UNVEILING THE ASCENT OF SERVANT LEADERSHIP: A RECENT DECADE BIBLIOMETRIC ANALYSIS

Ariff Zakwan[1], Zuraidah Abdullah[2*]

[1] Department of Educational Management, Planning and Policy, Faculty of Education, Universiti Malaya, Malaysia
     Email: ariffzeckzakwan@gmail.com
[2] Department of Educational Management, Planning and Policy, Faculty of Education, Universiti Malaya, Malaysia
     Email: zuraidahab@um.edu.my
[*] Corresponding Author

Article Info:

Abstract:

This study explored trends in servant leadership research over the past decade (2015-2024) using a bibliometric approach focusing on the Scopus database. The analysis revealed a rapidly expanding field, with a sharp rise in publications, especially after 2020. Pioneering scholars like Karatepe, Aboramadan, and van Dierendonck played a key role in laying the groundwork. The research primarily focuses on Business, Management, and Accounting, emphasising applications within organisations. However, there's potential for expansion into Social Sciences due to growing interest. The research has a global reach, with contributions from both Western and Eastern countries appearing well-balanced. Highly influential works by Hoch et al., Eva et al., and Liden et al., have significantly shaped the field's direction. Emerging trends highlight leadership styles, employee well-being, and contextual applications, particularly within the public sector. The keywords analysis underscores the multifaceted nature of servant leadership research, showcasing diverse scholarly interests. This study sheds light on key areas of servant leadership research, including current trends, global contributions, influential authors, and prominent themes. By identifying these elements, researchers gain valuable insights to address knowledge gaps and chart future directions. Ultimately, these findings can contribute to advancing and applying servant leadership theory, leading to improved leadership practices and organisational success.

Keywords:

Bibliometric Analysis, Leaders, Servant Leadership, Scopus Database, VOSviewer

Introduction

Leadership styles have captivated the interest of scholars and practitioners alike for decades. The search for effective leadership models has become even more critical in today's complex and dynamic organisational landscape. One of the leadership philosophies gaining significant traction in recent years is servant leadership. This approach, which focuses on follower growth, empowerment, and well-being, starkly contrasts traditional, power-centric leadership styles (Saleem et al., 2022). While the core tenets of servant leadership were first articulated by Greenleaf (1979), it was in the late 20th century that this concept received widespread academic attention. This burgeoning interest has translated into a significant increase in scholarly publications on servant leadership. To understand the current state of knowledge in this domain and identify emerging trends, a bibliometric analysis of the current decade (2015-2024) is crucial.

This study aims to delve into servant leadership research published between 2015 and 2024 by employing a bibliometric approach. Bibliometrics, a quantitative method for analysing scholarly literature, allows us to map publication trends, identify influential authors and journals, and uncover thematic clusters within the field. Through this analysis, we can gain valuable insights into the evolution of servant leadership research over the past ten years. This investigation explores several critical aspects of servant leadership research. This investigation involved examining publication volume over the decade since 2015. This analysis will reveal growth patterns and potential thematic shifts in servant leadership research, allowing us to understand how the field has evolved. Furthermore, we will delve into the authorship landscape by pinpointing the most prolific scholars and uncovering potential research collaborations. Identifying these key players will illuminate who is shaping the current conversation on servant leadership.

Another facet of this study will focus on the disciplinary context of servant leadership research. By analysing the subject areas where this research appears most frequently, we can identify the core disciplines contributing to and disseminating knowledge in this domain. Understanding the academic home of servant leadership research will provide valuable insights into its theoretical foundations and potential for cross-disciplinary exploration. The geographic distribution of servant leadership research is also becoming one of interest. Examining which countries have contributed the most articles will provide insights into the global landscape of this field. This analysis can reveal areas of international collaboration and highlight potential opportunities for further research partnerships across borders.

Beyond authorship and subject areas, this study will also explore the intellectual structure of servant leadership research. By identifying the most highly cited authors and frequently occurring keywords, we can showcase influential voices shaping the field and highlight key research themes. Additionally, analysing co-citation patterns, which reveal how scholarly articles reference each other, will allow us to visualise the network of interconnected ideas within servant leadership research. Finally, this study explored the research collaborations by visualising co-authorship patterns between countries. This analysis will provide valuable insights into how scholars from various regions work together to advance the understanding of servant leadership.

Research Questions

RQ1: What are the research trends of the recent 10 years on Servant Leadership?
RQ2: Who writes the most number of articles?
RQ3: What are the subject area published the most articles?
RQ4: Which country contributed the most articles to the study?
RQ5: Who are the top 10 authors based on the citation by research?
RQ6: What are the popular keywords related to the study?
RQ7: What are the co-authorship patterns of collaboration by countries?
RQ8: What are the patterns of co-citation by authorship?

Literature Review

Servant leadership, a philosophy emphasising the growth and well-being of followers, has emerged as a prominent leadership model in recent years. While the core principles introduced by Greenleaf (1979), the past decade has witnessed a surge in scholarly interest, reflected in a rapidly expanding body of literature. This review aims to synthesise current knowledge on servant leadership by examining key themes, theoretical frameworks, and empirical findings.

Several key characteristics define servant leadership. Central to this concept is the leader's focus on follower development (Eslamdoust & Mahmoudinazlou, 2023). Servant leaders prioritise empowering employees, fostering their growth, and creating an environment where individuals can reach their full potential (Latifatus, 2023). Additionally, servant leaders demonstrate high emotional intelligence, characterised by empathy, self-awareness, and the ability to build strong relationships with followers (Davis, 2017). Furthermore, servant leadership emphasises ethical decision-making and a commitment to social responsibility. The theoretical underpinnings of servant leadership draw from various disciplines, including ethics, organisational behaviour, and positive psychology. Greenleaf (1979) seminal work emphasises the "servant-as-leader" model, where leadership is viewed as a service to others rather than a position of power. Additionally, van Dierendonck & Patterson (2010) Servant Leadership theory posits that servant leaders exhibit specific behaviours like relationship, empathy, empowerment, and stewardship. These theories contribute to a deeper understanding of the essential qualities and practices associated with servant leadership.

Empirical research has explored the impact of servant leadership across various organisational contexts. Studies consistently demonstrate positive associations between servant leadership and employee outcomes, including increased job satisfaction, organisational commitment, and trust in leadership (Aprilda et al., 2019). Furthermore, evidence suggests that servant leadership fosters a positive work environment, reducing turnover and improving employee well-being (Huning et al., 2020). Recent research delves into the influence of servant leadership on organisational outcomes, with studies indicating a positive correlation with organisational performance, innovation, and ethical decision-making. The burgeoning literature on servant leadership offers valuable insights for scholars and practitioners. Future research can explore the contextual factors influencing the effectiveness of servant leadership and delve into the mechanisms through which servant leaders impact individual and organisational outcomes. For practitioners, the literature provides a framework for developing servant leadership skills and fostering a more empowering and employee-centric work environment.

In conclusion, servant leadership has established itself as a crucial area of leadership research with a growing body of theoretical and empirical literature. By fostering follower growth, building trust, and prioritising ethical behaviour, servant leadership offers a promising approach to navigating the complexities of modern organisations (Gandolfi et al., 2017). The continued exploration of this concept holds immense potential for enhancing employee well-being, organisational performance and ultimately, building a more positive and ethical work landscape. In summary, this bibliometric analysis aims to map the publication trends, authorship landscape, thematic clusters, and collaborative networks in servant leadership research from 2015 to 2024, offering a comprehensive overview of the field's evolution and global impact.

Methodology

This study utilises a bibliometric approach, which involves collecting, analysing, and interpreting bibliographic data from scholarly publications (Donthu et al., 2021). This encompasses not only standard descriptive elements like publication year, journals, and author affiliation but also sophisticated methods like document co-citation analysis (Lim & Kumar, 2024). A successful literature review necessitates an iterative process encompassing the identification of relevant keywords, literature search, and meticulous analysis to guarantee a comprehensive bibliography and dependable results (Öztürk et al., 2024). Recognising the value of high-quality publications in providing insights into the theoretical foundations of a field, this study prioritises such sources. The Scopus database was chosen for data collection to ensure data reliability, aligning with its established reputation for dependability (Zhu & Liu, 2020).

To ensure the reliability of the analysis, we took a step toward harmonizing the bibliometric data since it is crucial to ensure consistency and comparability across different sources' titles. This involves standardizing the article information, including the titles, abstract, and author name. We meticulously verified the data to derive meaningful insights in the field of study. Additionally, the inclusion criteria focused exclusively on peer-reviewed academic journals, purposefully excluding books and lecture notes to maintain the inclusion of high-quality research. Notably, Elsevier's Scopus database, recognised for its extensive coverage, facilitated gathering relevant publications from 2023 to March 2024 for further examination.

Data Search Strategy

The study employed a multi-step screening process to identify relevant articles for retrieval from the Scopus database. Initially, a broad search using "servant AND leader" yielded 3,077 articles. To refine the focus of the analysis, the search string was subsequently modified as in Table 1. By taking this step, we are able to narrow down the selection of the article to ensure there is consistency in analysis later. This revised search strategy resulted in 1,214 articles, after carefully selected with the specific inclusion and exclusion as detailed in Table 2, which were then included in the bibliometric analysis. It is important to note that this analysis encompassed all publications on servant leadership found within the Scopus database as of May 2024.

Table 1: The Search String

Database	Search String
Scopus	TITLE-ABS-KEY (servant AND leader*) AND (LIMIT-TO (DOCTYPE , "ar")) AND (LIMIT-TO (LANGUAGE , "English")) AND (LIMIT-TO (SUBJAREA , "BUSI") OR LIMIT-TO (SUBJAREA , "SOCI")) AND (LIMIT-TO (PUBYEAR , 2015) OR LIMIT-TO (PUBYEAR , 2016) OR LIMIT-TO (PUBYEAR , 2017) OR LIMIT-TO (PUBYEAR , 2018) OR LIMIT-TO (PUBYEAR , 2019) OR LIMIT-TO (PUBYEAR , 2020) OR LIMIT-TO (PUBYEAR , 2021) OR LIMIT-TO (PUBYEAR , 2022) OR LIMIT-TO (PUBYEAR , 2023) OR LIMIT-TO (PUBYEAR , 2024))

Source: Scopus Database

Table 2: The Selection Criterion

Criterion	Inclusion	Exclusion
Timeline	2015-2024	<2015
Language	English	Non-English
Document Type	Article	Non-Article
Source type	Journal (Article)	Book, Review

Source: Scopus Database

Data Analysis

Developed by Nees Jan van Eck and Ludo Waltman at Leiden University (van Eck & Waltman, 2010), VOSviewer is a user-friendly software designed explicitly for bibliometric analysis. This versatile tool empowers researchers to visualise and analyse scientific literature by creating intuitive network visualisations, clustering related research items, and generating density maps. VOSviewer's functionality extends to co-authorship, co-citation, and keyword co-occurrence networks, providing a comprehensive understanding of research landscapes (van Eck & Waltman, 2017). The interactive interface and continuous updates ensure efficient exploration of large datasets. Furthermore, the ability to compute metrics, customise visualisations, and handle various data sources makes VOSviewer a valuable resource for researchers seeking insights into complex research fields.

One of VOSviewer's key strengths is its ability to transform complex bibliometric data into visually interpretable maps and charts (Arruda et al., 2022). The software excels at network visualisation, particularly in clustering related items, analysing keyword co-occurrence patterns, and generating density maps. The user-friendly interface caters to novice and experienced users, facilitating efficient exploration of research landscapes. Continuous development keeps VOSviewer at the forefront of bibliometric analysis, offering valuable insights through customisable visualisations and metric computation. Its adaptability to different data types, such as co-authorship and citation networks, positions VOSviewer as a versatile and indispensable tool for scholars seeking deeper understanding within their research domains.

This study retrieved datasets encompassing publication year, title, author names, journal, citations, and keywords from the Scopus database from 2015 to May 2024. These datasets were then analysed using VOSviewer software version 1.6.19. Unlike Multidimensional Scaling (MDS), which relies on similarity metrics, VOSviewer employs a more fitting method

for co-occurrence analysis. This method, known as Association Strength (ASij), is calculated as: $ASij = Cij / (Wiwj)$, where Cij represents the observed number of co-occurrences between items i and j, and $Wiwj$ represents the expected number of co-occurrences if independence is assumed (van Eck & Waltman, 2010). Using this index, VOSviewer creates maps by positioning items based on the minimised weighted sum of squared distances between all item pairs.

Result And Finding

What Are The Research Trends Of The Recent Ten Years On Servant Leadership?
The first research question delves into the recent trends in servant leadership research over the past decade (2015-2024). Figure 1 visually depicts the publication output within this timeframe, revealing a significant upward trend. Notably, the number of journal articles and publications retrieved from the Scopus database displays a remarkably consistent increase. The most dramatic rise occurred between 2020 and 2021, with a jump of 62 published articles. This surge, from 125 articles in 2020 to 187 in 2021, underscores the growing interest and demand for research in this area.
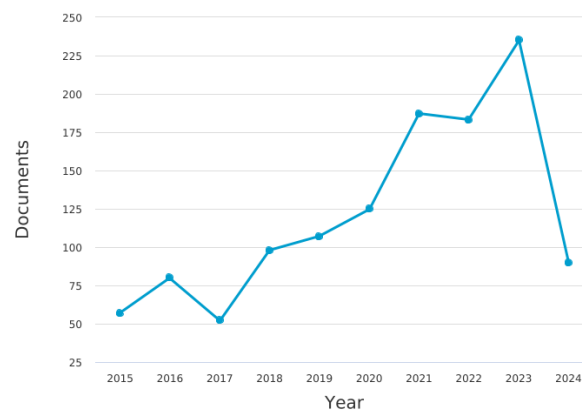

Figure 1: Total Number of Publications

2020 witnessed a more substantial increase in publications, potentially indicating a significant event or development in the field that prompted increased research activity and publishing. Table 3 shows that the trend continued to rise sharply in 2021 with 187 publications, while 2022 witnessed a notable publication count of 183, constituting a considerable proportion of the total. A slight decrement is observable in the subsequent year, 2021, with 187 publications. However, 2023 emerged as a pinnacle in publication frequency again, boasting the highest count of publications at 235, thus representing a significant proportion of the total publications in the decade. This prominence is further underscored by the corresponding percentage, which surpasses 19%, denoting substantial scholarly activity during this temporal epoch.

Table 3: Total Numbers Of Publications And Percentages

Year	Number of publications	Percentages
2024	90	7.4
2023	235	19.4
2022	183	15.1
2021	187	15.4
2020	125	10.3
2019	107	8.8

2018	98	8.1
2017	52	4.3
2016	80	6.6
2015	57	4.7

Source: SCOPUS Database

The data for 2024 indicates a further decrease in publication output compared to 2023. However, it is essential to note that this data may need to be completed or preliminary, as the year is still ongoing. The trend suggests that servant leadership has gained increasing attention and research interest in the Business and Social Sciences domains over the past decade, with a significant growth in publications from 2020 onwards. The peak in 2023 could be attributed to particular issues, conferences, or emerging research trends.

Who Writes The Most Number Of Articles?

To answer the second research question, we explored the top 10 scholars who contributed the most publications in the Scopus database. Table 4 shows the top ten authors with the most contributions from around 2015 to 2024 publication years. Karatepe became the top author with the most published articles in the Scopus database on the servant leadership area of studies.

Table 4: Number Of Articles Published By Authors

Author	Article	Percentages
Karatepe, O.M.	13	1.07
Aboramadan, M.	10	0.82
Ruiz-Palomino, P.	10	0.82
van Dierendonck, D.	10	0.82
Khan, M.M.	9	0.74
Liden, R.C.	9	0.74
Ahmed, S.S.	8	0.65
Eva, N.	8	0.65
Islam, T.	8	0.65
Mubarik, M.S.	8	0.65

Source: SCOPUS Database

The bibliometric analysis also reveals the percentages of the contributions of these top ten authors in publications from 2015 until recent years. Notably, Karatepe, O.M. emerges as the most prolific, constituting approximately 1.07% of the total publications among all the authors. This prominence underscores Karatepe's scholarly contribution to servant leadership research and literature. Following closely are Aboramadan, Ruiz-Palomino and van Dierendonck, with ten publications contributing 0.82% to the body of literature. Additionally, notable figures in servant leadership studies such as Khan, M.M., and Liden, R.C. contribute 9 published articles with 0.74%. Another four authors who published 8 articles in the Scopus database contributed 0.65% among these 10 years is Ahmed, s.s., Eva, N., Islam, T., and Mubarak, M.S.

What Are The Subject Areas Published The Most Articles?

The third research question attempts to find which subject areas contribute most to servant leadership studies. We analysed the source of information from Scopus and identified 11 subject areas, including others. Two dominant subject areas, as shown in Figure 2, contribute the most to servant leadership research.
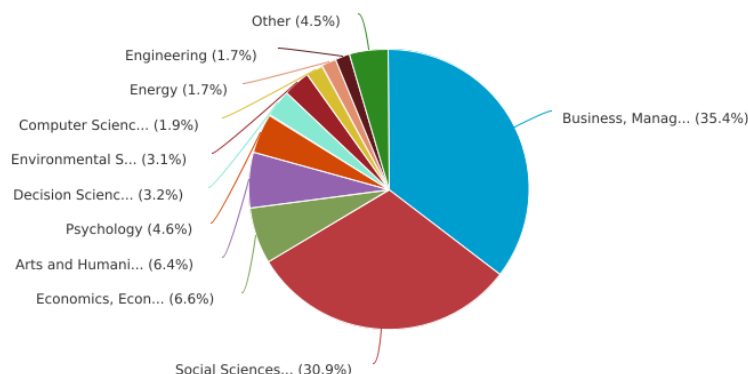
Figure 2: Published Articles By Subject Area

At the centre of the analysis are two prominent subject areas: Business, Management, and Accounting, which accounts for the most significant portion at 35.4%, and Social Sciences, which contributes 30.9% of the documents, as shown in Table 5. This significant representation highlights the strong research focus and interest in these fields, particularly in topics related to business, management, and the various aspects of social sciences. The next largest segment belongs to Arts and Humanities (6.4%), followed closely by Psychology (4.6%), suggesting an interdisciplinary approach or application of the research topic across these domains. Decision Sciences (3.2%) and Environmental Science (3.1%) also have a notable presence, indicating potential connections or implications of the research in these areas.

Table 5: Number Of Publications and Percentages By Subject Area

Subject Area	Number of Publication	Percentages %
Business, Management and Accounting	799	35.4
Social Sciences	698	30.9
Economics, Econometrics and Finance	148	6.6
Arts and Humanities	144	6.4
Psychology	104	4.6
Decision Sciences	72	3.2
Environmental Science	71	3.1
Computer Science	42	1.9
Energy	39	1.7
Engineering	39	1.7

Source: Scopus Database

Several other subject areas are represented with smaller proportions, including Computer Science (1.9%), Energy (1.7%), Engineering (1.7%), and a collective "Other" category (4.5%), which likely encompasses various niche or interdisciplinary fields not explicitly specified. In summary, business, management and accounting, and social science have been the vast majority of existing research on servant leadership in this recent decade. However, there are opportunities for more work focused on economic and arts subject areas, which have already shown a significant percentage in this research focus.

Which Country Contributed The Most Articles On The Study

The fourth research question investigated the top contributing countries to servant leadership research within the past decade. We used the Scopus database to analyse the publication output

of the ten most productive countries. Figure 3 presents these top ten countries alongside their publication counts. The United States emerged as the leading contributor, with many publications (258). This dominance is evident in the substantial gap between the US and the second-ranked country, China (130 publications), a difference of 128 publications. While the US holds a clear lead, the remaining countries within the top ten exhibit a closer cluster in terms of publication volume, suggesting a more balanced distribution amongst these nations.
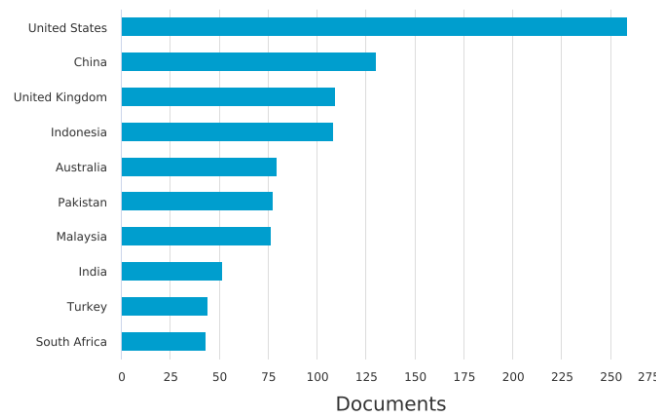

Figure 3: Number Of Published Articles By Country

Table 6 reveals the top contributors to servant leadership research literature. The United States stands out as the leading contributor, accounting for an impressive 21.25% of publications. China follows closely behind with a 10.70% share (130 publications). The United Kingdom ranks third with 109 publications (8.97%), followed closely by Indonesia (108 publications, 8.89%). These four nations, exceeding 100 publications each, have significantly contributed to the field. Australia, Pakistan, and Malaysia also demonstrate noteworthy contributions, each exceeding a 6% share of the literature. Australia leads this group with 79 publications, followed by Pakistan (77) and Malaysia (76). The publication volumes between these three countries are relatively close.

Table 6: Number Of Published Articles By Country With Percentages

Country	Number of Publication	Percentages
United States	258	21.25
China	130	10.70
United Kingdom	109	8.97
Indonesia	108	8.89
Australia	79	6.50
Pakistan	77	6.34
Malaysia	76	6.26
India	51	4.20
Turkey	44	3.62
South Africa	43	3.54

Source: Scopus Database

This analysis reveals a significant contribution from both Western and Eastern scholars. The United States stands out as the leading publisher, but the top ten countries are predominantly from Eastern regions. Indonesia (108 publications, 8.89%), Pakistan (77 publications, 6.34%), Malaysia (76 publications, 6.26%), India (51 publications, 4.2%), and Turkey (44 publications,

3.62%) all represent Eastern nations and demonstrate a well-balanced interest in this research area.

Who Are The Top Ten Authors Based On The Citation By Research

To address the fifth research question, we examined the ten most-cited authors in servant leadership research from 2015 to 2024. Table 7 presents these top ten authors. Collectively, their publications have garnered a total of 3,288 citations. Hoch et al. (2018) emerged as the most-cited author, with their article published in the Journal of Management, accumulating 654 citations. This work sheds light on the connection between servant leadership and transformational leadership, sparking significant interest and paving the way for further studies. Eva et al. (2019) follow closely with their highly cited systematic review published in Leadership Quarterly (642 citations), with just 12 citations behind Hoch et al. (2018). Both studies offer fresh perspectives on servant leadership literature and establish a strong foundation for future research. Liden et al. (2015) secured the third position with their noteworthy work published in Leadership Quarterly (343 citations). This work focuses on developing a short-form Servant Leadership Scale.

Leadership Quarterly became famous in servant leadership research studies as Chiniara & Bentein (2016), who became number four with 304 cited from the same journal source. Then, Newman et al. (2017)) came in fifth with 287 cited. They published an article in the Journal of Business Ethics about the influence of servant leadership towards organisational citizenship behaviour. Lemoine et al. (2019) seminal work, "Taking Stock of Moral Approaches to Leadership: An Integrative Review of Ethical, Authentic, and Servant Leadership," published in the esteemed Academy of Management Annals, stands as a beacon of scholarly excellence, garnering widespread acclaim with 279 citations. This integrative review offers a comprehensive synthesis of moral perspectives on leadership, elucidating the intricate interplay between ethical, authentic, and servant leadership paradigms, thus fostering a deeper understanding of the moral underpinnings of effective leadership practices.

Moreover, Fernandez & Shaw (2020) seminal treatise, "Academic Leadership in a Time of Crisis: The Coronavirus and COVID-19," published in the Journal of Leadership Studies, emerges as a timely and prescient contribution amidst the unprecedented challenges wrought by the COVID-19 pandemic. With 229 citations to its credit, this seminal work offers invaluable insights into the adaptive strategies and ethical imperatives inherent in navigating crises, thereby enriching our understanding of leadership dynamics in tumultuous times. Similarly, Anderson & Sun (2017) seminal review, "Reviewing Leadership Styles: Overlaps and the Need for a New 'Full-Range' Theory," published in the International Journal of Management Reviews, engenders critical reflection on the conceptual contours of leadership styles, advocating for a more nuanced and comprehensive theoretical framework to capture the multifaceted nature of leadership phenomena. With 197 citations, this review underscores the enduring relevance of theoretical refinement in advancing scholarly discourse in leadership studies.

Alvesson & Einola (2019) work "Warning for Excessive Positivity: Authentic Leadership and Other Traps in Leadership Studies," published in the Leadership Quarterly, critically examines prevailing leadership paradigms. With 185 citations, the authors caution against simplistic interpretations of constructs like authentic leadership, urging scholars to embrace a more nuanced and contextually sensitive approach. Alvesson & Einola (2019) advocate for a more

rigorous and reflexive scholarly discourse by interrogating the limitations of dominant theories and highlighting the complexities of organisational dynamics.

Table 7: Top Ten Cited Authors

Authors	Title	Year	Source Title	Cited by
(Hoch et al., 2018)	Do Ethical, Authentic, and Servant Leadership Explain Variance Above and Beyond Transformational Leadership? A Meta-Analysis	2018	Journal of Management	654
Eva et al. (2019)	Servant Leadership: A systematic review and call for future research	2019	Leadership Quarterly	642
Liden et al. (2015)	Servant leadership: Validation of a short form of the SL-28	2015	Leadership Quarterly	343
Chiniara & Bentein (2016)	Linking servant leadership to individual performance: Differentiating the mediating role of autonomy, competence and relatedness need satisfaction	2016	Leadership Quarterly	304
Newman et al. (2017)	How Servant Leadership Influences Organisational Citizenship Behavior: The Roles of LMX, Empowerment, and Proactive Personality	2017	Journal of Business Ethics	287
Lemoine et al. (2019)	Taking stock of moral approaches to leadership: An integrative review of ethical, authentic, and servant leadership	2019	Academy of Management Annals	279
Fernandez & Shaw (2020)	Academic Leadership in a Time of Crisis: The Coronavirus and COVID-19	2020	Journal of Leadership Studies	229
Anderson & Sun (2017)	Reviewing Leadership Styles: Overlaps and the Need for a New 'Full-Range' Theory	2017	International Journal of Management Reviews	197
Alvesson & Einola (2019)	Warning for excessive positivity: Authentic leadership and other traps in leadership studies	2019	Leadership Quarterly	185
Walumbwa et al. (2018)	Inspired to perform: A multilevel investigation of antecedents and consequences of thriving at work	2018	Journal of Organizational Behavior	168

Source: Scopus Database

Similarly, Walumbwa et al. (2018) study "Inspired to Perform: A Multilevel Investigation of Antecedents and Consequences of Thriving at Work," published in the Journal of Organizational Behavior, explores factors contributing to individual thriving in organisational settings. With 168 citations, this research illuminates the interplay between personal resources, organisational climates, and job crafting behaviours in fostering employee well-being and performance. By adopting a multilevel perspective, the authors offer valuable insights for cultivating environments that promote individual flourishing and organisational success.

What Are The Popular Keywords Related To The Study?

The analysis of popular keywords related to the study of servant leadership reveals several notable trends, as illustrated in Figure 4. At the centre of the network, the term "servant leadership" appears as the most prominent node, indicating its pivotal role in the research area under investigation. Surrounding this central concept are other keywords and themes interconnected through co-occurrence relationships. One cluster of keywords focuses on leadership-related concepts, such as "leadership," "leadership style," "authentic leadership," "transactional leadership," "ethical leadership," and "leadership development." These terms highlight exploring different leadership approaches, styles, and their potential connections or comparisons with servant leadership.

Another prominent cluster revolves around organisational and employee-related themes, including "organisational citizenship behaviour," "job satisfaction," "employee creativity," "public service motivation," "psychological empowerment," "organisational trust," and "innovative behaviour." These keywords suggest that the research examines the impact of servant leadership on various organisational outcomes, employee attitudes, and behaviours.

Several keywords related to specific contexts or settings appear in the network, such as "public administration," "public sector," "civil service," "local government," "hotels," and "Bangladesh." These terms indicate that servant leadership has been studied across diverse organisational settings, including the public sector, the hospitality industry, and specific geographical regions.
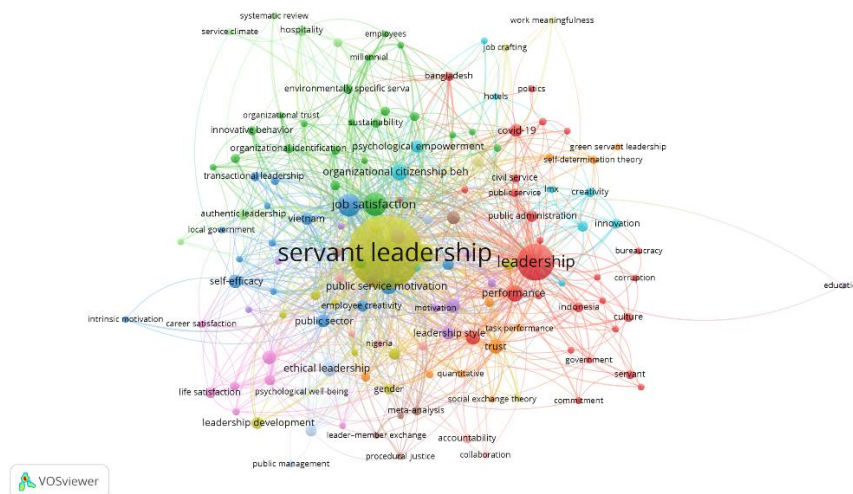

Figure 4: Network Visualization Map of Keywords Co-Occurrence

Theoretical perspectives and research approaches are also represented in the network, with keywords like "self-determination theory," "meta-analysis," "sustainability," "social exchange theory," "quantitative," and "systematic review." These terms provide insights into the theoretical foundations and methodological approaches employed in studying servant leadership. Interestingly, the network also includes keywords related to contemporary issues and emerging trends, such as "covid-19," "green servant leadership," "job crafting," and "work meaningfulness." These terms suggest that the research on servant leadership has evolved to address current challenges and explore its relevance in the context of specific events or phenomena.

Overall, the keyword co-occurrence network illustrates the multidimensional nature of servant leadership research, encompassing various organisational, leadership, and employee-related aspects and theoretical and contextual considerations. This analysis can inform future research directions, identify potential collaborations, and comprehensively understand the intellectual structure and thematic clusters within the servant leadership domain.

What Are The Co-Authorship Patterns Of Collaboration By Countries?

Figure 5 presents a co-authorship network analysis based on the countries of the researchers contributing to the field of servant leadership. This analysis provides insights into the geographical distribution and collaborations among scholars from various nations studying this leadership approach.
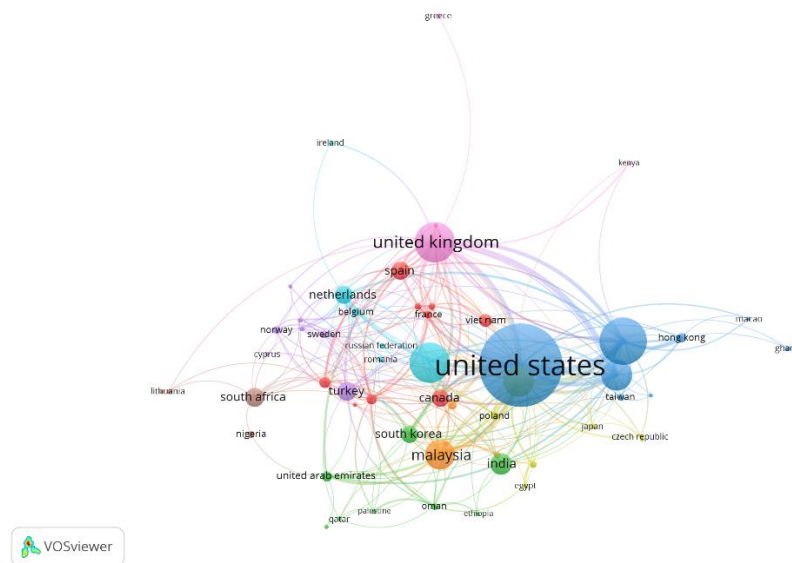

Figure 5: Co-Authorship Countries Network Mapping of Collaboration

At the centre of the network, the United States emerges as a prominent node, represented by a larger circle, indicating a significant contribution and involvement of researchers from the US in the servant leadership domain. This aligns with the historical origins and initial development of the servant leadership concept within the American context. Surrounding the United States, several other countries are interconnected through co-authorship links, suggesting collaborative efforts and knowledge exchange among researchers across borders. Countries like the United Kingdom, Spain, the Netherlands, Belgium, France, and Russia appear closely linked to the US, indicating strong research collaborations or partnerships in exploring servant leadership.

Another cluster of countries, including Malaysia, India, South Korea, Japan, Taiwan, and Hong Kong, showcases the growing interest and contributions from the Asian region in this field of study. These connections potentially reflect the applicability and relevance of servant leadership principles in diverse cultural contexts and organisational settings within the Asian region. European countries such as Norway, Sweden, and Turkey are also present in the network, suggesting a broader international engagement and recognition of servant leadership as a research area within the European academic community. Notably, the network includes countries from various regions, such as South Africa, Nigeria, Kenya, Ghana, the United Arab Emirates, Oman, and Egypt, indicating a global reach and representation in the servant leadership research landscape. These connections facilitate cross-cultural comparisons,

contextual adaptations, or the examination of servant leadership's applicability and impact in different socio-economic and cultural environments.

The co-authorship network highlights the collaborative efforts and knowledge dissemination among researchers from different countries, fostering a multinational perspective on servant leadership. This geographical diversity enriches the understanding of servant leadership by incorporating various cultural lenses, organisational contexts, and theoretical frameworks, ultimately contributing to a more comprehensive and nuanced body of knowledge in this leadership domain.

What Are The Patterns Of Co-Citation By Authorship?

The co-citation network map provides a rich visualisation of the intellectual landscape within the servant leadership literature. At the core, we see a densely interconnected cluster of influential authors whose works are frequently co-cited, indicating their seminal and foundational contributions to establishing and advancing servant leadership theory and research.
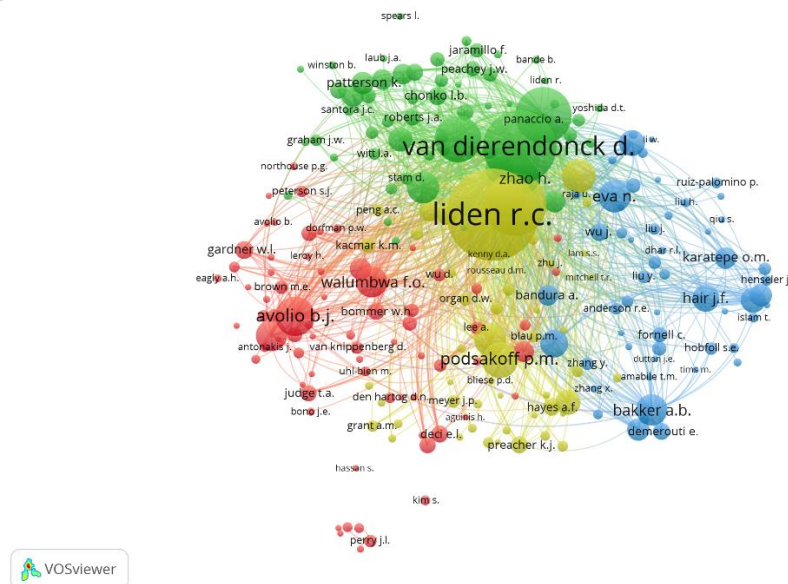

Figure 6: Co-Citation Network Patterns Map By Authorship

Central to this core cluster as shown in Figure 6 is Robert C. Liden, whose writings with colleagues like Jiatao Li and Sandy Wayne on developing and validating servant leadership measures have been pivotal. Closely linked are authors like Dirk van Dierendonck, known for articulating the servant leadership concept and behaviour dimensions, and Philip M. Podsakoff, whose work has explored the relationships between servant leadership and various organisational outcomes. Emanating from this nucleus are distinct sub-clusters that may represent more specialised research domains or alternative perspectives. For instance, the cluster, which includes Megan Endres, Mary Uhl-Bien, and John Antonakis, could examine servant leadership through followership or leader-follower dynamics. Meanwhile, authors like Dacher Keltner and Lan Kamleitner may explore connections between servant leadership and positive psychological states or prosocial behaviours.

Another notable cluster involves Michael E. Brown and Linda K. Treviño, whose work has delved into servant leadership's ethical and integrity dimensions and its links to ethical climate

and behaviour in organisations. This cluster's proximity to the core suggests its integration with mainstream servant leadership theory while offering a unique ethical and values-based perspective. On the periphery, we see clusters that potentially represent emerging or less centralised research areas. The grouping around David A. Waldman could be investigating how servant leadership manifests and is perceived across cultures or national contexts. Meanwhile, the cluster including Michael D. Mumford may focus on this leadership approach's cognitive underpinnings or decision-making aspects. Notably, while some authors like Van Dierendonck and Liden are central across multiple clusters, indicating their broad influence, others are more narrowly clustered, suggesting specialised research foci or novel applications of servant leadership theory.

The varied distances and densities of author interconnections provide clues about the flow of ideas, cross-pollination of concepts, and intellectual ties binding different research streams within this literature domain. Closely linked clusters likely share more commonalities in theoretical foundations, methodological approaches, or empirical findings. By examining each author cluster's specific publications and conceptual underpinnings, one could gain deeper insights into the prevailing perspectives, debates, and emerging frontiers shaping the continued evolution of servant leadership scholarship. This co-citation mapping illuminates the knowledge networks and influential contributors guiding inquiry in this growing field of leadership studies.

Discussion And Conclusion

This bibliometric analysis explored servant leadership research trends over the past decade (2015-2024). The findings reveal a field experiencing a surge in interest. Publication output has steadily grown, particularly since 2020, suggesting a growing desire to understand servant leadership as a leadership approach. The analysis also identified prominent scholars who have significantly contributed to the body of research on servant leadership. Karatepe emerged as the top author, followed by Aboramadan, Ruiz-Palomino, van Dierendonck, Khan, and Liden. Their work has helped establish the foundation for servant leadership research.

In terms of subject areas, Business, Management, and Accounting, followed by Social Sciences, are the primary areas where servant leadership research is conducted. This highlights a strong focus on the application of servant leadership principles within organisational settings. However, the analysis also suggests opportunities for further exploration in areas like Arts, Humanities, and Economics. The research also has a global reach. The United States leads in publications, but a significant contribution comes from Eastern countries like China and Indonesia. This indicates Western and Eastern scholars' strong interest in servant leadership. Another key finding is the identification of highly cited research papers. Works by Hoch et al. (2018), Eva et al. (2019) and Liden et al. (2015) are among the most referenced studies. These studies have played a crucial role in shaping the foundation for future research on servant leadership.

The analysis of keywords used in servant leadership research has revealed some emerging trends. There is a focus on leadership styles, employee well-being, and how servant leadership functions in specific contexts, such as the public sector and the hospitality industry. Additionally, keywords related to contemporary issues such as COVID-19 suggest that servant leadership research is evolving to address current challenges and explore its relevance in the face of new developments. Although this study can analyse most areas in bibliometric analysis,

it still has limitations. The study only focuses on a single database, which may narrow the results since more articles on servant leadership may exist. The study, while comprehensive, maintains a broad focus that could benefit from a more detailed exploration into specific facets of servant leadership. Narrowing to investigate distinct perspectives within servant leadership could enrich the understanding and provide nuanced insights into this leadership paradigm.

In conclusion, research on servant leadership has seen significant growth in recent years. Scholars from various countries and disciplines are drawn to this field, highlighting its global relevance. Future research can benefit from exploring under-represented areas such as Arts, Economics, and Humanities. Fostering international collaborations and addressing emerging trends in leadership and organisational dynamics are also promising avenues for future research. This analysis offers valuable insights for researchers and practitioners seeking to understand servant leadership research's current state and future directions.

Acknowledgement

References

Alvesson, M., & Einola, K. (2019). Warning for excessive positivity: Authentic leadership and other traps in leadership studies. *Leadership Quarterly*, *30*(4), 383–395. https://doi.org/10.1016/j.leaqua.2019.04.001

Anderson, M. H., & Sun, P. Y. T. (2017). Reviewing Leadership Styles: Overlaps and the Need for a New 'Full-Range' Theory. *International Journal of Management Reviews*, *19*(1), 76–96. https://doi.org/10.1111/ijmr.12082

Aprilda, R. S., Purwandari, D. A., & Syah, T. Y. R. (2019). Servant leadership , Organization Commitment and Job Satisfaction on Organizational Citizenship Behaviour. *Journal of Multidisciplinary Academic*, *03*(04).

Arruda, H., Silva, E. R., Lessa, M., Proença, D., & Bartholo, R. (2022). VOSviewer and Bibliometrix. In *Journal of the Medical Library Association : JMLA* (Vol. 110, Issue 3). https://doi.org/10.5195/jmla.2022.1434

Chiniara, M., & Bentein, K. (2016). Linking servant leadership to individual performance: Differentiating the mediating role of autonomy, competence and relatedness need satisfaction. *Leadership Quarterly*, *27*(1), 124–141. https://doi.org/10.1016/j.leaqua.2015.08.004

Davis, C. J. (2017). Servant Leadership And Followership (Examining the Impact on Workplace Bahavior). In *International Letters of Social and Humanistic Sciences* (Vol. 7).

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*. https://doi.org/10.1016/j.jbusres.2021.04.070

Eslamdoust, S., & Mahmoudinazlou, S. (2023). Servant Leadership, Followers Job Satisfaction, Empowerment and Performance: The Moderating Effect of Gender. *Open Journal of Social Sciences*, *11*(03). https://doi.org/10.4236/jss.2023.113002

Eva, N., Robin, M., Sendjaya, S., van Dierendonck, D., & Liden, R. C. (2019). Servant Leadership: A systematic review and call for future research. *Leadership Quarterly*, *30*(1), 111–132. https://doi.org/10.1016/j.leaqua.2018.07.004

Fernandez, A. A., & Shaw, G. P. (2020). Academic Leadership in a Time of Crisis: The Coronavirus and COVID-19. *Journal of Leadership Studies*, *14*(1), 39–45. https://doi.org/10.1002/jls.21684

Gandolfi, F., Store, S., & Deno, F. (2017). Servant Leadership: An Ancient Style with 21st Century Relevance. *Revista de Management Comparat Internațional*, *18*(4).

Greenleaf, R. K. (1979). Servant leadership: A journey into the nature of legitimate power and greatness. *Business Horizons*, *22*(3). https://doi.org/10.1016/0007-6813(79)90092-2

Hoch, J. E., Bommer, W. H., Dulebohn, J. H., & Wu, D. (2018). Do Ethical, Authentic, and Servant Leadership Explain Variance Above and Beyond Transformational Leadership? A Meta-Analysis. *Journal of Management*, *44*(2), 501–529. https://doi.org/10.1177/0149206316665461

Huning, T. M., Hurt, K. J., & Frieder, R. E. (2020). The effect of servant leadership, perceived organisational support, job satisfaction and job embeddedness on turnover intentions: An empirical investigation. *Evidence-Based HRM*, *8*(2). https://doi.org/10.1108/EBHRM-06-2019-0049

Latifatus, S. (2023). Servant Leadership: Maintaining Teacher Commitment And Building Community Trust. *Journal of Journal of Social Studies and Education*, *01*(01).

Lemoine, G. J., Hartnell, C. A., & Leroy, H. (2019). Taking stock of moral approaches to leadership: An integrative review of ethical, authentic, and servant leadership. *Academy of Management Annals*, *13*(1), 148–187. https://doi.org/10.5465/annals.2016.0121

Liden, R. C., Wayne, S. J., Meuser, J. D., Hu, J., Wu, J., & Liao, C. (2015). Servant leadership: Validation of a short form of the SL-28. *Leadership Quarterly*, *26*(2), 254–269. https://doi.org/10.1016/j.leaqua.2014.12.002

Lim, W. M., & Kumar, S. (2024). Guidelines for interpreting the results of bibliometric analysis: A sensemaking approach. *Global Business and Organizational Excellence*, *43*(2). https://doi.org/10.1002/joe.22229

Newman, A., Schwarz, G., Cooper, B., & Sendjaya, S. (2017). How Servant Leadership Influences Organisational Citizenship Behavior: The Roles of LMX, Empowerment, and Proactive Personality. *Journal of Business Ethics*, *145*(1), 49–62. https://doi.org/10.1007/s10551-015-2827-6

Öztürk, O., Kocaman, R., & Kanbach, D. K. (2024). How to design bibliometric research: an overview and a framework proposal. *Review of Managerial Science*. https://doi.org/10.1007/s11846-024-00738-0

Saleem, S., Tourigny, L., Raziq, M. M., Shaheen, S., & Goher, A. (2022). Servant leadership and performance of public hospitals: Trust in the leader and psychological empowerment of nurses. *Journal of Nursing Management*, *30*(5). https://doi.org/10.1111/jonm.13622

van Dierendonck, D., & Patterson, K. (2010). Servant leadership: Developments in theory and research. In *Servant Leadership: Developments in Theory and Research*. https://doi.org/10.1057/9780230299184

van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, *84*(2). https://doi.org/10.1007/s11192-009-0146-3

van Eck, N. J., & Waltman, L. (2017). Citation-based clustering of publications using CitNetExplorer and VOSviewer. *Scientometrics*, *111*(2). https://doi.org/10.1007/s11192-017-2300-7

Walumbwa, F. O., Muchiri, M. K., Misati, E., Wu, C., & Meiliani, M. (2018). Inspired to perform: A multilevel investigation of antecedents and consequences of thriving at work. *Journal of Organizational Behavior*, *39*(3), 249–261. https://doi.org/10.1002/job.2216

Zhu, J., & Liu, W. (2020). A tale of two databases: the use of Web of Science and Scopus in academic papers. *Scientometrics*, *123*(1). https://doi.org/10.1007/s11192-020-03387-8