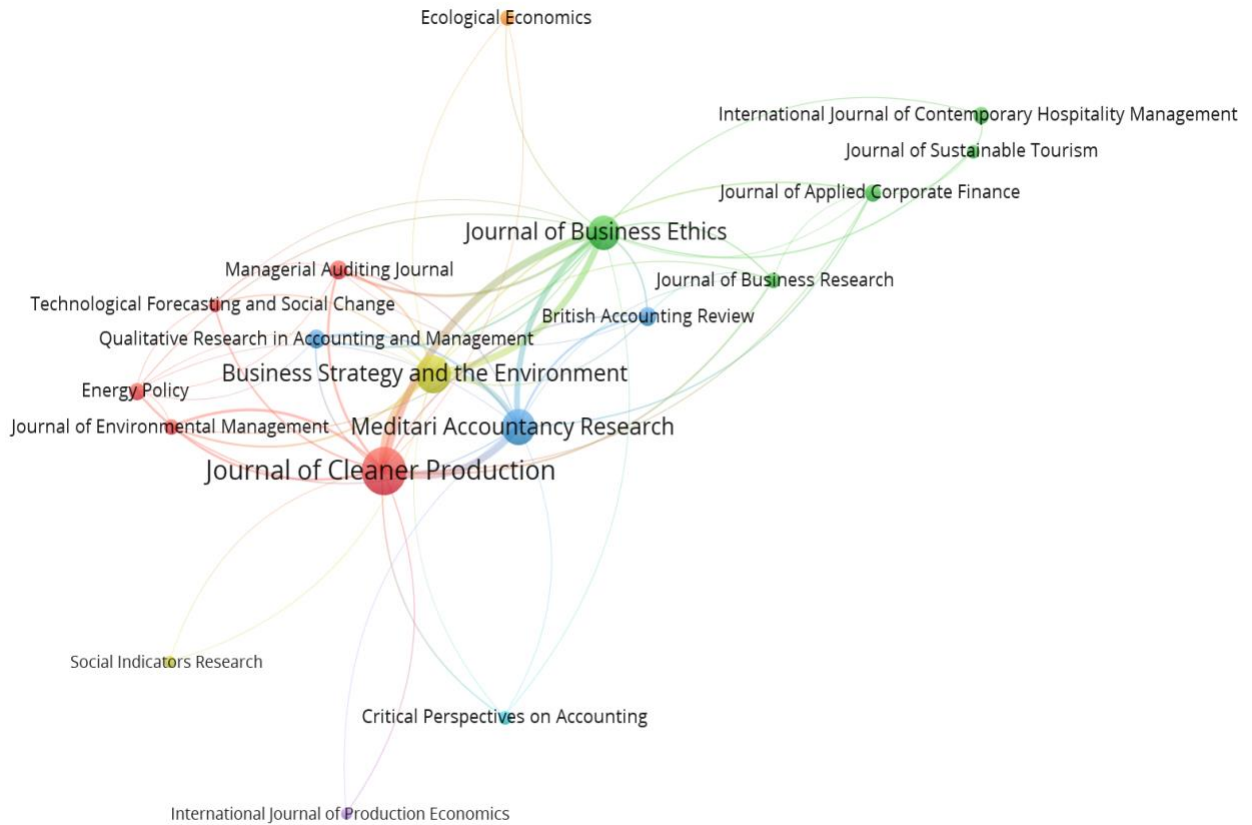


Figure 13. Citation Map between Journals

Notes: Figure 13 visualizes the citation map between journal that is produced using VOSviewer.

4.4.4. Co-citation analysis

Co-citation analysis visualizes the connections between articles that arise when cited within a publication (Lemken & Anderson, 2022). Despite the absence of direct conversational connections between articles, the co-citation relationship indicates a shared research focus on a specific subject (Zainuldin & Lui, 2022). Lombardi et al. (2022) and Zhang et al. (2023) are examples of an article that presents co-citation analysis, visualized using VOSviewer. An example of co-citation analysis can be found in Figure 14, where each article is represented as a node, with its size corresponding to the frequency of citations it receives. The connecting line between the articles indicates that a third party cited both articles within a publication. VOSviewer organizes article clusters according to the strength of their relationships. Different colours in the citation map mark the clusterization. Each colour represents a group of articles discussing a specific theme within the cluster (Lombardi et al., 2022).

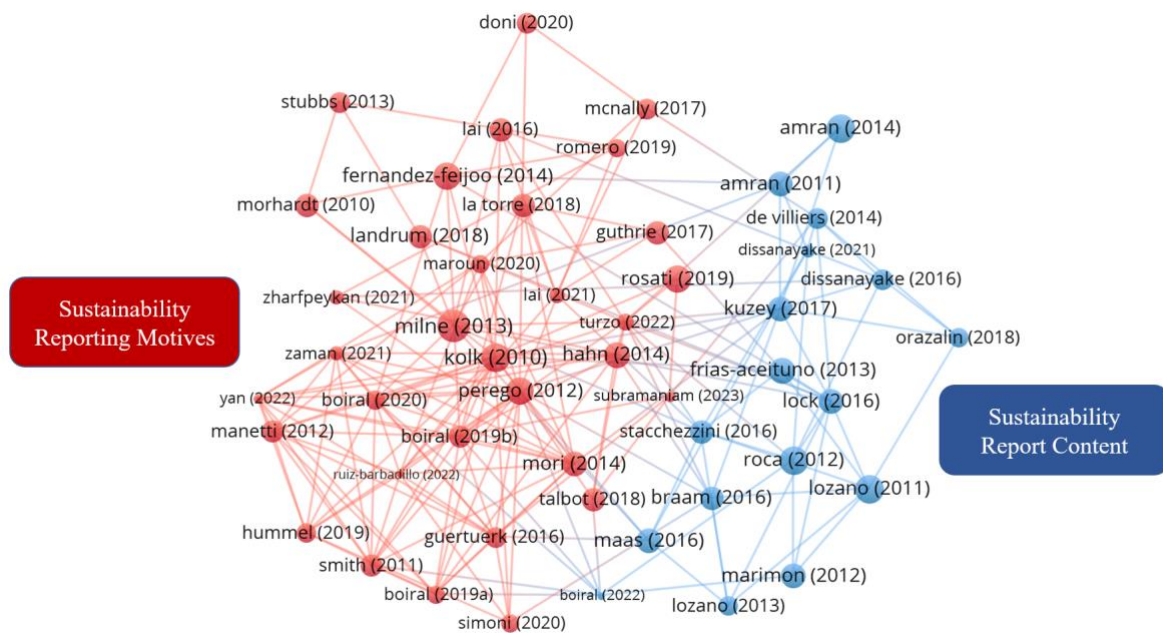


Figure 14. Co-Citation Analysis

Notes: We produced Figure 14 using VOSviewer to visualize the co-citation map. This network includes only 50 top-linked documents to maintain graphical readability.

4.4.5. Bibliographic coupling

Bibliographic coupling refers to the connections between articles due to the commonality in their cited references (Boyack & Klavans, 2010). Articles with similar topics usually share a set of publications cited in their references (Manetti et al., 2021). New research endeavours aim to expand the knowledge by leveraging existing publications as the foundation. The relationship between articles will be stronger if they have more overlapping references (van Eck & Waltman, 2014). Recent technological advancements have significantly enhanced the effectiveness of bibliographic coupling techniques for identifying research clusters. Text mining technology efficiently examines large bibliography data sets as the primary resource for identifying the thematic clusters. For instance, Lombardi et al. (2022) and Manetti et al. (2021) employed VOSviewer for visualizing bibliographic coupling within their SLR. We demonstrate the bibliographic coupling analysis on our SLR data set in Figure 15.

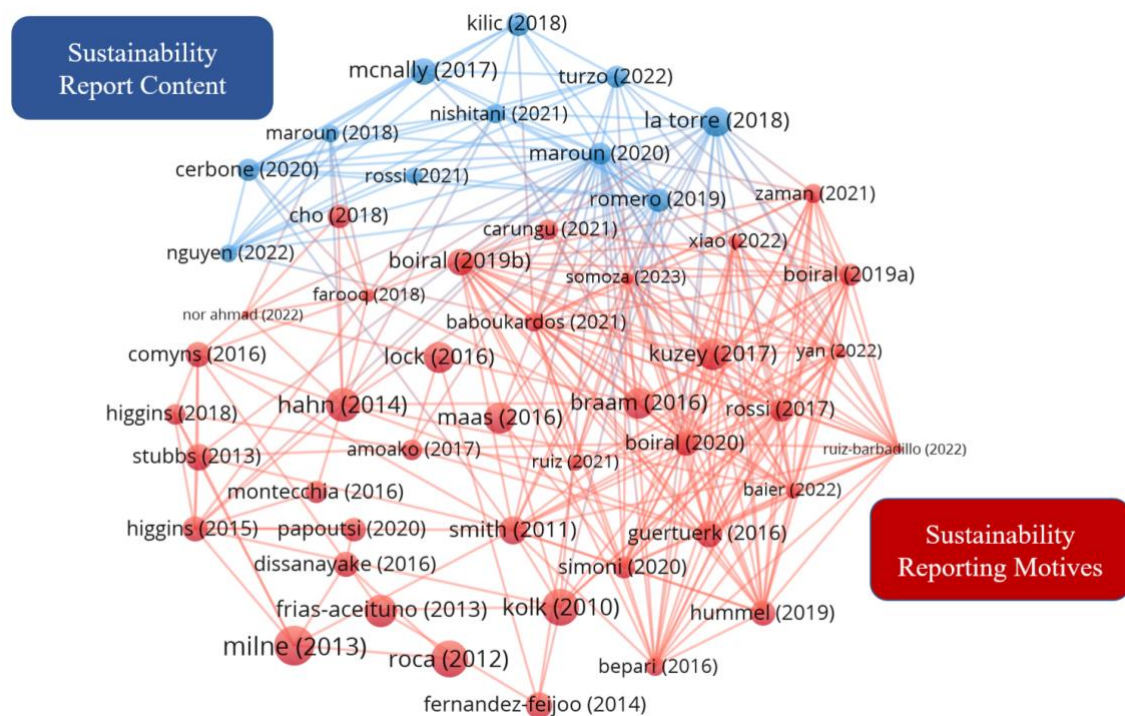


Figure 15. Bibliographic Coupling Visualization

Notes: Figure 15 visualizes bibliographic coupling between articles within the data set. We limited only 50 articles with the strongest connections to ensure graphical clarity.

4.4.6. Word cloud

Bibliometric data analysis enables the researcher to produce word clouds from article text data. Word clouds represent thematic centrality among articles within the SLR data set (Agostino et al., 2020). Researchers can efficiently obtain the big picture of the corpus data set by focusing on the most significant themes highlighted in the word cloud (Obregon et al., 2022). This analysis allows them to quickly identify the key idea addressed in the SLR while avoiding the risk of overlooking important concepts. Figure 16 displays the word cloud generated from author keywords within our SLR demonstration dataset. This visual can be based on the keywords, abstract, or title. We can structure a word cloud directly from the keywords. However, creating a word cloud based on an abstract or title requires a specific extraction technique. The N-gram extraction method generates meaningful sets of bi-gram (two-word pairs) or tri-gram (three-word pairs) that enhance the semantic analysis of SLR documents (Blanco-González-Tejero et al., 2023). Word cloud usually showcases the most prevalent words in a graphical format, with larger text indicating more frequent words.

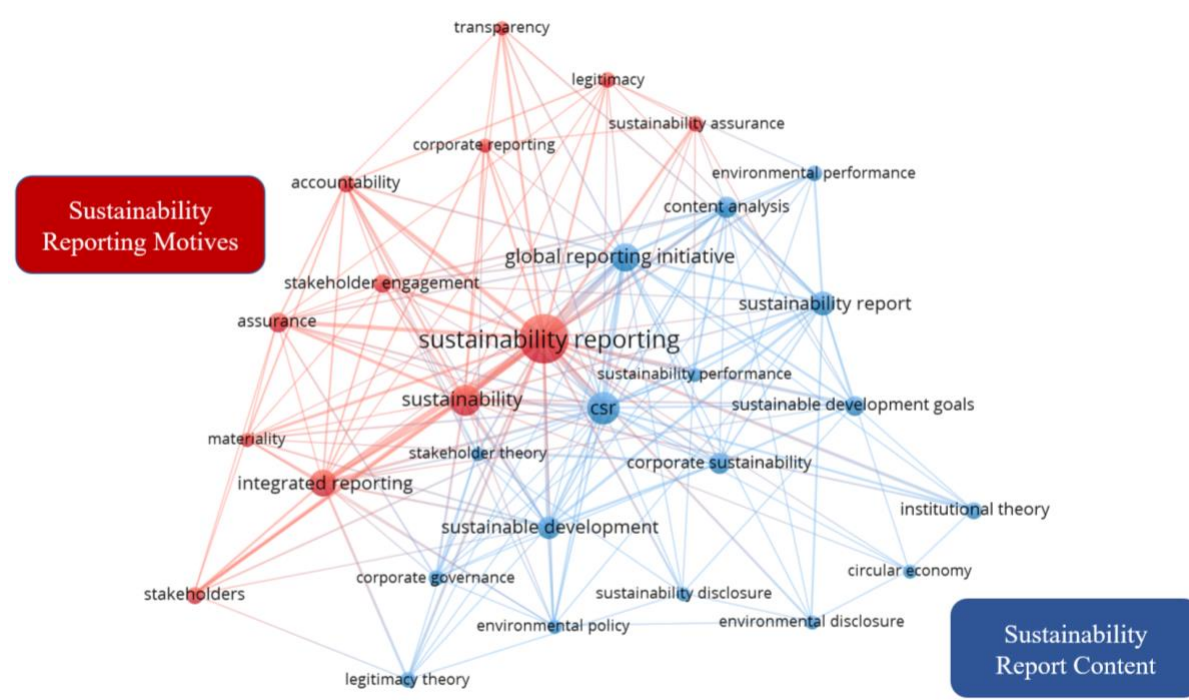


Figure 17. Keywords Co-Occurrence Visualization

Notes: We produce Figure 17 using VOSviewer to visualize the keywords' co-occurrence.

4.4.8. Conceptual structure

Conceptual structure is a textual co-occurrence analysis arranged in a hierarchical form based on factorial analysis to present the relationships between concepts and their underlying explanatory roots (Kumar & Kumar, 2023). The concepts organized within this structure are textual components extracted from the article's title, abstract, or keywords. This hierarchical structure consists of clustered concept strands that help holistically synthesize the meaning of particular research themes (Calandra et al., 2023). Researchers can interpret the relationship between key concepts in a cluster to determine the distinctive topic of a research stream. Moreover, this structured hierarchy of key concepts assists authors in identifying research gaps (Gyimah et al., 2023). Key concepts combination implies the particular perspective employed when discussing a research stream. The absence of a critical perspective within a cluster can indicate potential research opportunities. Figure 18 is the visualization of the conceptual structure from our demonstration of SLR on sustainability reporting.

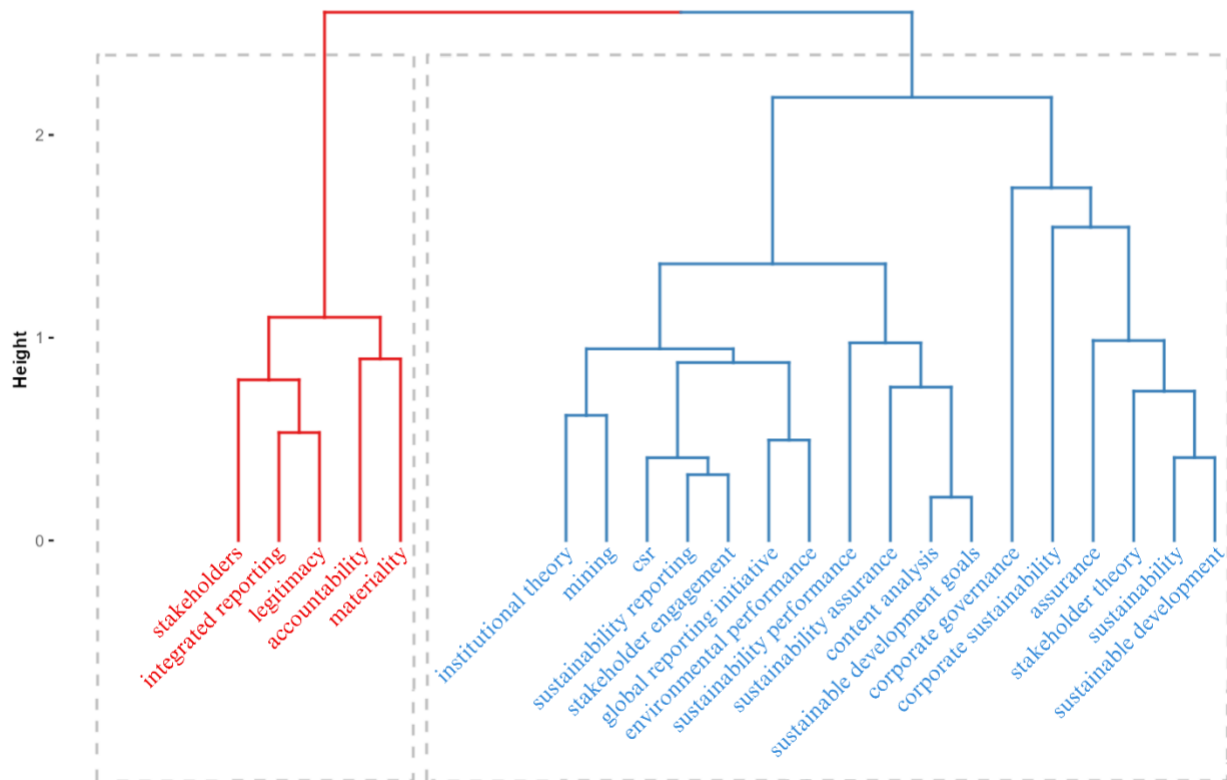


Figure 18. Conceptual Structure Dendrogram

Notes: Figure 18 presents the hierarchical structure of key concepts within the SLR demonstrated data. We produce this figure using Bibliometrix.

4.4.9. Topical evolution

From the epistemological perspective, knowledge evolves as a response to the need to comprehend and make sense of the world (Nguyen & Chia, 2023). Therefore, the dynamic nature of our world demands continual efforts to unveil new insights and understanding. In this regard, literature reviews lay the groundwork for discerning prospective avenues in research. In particular, bibliometric data offers the opportunity to investigate the temporal progression of research topics. Topical evolution analysis assists in identifying the relevant topics at each time slice (Kumar & Kumar, 2023). Within each distinct period, researchers can establish a connection between the emerging phenomena and the inquiries made by scholars. As a result, future research directions can be guided by the previous methodological and theoretical steppingstones. Examining topical evolution allows researchers to discern the development of inquiries over time and identify avenues for advancing knowledge in a particular field (Mody et al., 2021). Topical evolution can be visualized using bibliometric analysis tools, including VOSviewer (in Vermiglio et al. (2022)), Bibliometrix (in Anaç et al. (2023)), dan CiteSpace (in Mody et al. (2021)). Figure 19 demonstrates the topical evolution of sustainability research using CiteSpace. Each topic is associated with a specific timeline, with the denser regions indicating periods when the topic received more attention.

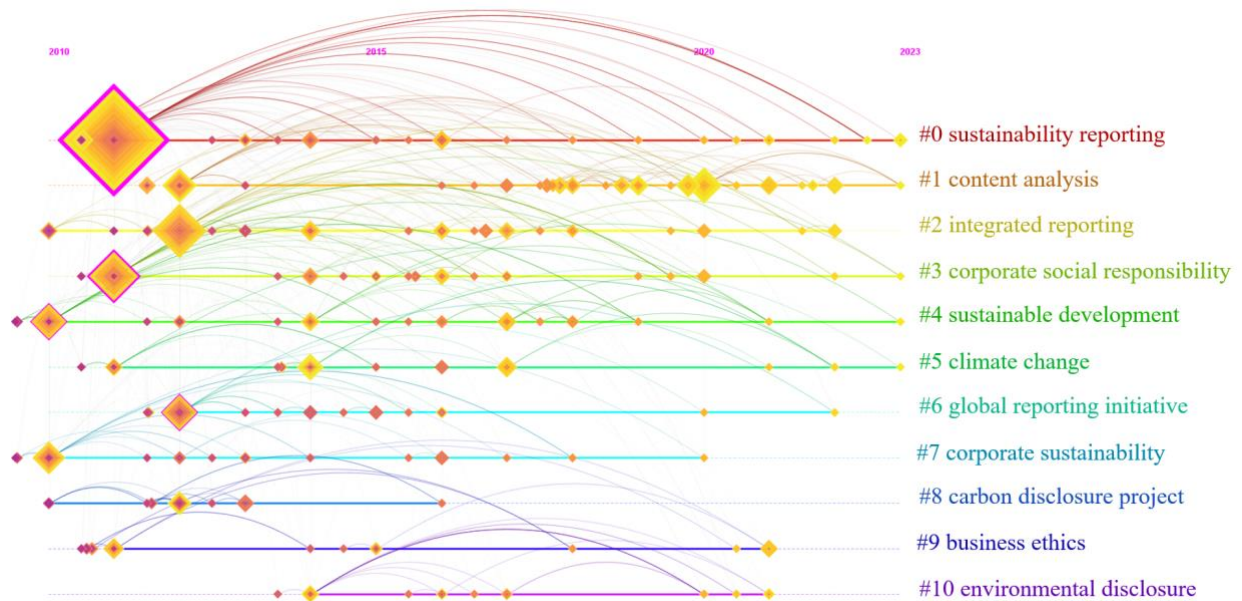


Figure 19. Topical Evolution Visualization

Notes: Figure 19 visualizes the evolution of research on sustainability reporting. We produce this graphic using CiteSpace based on the bibliographic data from the Web of Science. This visual presents the dynamics of the discussions on ten topics over the observed period, based on the occurrence of the most common keywords over time.

4.4.10. Three-field plots diagram

A three-field plot visualizes three bibliometric data fields in a Sankey diagram format. This diagram presents the flow of values or information from one field to another. It also provides an approach to obtaining insights from a complex relationship within bibliometric data and the dynamic flow of information, citations, or associations among authors, keywords, journals, or other relevant entities. The displayed fields can be customized based on the specific intention or focus. Consequently, presenting a wide range of insights and research dynamics becomes possible. Previous SLR publications also present three-field plot diagrams, such as Hossain et al. (2022) and Warin and Stojkov (2021). We also simulate this type of visualization in Figure 20. We present the complex relationships between keywords, journals, and countries. Through this figure, we can obtain valuable insights about the publication focus of individual journals and research themes associated with each country.

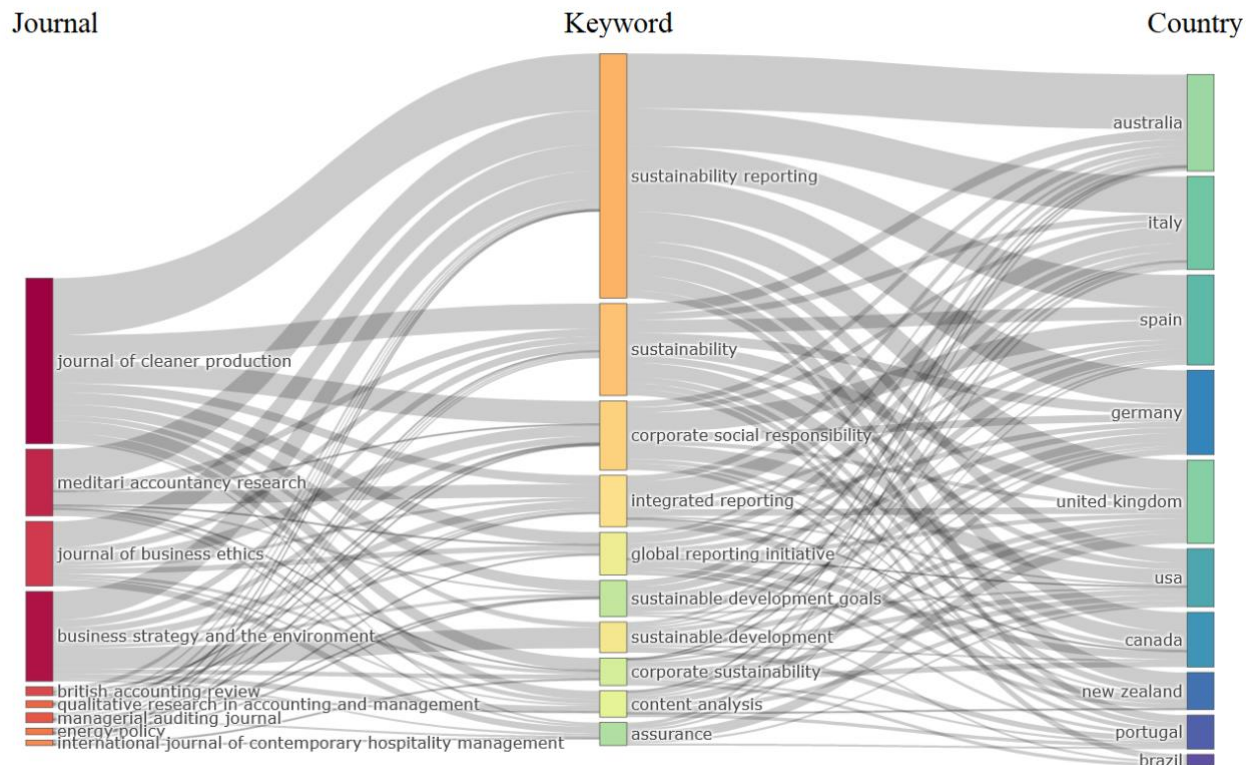


Figure 20. Three-fields Plot

Notes: Figure 20 was generated using Bibliometrix, showing three bibliometric data fields.

4.4.11. Thematic map

A thematic map combines two bibliometric measurements to provide a more comprehensive understanding of the positioning of a specific topic. The two metrics are the degree of topical development and relevance. Topical development is reflected in the density of keyword relationships within the same cluster (Anaç et al., 2023). This measure indicates the depth to which a specific topic has been examined by extant research. The centrality of a specific topic determines topical relevance within the broader landscape of academic areas. Topics with high centrality indicate that they have been extensively discussed across various academic subfields (Fernandez et al., 2023).

Thematic map categorizes research topics into four quadrants: motor, basic, niche, and emerging or declining themes. Motor themes refer to highly developed research topics that are highly relevant to other subjects. The topics within this quadrant are deemed crucial within the scope of the discussed SLR research (Belloque et al., 2021). The basic themes quadrant characterizes research topics with limited connections to other concepts within their cluster while demonstrating significant relevance to other research areas (Cobo et al., 2011). Furthermore, niche themes relate to well-developed research topics but exhibit fewer connections to other research areas (Linnenluecke et al., 2020b). The final quadrant is for declining or emerging themes, which are relatively underdeveloped topics and establish fewer connections with various themes.

Thematic maps can be instrumental in shaping future research directions, specifically focusing on niche and emerging or declining themes. The niche themes quadrant has the potential for further development, particularly by exploring various new perspectives to examine the existing topic. Nonetheless, it is essential to acknowledge that niche topics may be highly specialized and lack a sufficient foundation for further advancement (Anaç et al.,

2023). Topics in the declining or emerging quadrant can be new or outdated subjects. Researchers must employ qualitative analysis to distinguish whether a topic is rising or declining. Topics that have been saturated and are no longer relevant to research tend to be classified as declining. Classifying a topic as declining signifies that the research theme has diminished academic or managerial relevance. On the other hand, novel topics can be regarded as emerging subjects. Emerging topics offer opportunities for making significant contributions and creating potential pathways for future research (Funko et al., 2023). Figure 21 presents a thematic map for SLR on the theme of sustainability reporting. Some SLRs that have presented thematic maps include Belloque et al. (2021) and Linnenluecke et al. (2020b).

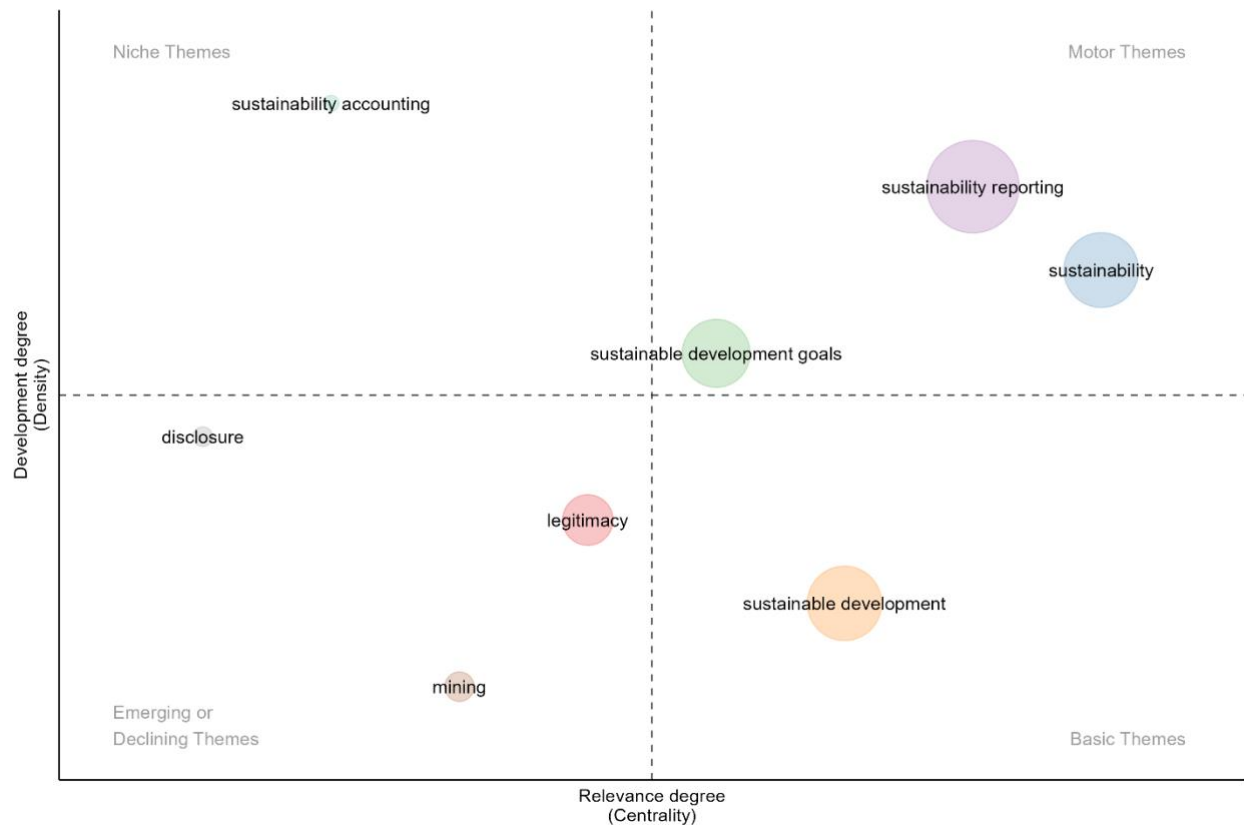


Figure 21. Thematic Map

Notes: We produced Figure 21 using Bibliometrix to visualize the thematic map.

4.5. Narrative analysis

4.5.1. Main research streams

SLRs can broaden their horizon beyond bibliometric analysis by comprehensively rendering the manuscripts' substance in the data set. These in-depth portrayals in SLR articles can include existing research streams, theoretical perspectives, and methodological approaches. Bibliometric analysis can reveal the prevalent research themes in the SLR data set. Identifying research streams is crucial for comprehending the primary focus of extant research endeavours. Therefore, this analysis can assist in the development of potential research directions. Research streams are typically narrated by highlighting the emerging sub-themes or the most influential papers. Sub-themes exploration within each research stream offers a comprehensive understanding of diverse viewpoints and the evolutionary progression of the topic. This narrative approach is evident in SLRs published by Gepp et al. (2018) and Vermiglio et al. (2022). The next narrative strategy involves discussing each of the most influential papers

within the research stream. This approach reveals intellectual origin that contributes to developing the research stream. Focusing on seminal papers will reduce distractions from less relevant publications. We can find this narrative approach in some SLR publications, such as Manetti et al. (2021), Linnenluecke, Chen, et al. (2017) and Lombardi et al. (2022).

Identifying the underlying theories within the articles enriches the discussion on the SLR topic. Researchers gain conceptual clarity by identifying various theoretical perspectives of the articles. Comprehending the conceptual foundation helps researchers construct analytical frameworks that will be insightful in finding theoretical gaps for future research agendas (Müller-Bloch & Kranz, 2015). Further, researchers can also synthesize the trends and patterns of the theoretical perspective. This evolutionary analysis presents the shift in theoretical paradigm and the emergence of a new theoretical perspective. Researchers can also gain insights into which theories have been well-established and which ones have been underutilized. Understanding the theories can assist in comparing the effectiveness of different theories in explaining particular phenomena. Furthermore, identifying an appropriate theory can guide the development of a research style within a specific subject of interest (Glaser & Strauss, 1999). Knowledge of the effective theoretical perspective will help leverage future research agendas' rationality.

Methodological identification enriches the SLR with insights to improve research effectiveness and efficiency (Cooper et al., 2017). Researchers can conduct a comparative analysis of various employed research methods. This analysis helps explain the consistency and discrepancy of research findings. Methodological identification also contributes to understanding the contextual settings of each study. Specific research methods are often associated with the particular object under study. Furthermore, researchers can establish connections between specific institutional characteristics and the relevant research methods. Lastly, this overview can also reveal methodological trends and shifts over time. The lessons learned from methodological evolution will be beneficial to improve future research practices with innovative methods (Galport & Galport, 2015).

4.5.2. Future research direction

The future research agenda is a critically significant component of an SLR. SLR should contribute significantly to advancing the body of knowledge by paving the path to potential areas for further research. The future research agenda is formulated through a scientific approach complemented by the researchers' expertise. Thematic mapping in the bibliometric analysis is an effective tool to identify potential future research. Furthermore, the expertise of the researchers plays a vital role in assessing the feasibility and rationality of potential research agendas. The future research agenda is carefully formulated by addressing theoretical and methodological gaps while considering the emergence of new phenomena. Analyzing the theoretical landscape and methodological approaches will stimulate innovation in future research. Understanding the current research stage can inspire innovation by encouraging researchers to challenge existing theories, propose new perspectives, or adapt cross-disciplinary theories. Research innovation is pivotal to gaining and understanding greater insights from emerging phenomena (Smith, 2018). Methodological analysis can also be beneficial in uncovering gaps, particularly concerning the approach to addressing specific research questions. Future research can either extend existing domains or structure a cross-disciplinary agenda. Collaboration and knowledge exchange in multi-disciplinary research can lead to relevant problem-solving for bigger problems (Lindgreen et al., 2020).

We improve the logical ties between the SLR and research agendas that Wu and Liu (2023) developed to structure a logical framework for structuring future research directions. This study acknowledges the “known-knowns” and “known-unknowns” within the subject of

interest. We consider our SLR as the scholarly exposition of the “known-knowns” aspects of the emerging phenomena. Further, we logically identify potential research agendas driven by the need to discover the “known-unknowns” area. We visualize this logical framework in Figure 22.

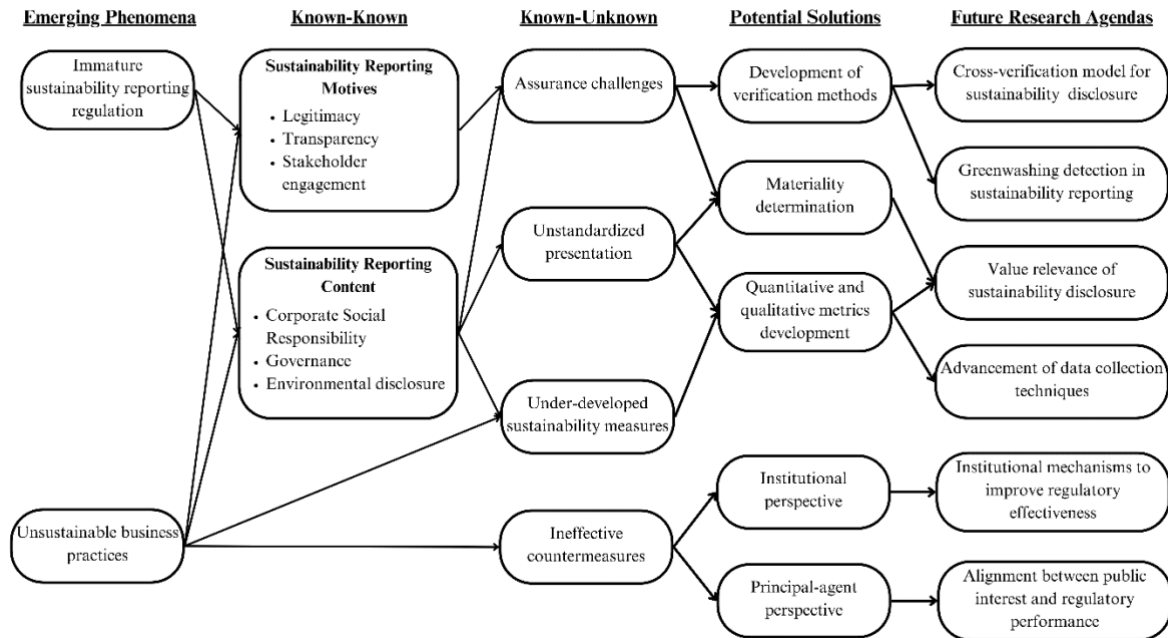


Figure 22. Logical Ties Between Existing Knowledge and Future Research Agendas

Notes: Figure 22 visualizes the logical process from identifying existing knowledge, highlighting significant problems, determining potential solutions, and formulating future research directions.

4.5.3. Conceptual framework

Literature reviews may also structure a conceptual framework to synthesize the scholarly landscape. This framework enables audiences to discern and highlight important insights. This synthesis summarizes various elements in extant research on the topic of interest. These elements cover the underlying theory, methodology, empirical phenomena, and other perspectives that are relevant to a topic. For example, Jansen (2018) visualizes the progression of a concept using a process chart. This framework illustrates the determinants that trigger a specific phenomenon, transformative process, and distinct consequences. Further, Yadav and Lenka (2022) present the conceptual framework by categorizing their theoretical standpoints, research methodologies, and contextual phenomena. A comprehensive exploration of a topic can involve diverse theoretical perspectives. Moreover, researchers may look for the opportunity to classify these theories according to their commonalities. This visualization can also portray the research development from their methodological perspective. Conceptual frameworks can also be structured to emphasize various contexts of phenomena relevant to the topic. In addition, Bashir and Qureshi (2023) systematically categorized the research viewpoints according to the variables employed. In addition to the visualization mentioned above, researchers have the flexibility to construct a conceptual framework in alignment with their intention to emphasize particular insights. However, the synthesis of complex scholarly discussions should be crafted to enable the audience to grasp the overarching concept swiftly. We synthesize the “known-knowns” elements of sustainability reporting in Figure 23.

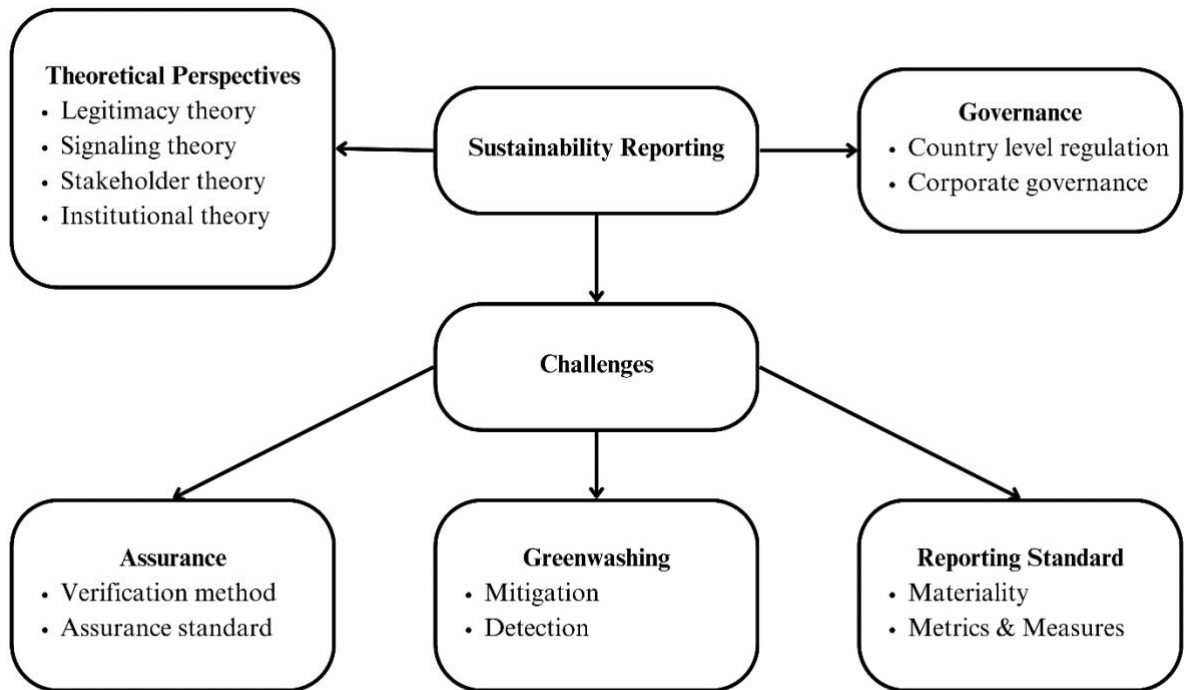


Figure 23. Conceptual Framework

5. Discussion and conclusion

An SLR contributes to advancing the existing body of knowledge by delivering new insights beyond the descriptive summary of the literature (Snyder, 2019). We present how to structure a conceptual framework to help identify what is “known-knowns”. Furthermore, this study also offers a scientific approach to identifying the “known-unknowns” through a thematic map and logical ties between existing knowledge and future research directions.

An SLR implementation demands careful consideration in the data collection and bibliometric analysis stages. Researchers should carefully plan, execute, and review the data collection strategy, especially regarding database sources, keywords, and article quality characteristics. The data collection cycle is subject to review and modification in later stages, as different strategies may yield varying insights. Various software is available for handling bibliometric data and generating diverse analyses. However, researchers may encounter challenges when composing an SLR, particularly in structuring the bibliometric analysis. Nevertheless, certain analyses might lack meaningful insights. This software and analysis work with different approaches and methods. Consequently, various bibliometric visualizations might lack consistency with each other. Researchers must address this challenge by carefully selecting suitable tools and visualizations to structure them as one solid SLR.

This methodological paper provides a comprehensive guide for structuring an SLR by leveraging the latest advancements in data analytics technology. In particular, this study contributes to existing SLR references by filling unaddressed needs to obtain overarching insights from a broader range of bibliometric visualization. We therefore present 21 visuals to obtain overarching insights from existing literature. This study also offers a scientific approach to synthesize existing literature and identify potential research agendas. We present guidance on how to construct a conceptual framework from complex literature. This framework will enable the audience to obtain a big picture of the scholarly landscape efficiently. We also

present guidance on leveraging the bibliometric analysis and logical framework to identify potential research agendas.

This guide offers a detailed demonstration of how to structure an SLR that consists of data collection, cleaning, and analysis. In particular, we also simulate structuring an SLR on sustainability reporting to improve methodological replicability. The comprehensive nature of this guide contributes significant value to the existing literature by facilitating the systematic execution of literature reviews, identifying research gaps, and formulating future research agendas. Therefore, this study will benefit early career researchers and research students to conduct a comprehensive, advanced, and scientific SLR. In educational research, this paper supports the calling for scholarly endeavours to conduct periodic reviews, synthesis, and analysis of the published literature by enhancing their methodological approach.

References

- Abdulla, A., & Krishnamurthy, M. (2016). Comparing retrieval of systematic review searches in health sciences areas using two major databases. *Reference Reviews*, 30(9), 1-5. <https://doi.org/10.1108/RR-03-2016-0082>
- Agostino, I. R. S., da Silva, W. V., da Veiga, C. P., & Souza, A. M. (2020). Forecasting models in the manufacturing processes and operations management: systematic literature review. *Journal of Forecasting*, 39(7), 1043-1056. <https://doi.org/10.1002/for.2674>
- Anaç, M., Ayalp, G. G., & Erdayandi, K. (2023). Prefabricated construction risks: a holistic exploration through advanced bibliometric tool and content analysis. *Sustainability*, 15, 11916. <https://doi.org/10.3390/su151511916>
- Anderson, M. H., & Lemken, R. K. (2023). Citation context analysis as a method for conducting rigorous and impactful literature reviews. *Organizational Research Methods*, 26(1), 77-106. <https://doi.org/10.1177/1094428120969905>
- Aria, M., & Cuccurullo, C. (2017). Bibliometrix: an R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, 11(4), 959-975. <https://doi.org/10.1016/j.joi.2017.08.007>
- Asatullaeva, Z., Aghdam, R. F. Z., Ahmad, N., & Tashpulatova, L. (2021). The impact of foreign aid on economic development: A systematic literature review and content analysis of the top 50 most influential papers. *Journal of International Development*, 33, 717-751. <https://doi.org/10.1002/jid.3543>
- Barry, E. S., Merkebu, J., & Varpio, L. (2022). State-of-the-art literature review methodology: A six-step approach for knowledge synthesis. *Perspectives on Medical Education*, 11(5), 281-299. <https://doi.org/10.1007/s40037-022-00725-9>
- Bashir, I., & Qureshi, I. H. (2023). Examining theories, mediators and moderators in financial well-being literature: A systematic review and future research agenda. *Qualitative Research in Organizations and Management: An International Journal*, 18(4), 265-290. <https://doi.org/10.1108/QROM-04-2022-2314>
- Belloque, G., Linnenluecke, M. K., Marrone, M., Singh, A. K., & Xue, R. (2021). 55 years of Abacus: evolution of research streams and future research directions. *Abacus*, 57(3), 593-618. <https://doi.org/10.1111/abac.12232>
- Blanco-González-Tejero, C., Ribeiro-Navarrete, B., Cano-Marin, E., & McDowell, W. C. (2023). A systematic literature review on the role of artificial intelligence in entrepreneurial activity. *International Journal on Semantic Web and Information Systems*, 19(1), 1-16. <https://doi.org/10.4018/IJSWIS.318448>
- Boell, S. K., & Cecez-Kecmanovic, D. (2016). On being 'systematic' in literature reviews. In L. P. Willcocks, C. Sauer, & M. C. Lacity (Eds.), *Formulating Research Methods for*

- Information Systems* (Vol. 2, pp. 48-78). Palgrave Macmillan. https://doi.org/10.1057/9781137509888_3
- Borghei, Z. (2021). Carbon disclosure: A systematic literature review. *Accounting & Finance*, 61, 5255–5280. <https://doi.org/10.1111/acfi.12757>
- Boyack, K. W., & Klavans, R. (2010). Co-citation analysis, bibliographic coupling, and direct citation: which citation approach represents the research front most accurately? *Journal of the American Society for Information Science and Technology*, 61(12), 2389-2404. <https://doi.org/10.1002/asi.21419>
- Burki, U., Najam, U., & Dahlstrom, R. (2022). Measuring environmental performance in business to business relationships: A bibliometric review. *Marketing Intelligence & Planning*, 40(2), 205-226. <https://doi.org/10.1108/MIP-05-2021-0141>
- Calandra, D., Wang, T., Cane, M., & Alfiero, S. (2023). Management of hydrogen mobility challenges: A systematic literature review. *Journal of Cleaner Production*, 410, 137305. <https://doi.org/10.1016/j.jclepro.2023.137305>
- Carvalho, P., & Alves, H. (2023). Customer value co-creation in the hospitality and tourism industry: A systematic literature review. *International Journal of Contemporary Hospitality Management*, 35(1), 250-273. <https://doi.org/10.1108/IJCHM-12-2021-1528>
- Cavallaro, F., & Nocera, S. (2022). Integration of passenger and freight transport: A concept-centric literature review. *Research in Transportation Business & Management*, 43, 100718. <https://doi.org/10.1016/j.rtbm.2021.100718>
- Chen, C. (2003). On the shoulders of giants. In *Mapping Scientific Frontiers: The Quest for Knowledge Visualization* (pp. 135-166). Springer. https://doi.org/10.1007/978-1-4471-0051-5_5
- Chen, C. (2016). *CiteSpace: A Practical Guide for Mapping Scientific Literature*. Nova Science Publishers.
- Cobo, M. J., López-Herrera, A. G., Herrera-Viedma, E., & Herrera, F. (2011). An approach for detecting, quantifying, and visualizing the evolution of a research field: a practical application to the fuzzy sets theory field. *Journal of Informetrics*, 5(1), 146-166. <https://doi.org/10.1016/j.joi.2010.10.002>
- Cooper, C., Booth, A., Britten, N., & Garside, R. (2017). A comparison of results of empirical studies of supplementary search techniques and recommendations in review methodology handbooks: A methodological review. *Systematic Reviews*, 6, Article Article 234. <https://doi.org/10.1186/s13643-017-0625-1>
- Dantas, R., & Fleck, D. (2023). Challenges in identifying studies to include in a systematic literature review: An analysis of the organizational growth and decline topics. *Global Knowledge, Memory and Communication*. <https://doi.org/10.1108/GKMC-03-2023-0098>
- Delwiche, F. A., & Hall, E. F. (2007). Mapping the literature of athletic training. *Journal of the Medical Library Association*, 95(2), 195-201. <https://doi.org/10.3163/1536-5050.95.2.195>
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285-296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
- Efron, S. E., & Ravid, R. (2018). *Writing the Literature Review : A Practical Guide*. Guilford Publications.
- Fernandez, D., Dastane, O., Zaki, H. O., & Aman, A. (2023). Robotic process automation: Bibliometric reflection and future opportunities. *European Journal of Innovation Management*. <https://doi.org/10.1108/EJIM-10-2022-0570>

- Fiaz, A., Ahmad, N., Al-Abri, A., Khurshid, N., & Menegaki, A. (2023). Exchange rate misalignment: A systematic literature review based on citation and content analysis. *OPEC Energy Review*, 47(3), 176-196. <https://doi.org/10.1111/opec.12278>
- Funko, I. S., Vlacic, B., & Dabic, M. (2023). Corporate entrepreneurship in public sector: A systematic literature review and research agenda. *Journal of Innovation & Knowledge*, 8, 100343. <https://doi.org/10.1016/j.jik.2023.100343>
- Galport, M., & Galport, N. (2015). Methodological trends in research on evaluation. *New Directions for Evaluation*, 2015(148), 17-29. <https://doi.org/10.1002/ev.20154>
- Garfield, E. (2009). From the science of science to scientometrics visualizing the history of science with HistCite software. *Journal of Informetrics*, 3(3), 173-179. <https://doi.org/10.1016/j.joi.2009.03.009>
- Gepp, A., Linnenluecke, M. K., O'Neill, T. J., & Smith, T. (2018). Big data techniques in auditing research and practice: Current trends and future opportunities. *Journal of Accounting Literature*, 40, 102-115. <https://doi.org/10.1016/j.acclit.2017.05.003>
- Glaser, B. G., & Strauss, A. L. (1999). Discovery of grounded theory. In *Strategies for Qualitative Research*. Routledge. <https://doi.org/10.4324/9780203793206>
- Green, B. N., Johnson, C. D., & Adams, A. (2006). Writing narrative literature reviews for peer-reviewed journals: Secrets of the trade. *Journal of Chiropractic Medicine*, 5(3), 101-117. [https://doi.org/10.1016/S0899-3467\(07\)60142-6](https://doi.org/10.1016/S0899-3467(07)60142-6)
- Greenhalgh, T., Thorne, S., & Malterud, K. (2018). Time to challenge the spurious hierarchy of systematic over narrative reviews? *European Journal of Clinical Investigation*, 48(6), 12931. <https://doi.org/10.1111/eci.12931>
- Gyimah, P., Appiah, K. O., & Appiagyei, K. (2023). Seven years of United Nations' sustainable development goals in Africa: A bibliometric and systematic methodological review. *Journal of Cleaner Production*, 395, 136422. <https://doi.org/10.1016/j.jclepro.2023.136422>
- Hossain, A., Bose, S., & Shamsuddin, A. (2023). Diffusion of integrated reporting, insights and potential avenues for future research. *Accounting & Finance*, 63, 2503-2555. <https://doi.org/10.1111/acfi.12981>
- Hossain, M. R., Akhter, F., & Sultana, M. M. (2022). SMEs in Covid-19 crisis and combating strategies: A systematic literature review (SLR) and a case from emerging economy. *Operations Research Perspectives*, 9, Article Article 100222. <https://doi.org/10.1016/j.orp.2022.100222>
- Jansen, E. P. (2018). Bridging the gap between theory and practice in management accounting: Reviewing the literature to shape interventions. *Accounting, Auditing & Accountability Journal*, 31(5), 1486-1509. <https://doi.org/10.1108/AAAJ-10-2015-2261>
- Kaiser, C., Stocker, A., & Papatheocharous, E. (2021). Distracted driver monitoring with smartphones: A preliminary literature review. 29th Conference of Open Innovations Association (FRUCT), Finland.
- Kumar, V. M. V., & Kumar, J. P. S. (2023). Insights on financial literacy: a bibliometric analysis. *Managerial Finance*, 49(7), 1169-1201. <https://doi.org/10.1108/MF-08-2022-0371>
- Lardo, A., Corsi, K., Varma, A., & Mancini, D. (2022). Exploring blockchain in the accounting domain: A bibliometric analysis. *Accounting, Auditing & Accountability Journal*, 35(9), 204-233. <https://doi.org/10.1108/AAAJ-10-2020-4995>
- Lehmann, S., & Bengart, P. (2016). Replications hardly possible: Reporting practice in top-tier marketing journals. *Journal of Modelling in Management*, 11(2), 427-445. <https://doi.org/10.1108/JM2-04-2014-0030>

- Lemken, R. K., & Anderson, M. H. (2022). Tracing the influence of James March's most cited works: An empirical approach using historical analysis of co-citation contexts. *Journal of Management History*, 28(1), 107-133. <https://doi.org/10.1108/JMH-01-2021-0009>
- Liang, Y. (2023). Capital and labour distortion in China: A systematic literature review using HistCite. *Accounting & Finance*, 63, 1759–1784. <https://doi.org/10.1111/acfi.12926>
- Lindgreen, A., Benedetto, C. A. D., Brodie, R. J., & Borgh, M. v. d. (2020). How to undertake great cross-disciplinary research. *Industrial Marketing Management*, 90, A1-A5. <https://doi.org/10.1016/j.indmarman.2020.03.025>
- Linnenluecke, M. K., Birt, J., Chen, X., Ling, X., & Smith, T. (2017). Accounting research in Abacus, A&F, AAR, and AJM from 2008–2015: A review and research agenda. *Abacus*, 53(2), 159-179. <https://doi.org/10.1111/abac.12107>
- Linnenluecke, M. K., Chen, X., Ling, X., Smith, T., & Zhua, Y. (2017). Research in finance: A review of influential publications and a research agenda. *Pacific-Basin Finance Journal*, 43, 188-199. <https://doi.org/10.1016/j.pacfin.2017.04.005>
- Linnenluecke, M. K., Marrone, M., & Singh, A. K. (2020a). Conducting systematic literature reviews and bibliometric analyses. *Australian Journal of Management*, 45(2), 175-194. <https://doi.org/10.1177/0312896219877678>
- Linnenluecke, M. K., Marrone, M., & Singh, A. K. (2020b). Sixty years of Accounting & Finance: A bibliometric analysis of major research themes and contributions. *Accounting & Finance*, 60, 3217–3251. <https://doi.org/10.1111/acfi.12714>
- Lombardi, R., de Villiers, C., Moscariello, N., & Pizzo, M. (2022). The disruption of blockchain in auditing – A systematic literature review and an agenda for future research. *Accounting, Auditing & Accountability Journal*, 35(7), 1534-1565. <https://doi.org/10.1108/AAAJ-10-2020-4992>
- Macaro, E. (2019). Systematic reviews in applied linguistics. In J. McKinley & H. Rose (Eds.), *The Routledge Handbook of Research Methods in Applied Linguistics*. Routledge. <https://doi.org/10.4324/9780367824471>
- Machi, L. A., & McEvoy, B. T. (2016). *The Literature Review : Six Steps to Success*. Corwin Press.
- Manetti, G., Bellucci, M., & Oliva, S. (2021). Unpacking dialogic accounting: A systematic literature review and research agenda. *Accounting, Auditing & Accountability Journal*, 34(9), 250-283. <https://doi.org/10.1108/AAAJ-08-2020-4736>
- Marrone, M., Linnenluecke, M. K., Richardson, G., & Smith, T. (2020). Trends in environmental accounting research within and outside of the accounting discipline. *Accounting, Auditing & Accountability Journal*, 33(8), 2167-2193. <https://doi.org/10.1108/AAAJ-03-2020-4457>
- Massaro, M., Dumay, J., & Guthrie, J. (2016). On the shoulders of giants: undertaking a structured literature review in accounting. *Accounting, Auditing & Accountability Journal*, 29(5), 767-801. <https://doi.org/10.1108/AAAJ-01-2015-1939>
- Modem, R., Lakshminarayanan, S., Pillai, R., & Prabhu, N. (2021). Twenty-five years of career growth literature: A review and research agenda. *Industrial and Commercial Training*, 54(1), 152-182. <https://doi.org/10.1108/ICT-04-2021-0030>
- Mody, M. A., Hanks, L., & Cheng, M. (2021). Sharing economy research in hospitality and tourism: A critical review using bibliometric analysis, content analysis and a quantitative systematic literature review. *International Journal of Contemporary Hospitality Management*, 33(5), 1711-1745. <https://doi.org/10.1108/IJCHM-12-2020-1457>
- Müller-Bloch, C., & Kranz, J. (2015). A framework for rigorously identifying research gaps in qualitative literature reviews. International Conference on Information Systems,

- Nash-Stewart, C. E., Kruesi, L. M., & Del Mar, C. B. (2012). Does Bradford's law of scattering predict the size of the literature in Cochrane reviews? *Journal of the Medical Library Association*, 100(2), 135-138. <https://doi.org/10.3163/1536-5050.100.2.013>
- Nayak, B., Bhattacharyya, S. S., & Krishnamoorthy, B. (2022). Exploring the black box of competitive advantage – An integrated bibliometric and chronological literature review approach. *Journal of Business Research*, 139, 964-982. <https://doi.org/10.1016/j.jbusres.2021.10.047>
- Nguyen, N. T., & Chia, Y. T. (2023). Decolonizing research imagination: a journey of reshaping research epistemology and ontology. *Asia Pacific Education Review*, 24, 213-225. <https://doi.org/10.1007/s12564-023-09822-8>
- Nightingale, A. (2009). A guide to systematic literature reviews. *Surgery (Oxford)*, 27(9), 381-384. <https://doi.org/10.1016/j.mpsur.2009.07.005>
- Nirmal, D. D., Reddy, K. N., & Singh, S. K. (2023). Application of fuzzy methods in green and sustainable supply chains: Critical insights from a systematic review and bibliometric analysis. *Benchmarking: An International Journal*. <https://doi.org/10.1108/BIJ-09-2022-0563>
- Obregon, S. L., Lopes, L. F. D., Kaczam, F., da Veiga, C. P., & da Silva, W. V. (2022). Religiosity, spirituality and work: a systematic literature review and research directions. *Journal of Business Ethics*, 179, , 573-595. <https://doi.org/10.1007/s10551-021-04856-7>
- Okoli, C. (2015). A guide to conducting a standalone systematic literature review. *Communications of the Association for Information Systems*, 37, 43. <http://aisel.aisnet.org/cais/vol37/iss1/43>
- Pandey, D. K., Hunjra, A. m. I., Hassan, M. K., & Rai, V. K. (2023). Venture capital financing during crises: A bibliometric review. *Research in International Business and Finance*, 64, 1-17. <https://doi.org/10.1016/j.ribaf.2022.101856>
- Paré, G., & Kitsiou, S. (2017). Methods for literature reviews. In F. Lau & C. Kuziemsky (Eds.), *Handbook of eHealth Evaluation: An Evidence-based Approach*. University of Victoria.
- Qiu, J., Zhao, R., Yang, S., & Dong, K. (2017). Author distribution of literature information: Lotka's law. In *Informetrics*. Springer. https://doi.org/10.1007/978-981-10-4032-0_6
- Ratten, V. (2023). Bibliometrics and literature reviews in business management. In *Research Methodologies for Business Management*. Routledge. <https://doi.org/10.4324/9781003314516>
- Rowley, C., & Paul, J. (2021). Introduction: The role and relevance of literature reviews and research in the Asia Pacific. *Asia Pacific Business Review*, 27(2), 145-149. <https://doi.org/10.1080/13602381.2021.1894839>
- Santa-Eulalia, L. A., Halladjian, G., D'Amours, S., & Frayret, J.-M. (2011). Integrated methodological frameworks for modeling agent-based advanced supply chain planning systems: A systematic literature review. *Journal of Industrial Engineering and Management*, 4(4), 624-668. <https://doi.org/10.3926/jiem.326>
- Senivongse, C., Bennet, A., & Mariano, S. (2017). Utilizing a systematic literature review to develop an integrated framework for information and knowledge management systems. *VINE Journal of Information and Knowledge Management Systems*, 27(2), 250-264. <https://doi.org/10.1108/VJIKMS-03-2017-0011>
- Shabbir, M. S., Batool, F., & Mahmood, A. (2022). Trends in entrepreneurship education: A systematic literature review. *Higher Education, Skills and Work-Based Learning*, 12(6), 1040-1056. <https://doi.org/10.1108/HESWBL-05-2022-0105>

- Shahana, T., Lavanya, V., & Bhat, A. R. (2023). State of the art in financial statement fraud detection: A systematic review. *Technological Forecasting and Social Change*, 129, 122527. <https://doi.org/10.1016/j.techfore.2023.122527>
- Shekhar, & Gupta, A. (2022). Mapping research on family business in tourism and hospitality: A bibliometric analysis. *Journal of Family Business Management*, 12(3), 367-392. <https://doi.org/10.1108/JFBM-10-2021-0121>
- Smith, K. (2018). Reshaping international relations: Theoretical innovations from Africa. *All Azimuth*, 7(2), 81-92. <https://doi.org/10.20991/allazimuth.335811>
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333-339. <https://doi.org/10.1016/j.jbusres.2019.07.039>
- Stewart, B. M., Cipolla, J. M., & Best, L. A. (2009). Extraneous information and graph comprehension: Implications for effective design choices. *Campus-Wide Information Systems*, 26(3), 191-200. <https://doi.org/10.1108/10650740910967375>
- Tarquinio, L., & Posadas, S. C. (2020). Exploring the term “non-financial information”: An academics’ view. *Meditari Accountancy Research*, 28(5), 727-749. <https://doi.org/10.1108/MEDAR-11-2019-0602>
- Trejos, C. A. R., Meisel, J. D., & Jaimes, W. A. (2023). Humanitarian aid distribution logistics with accessibility constraints: A systematic literature review. *Journal of Humanitarian Logistics and Supply Chain Management*, 13(1), 26-41. <https://doi.org/10.1108/JHLSCM-05-2021-0041>
- Tshabangu, I., Ba', S., & Madondo, S. M. (2021). The research process: Literature review and other strategies. In P. A. Hershey (Ed.), *Approaches and Processes of Social Science Research*. Hershey (pp. 1-22). IGI Global. <https://doi.org/10.4018/978-1-7998-6622-0.ch001>
- Turnbull, D., Chugh, R., & Luck, J. (2023). Systematic-narrative hybrid literature review: A strategy for integrating a concise methodology into a manuscript. *Social Sciences & Humanities Open*, 7(1), 100381. <https://doi.org/10.1016/j.ssaho.2022.100381>
- van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523-538. <https://doi.org/10.1007/s11192-009-0146-3>
- van Eck, N. J., & Waltman, L. (2014). Visualizing bibliometric networks. In Y. Ding, R. Rousseau, & D. Wolfram (Eds.), *Measuring Scholarly Impact*. Springer. https://doi.org/10.1007/978-3-319-10377-8_13
- Vermiglio, C., Noto, G., Bolívar, M. P. R., & Zarone, V. (2022). Disaster management and emerging technologies: A performance-based perspective. *Meditari Accountancy Research*, 30(4), 1093-1117. <https://doi.org/10.1108/MEDAR-02-2021-1206>
- Warin, T., & Stojkov, A. (2021). Machine learning in finance: A metadata-based systematic review of the literature. *Journal of Risk and Financial Management*, 14(7), 302. <https://doi.org/10.3390/jrfm14070302>
- Yadav, S., & Lenka, U. (2022). A systematic review of job-related diversity and future research directions. *Equality, Diversity and Inclusion: An International Journal*, 41(8), 1181-1208. <https://doi.org/10.1108/EDI-12-2021-0324>
- Yang, K., & Thoo, A. C. (2023). Visualising the knowledge domain of reverse logistics and sustainability performance: Scientometric mapping based on VOSviewer and CiteSpace. *Sustainability*, 15(2), Article Article 1105. <https://doi.org/10.3390/su15021105>
- Zainuldin, M. H., & Lui, T. K. (2022). A bibliometric analysis of CSR in the banking industry: A decade study based on Scopus scientific mapping. *International Journal of Bank Marketing*, 40(1), 1-26. <https://doi.org/10.1108/IJBM-04-2020-0178>

Zhang, L., Ling, J., & Lin, M. (2023). Risk management research in East Asia: A bibliometric analysis. *International Journal of Intelligent Computing and Cybernetics*, 16(3), 574-594. <https://doi.org/10.1108/IJICC-10-2022-0276>