



Sustainable leadership research: trends, conceptual foundations, and future directions

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Abstract

Sustainable leadership is a recent paradigm of leadership that has come up as a critical issue in reaction to the mounting economic, social and environmental problems facing modern organizations. Regardless of the increasing academic focus, studies on sustainable leadership are still in a disjointed state with minimal conceptual and little synthesizing integration. To fill this gap, the research presents a systematic literature review (SLR) to conceptualize the intellectual space, study the trends in research, and synthesize the conceptual models of sustainable leadership. Basing on Scopus and Web of Science, a first set of 837 articles was found, among which 652 articles on the topic were peer-reviewed and were in English language. The analysis of the review is based on a multi-stage analytical model, involving the analysis of trends and patterns and the synthesis of concepts. Research papers that were indexed in ABDC, ABS, and FT50 were given priority to enhance the theoretical knowledge and shape future research. The results and findings indicate that there is a fast development of sustainable leadership scholarship, with a growing conceptual convergence concerning long-term orientation, stakeholder integration, and systemic thinking and ongoing theoretical fragmentation. Based on these observations, the paper suggests an organized roadmap to future research including the necessity to combine more theories and conduct multi-level analysis and empirical research in various organizational and cultural settings. The review can be useful to the literature on leadership and sustainability as it provides a formal synthesis and a research agenda that can be used to develop sustainable leadership studies.

Keywords: Sustainable leadership, Sustainability leadership, Sustainable manager, Long-term leadership, Conceptual framework, Research trends

Introduction

The growing complexity of economic, social, and environmental challenges in all global economies has increased the pressure on the need to adopt leadership strategies that could ensure sustainability in a long-term and global integration. The problems like climate change, social inequality, resource depletion, and ethical governance have demonstrated the constraints of the conventional leadership model which emphasizes the short-term performance and shareholder value (Avery and Bergsteiner, 2011; George *et al.*, 2016) [2, 9]. Sustainable leadership has in this regard become an essential paradigm that focuses on the balanced approach to economic feasibility, social justice, and environmental management.

Sustainable leadership goes beyond the traditional leadership models by incorporating the aspects of sustainability into the strategic decisions, organizational culture and relationships between leaders and other stakeholders (Hargreaves and Fink, 2006; Ferdig, 2007) [12, 8]. According to the previous studies, sustainable leaders are long-term oriented and think systemically, promote ethical actions and intergenerational responsibility (Avery and Bergsteiner, 2011; Tideman *et al.*, 2013) [3, 23]. This type of leadership is becoming seen as a necessity to realize the United Nations Sustainable

Development Goals (SDGs), especially the ones associated with responsible production, decent work, inequalities reduction, and climate action (United Nations, 2015).

The literature on sustainable leadership is relatively conceptually diffuse and scattered, although it has been gaining academic attention. Research works vary significantly in terms of definitions, theoretical background, levels of analysis and design (Armani *et al.*, 2020; Liao, 2022) [1, 15]. Although a few researchers understand sustainable leadership as an expansion of ethical, or servant leadership, others believe that it is a multidimensional construct without any analogies that is better adapted to addressing the paradoxical sustainability tensions (Sajjad *et al.*, 2024) [20]. Further, the results of the empirical studies are scattered in areas like management, education, psychology, and sustainability studies, which impede the accumulation of knowledge.

A number of narrative reviews and integrative reviews have provided worthwhile information on the nature of sustainable leadership and its consequences (Avery and Bergsteiner, 2011; Sajjad *et al.*, 2024) [2, 3, 20]. A significant gap in the systematic literature reviews that would synthesize the existing studies, map intellectual structures, discover prevailing themes, and point at the gaps in the theoretical and methodological basis is, however, also present. In the absence of such synthesis, the

field will be in danger of conceptual stagnation and limited theoretical progress.

It is against this context that the current research paper will conduct a Systematic Literature Review (SLR) in order to synthesize and critically assess the current body of knowledge on the topic of sustainable leadership. This review is going to (a) define the conceptual limits of sustainable leadership, (b) explore theoretical premises and empirical trends and (c) determine the essential gaps and future research directions. Through this, the research aims at making a contribution to the body of leadership and sustainability scholarship through the provision of a consistent and organized interpretation of sustainable leadership and its changing contribution to the progress of sustainable development.

Methodology

This paper will use a systematic literature review (SLR) approach to integrate and organize the available literature on sustainable leadership. SLR methodology is especially suitable in synthesizing scattered and conceptually diffused literature as it is precise, transparent, and replicable with minimum bias of reviewers (Tranfield *et al.*, 2003; Snyder, 2019)^[25,22]. Considering the fast-growing popularity of sustainability-oriented leadership research in various fields, an SLR allows conducting a wider overview of the research trends, theoretical basis, and scholarly perspectives.

The protocol used in the review was a systematic review in the management and organizational research (Denyer and Tranfield, 2009; Paul and Criado, 2020)^[6,18]. The Scopus and Web of Science (WoS) are two major academic databases that were chosen as the main source of data because of their all-inclusive coverage with high-quality, peer-reviewed journals and the degree of their use in the highest-quality review studies. Using Scopus and Web of Science databases as first search tools, 633 and 204 articles respectively were found and 837 records, about sustainable leadership and the similar constructs were identified.

After the data compilation, all the records retrieved were combined and filtered against duplication. A total of 185 duplicate articles were found and eliminated which reduced the total number of unique articles to 652. Only peer-reviewed English-language journal articles were taken in order to create conceptual clarity and analytical consistency. The limitation to English-language publications was implemented to ensure the effective interpretation, conceptual synthesis, and theoretical integration which is similar to the previous SLRs in the field of leadership and sustainability research (Snyder, 2019; Paul and Rosado-Serrano, 2019)^[22,19]. There was no time limitation that was applied and the review could therefore capture the changes, trends, and new directions of sustainable leadership research through time.

In order to increase the theoretical quality and academic importance of the review, special attention was given to the articles published in high-quality journals. In particular, the conceptual synthesis and designing future research directions were prioritized in the studies that were indexed in ABDC,

ABS, and journals included in FT50. This selective focus is consistent with best practices in systematic reviews research, where quality of the journal is applied as a standard of theory development and agenda formulation (Denyer & Tranfield, 2009; Paul and Criado, 2020)^[6,18]. Whereas the general data set was useful in trend and pattern analysis, the most successful journal articles of high rank were the foundation of further conceptual knowledge.

Multi-stage analytical strategy was used to analyze the final dataset. To study the patterns and trends of publishing, the first analysis was a trends and patterns analysis to find out the growth of publications, their temporal distribution, and their growing scholarship to the field of sustainable leadership as a study topic. Second, a conceptual analysis was conducted to generalize prevailing definitions, and central dimensions of sustainable leadership, making it possible to identify convergences, divergences, and gaps in the theoretical literature. Based on these implications, the article has formulated the directions of future research in a systematic manner, paying attention to unexplored contexts, new sustainability issues, and possibilities of integrating various theoretical directions.

The article is structured in a reasonable and sequential way. After this methodology section, conceptual synthesis that incorporates major theoretical views and definitions. This is then accompanied with trends and patterns analysis section will be provided with the focus on the development and academic expansion of sustainable leadership studies. The paper then identifies the future research directions that could be the future sustainable leadership research agenda. The paper ends by providing discussion of theoretical and practical implications and how the review has made contribution to the research of leadership and sustainability.

Conceptual understanding

Sustainable leadership is a new paradigm of leadership that has come up at the junction of the theory of leadership and the discussion of sustainable development. In conceptual terms, it is a leadership philosophy that is both economically viable, socially equitable, and environmentally responsible and, at the same time, assures long-term organizational resoluteness and intergenerational accountability (Avery and Bergsteiner, 2011a)^[2]. In contrast to the traditional leadership approaches, which focus on short-term productivity or financial success, sustainable leadership is based on the future, has a system perspective, and focuses on continuity, adaptability, and responsible value creation to a wide range of stakeholders (Hargreaves and Fink, 2006; Sajjad *et al.*, 2024)^[12,20]. It acknowledges organizations as being part and parcel of the larger socio-ecological systems and leadership as custodians of the current performance and future sustainability.

In theory, sustainable leadership is based on the triple bottom line logic (people, planet, profit) and systems thinking, which presupposes leaders to balance paradoxical tensions between competing, but interdependent objectives (Elkington, 1998; Hahn *et al.*, 2018)^[7,11]. Modern research views sustainable leadership as a multilevel theory, which can exist at individual

(values, cognition, ethical orientation), organizational (culture, strategy, human capital development) and societal (stakeholder engagement, institutional legitimacy) levels (Armani *et al.*, 2020; Sajjad *et al.*, 2024)^[1,21]. It is multilevel and paradox-sensitive, which makes the concept of sustainable leadership stand out of the traditional models of leadership, where the social or environmental issues are viewed as peripheral or instrumental.

Even though sustainable leadership has conceptual similarities with some of the current leadership styles, it still has its theoretical differences. For example, ethical leadership also focuses on normatively correct behavior, integrity, and ethical decision-making (Brown *et al.*, 2005)^[5], but long-term ecological constraints and intergenerational consequences are not specifically mentioned. On the same note, servant leadership focuses on the well-being of followers and service to the community (Greenleaf, 1977), which tends to have an either-or reasoning, which favors social over economic imperative. Conversely, sustainable leadership clearly embraces rationale wherein by leaders have to balance profitability, social welfare, and environmental protection simultaneously (Schad and Smith, 2019)^[19]. Although transformational leadership is of a futuristic and value-based nature (Bass, 1985)^[4], it lacks an inherent sustainability prism and does not necessarily involve an ecological or an intergenerational approach. Sustainable leadership, therefore, goes beyond these styles and integrates sustainability as one of the organizing principles and not a by-product (Avery and Bergsteiner, 2011b; Liao, 2022)^[2,15].

The literature has narrowed down to a few dimensions of sustainable leadership. Firstly, it involves long-term orientation whereby it focuses on continuity, succession, and long-term organizational capacity and not heroic leadership (Hargreaves and Fink, 2006)^[12]. Second, it is marked by the inclusiveness of stakeholders and social justice which makes certain that the success of the organization is not achieved at the cost of employees, communities, or ecosystems (McCann and Sweet, 2014)^[18]. Third, sustainable leadership fosters organizational learning, innovation, and human capital development, and it understands employees as renewable sources and not spending inputs (Suriyankietkaew and Avery, 2016)^[24]. Lastly, it demands that leaders apply systems thinking and paradox management that can allow them to react to the complex sustainability challenges in unstable and uncertain environments (Sajjad *et al.*, 2024)^[20].

Sustainable leadership empirical studies have turned to the use of validated measurement tools. The Sustainable Leadership Questionnaire (SLQ) created by McCann and Holt (2011)^[17] that determines how leaders are long term oriented, ethical, considerate of the stakeholders and make decisions that are driven by sustainability is one of the most popular tools. The SLQ has shown good internal consistency and has been used in other industries, such as finance, education, and services (McCann & Sweet, 2014)^[18].

The other persuasive model is Sustainable Leadership Practices model by Avery and Bergsteiner (2011a)^[2], which is operationalized by various indicators that cover the basic practices (e.g., trust, employee development), high-level practices (e.g., knowledge sharing, self-management), and

performance drivers (e.g., innovation, quality). Other recent works have used context-specific applications of sustainable leadership scales to determine the results of sustainable leadership, including organizational resilience, environmental innovation, employee well-being, and financial performance (Iqbal *et al.*, 2020; Liao, 2022; Sajjad *et al.*, 2024)^[14,15,21]. All these tools give a strong empirical basis to the concept of sustainable leadership as a quantifiable and theoretically unique entity.

Patterns and trend analysis

Overview of extracted articles

The bibliometric profile of the dataset in Table 1 indicates the maturing and steadily growing research area. The corpus consists of 652 documents issued in 317 sources published between 1998 to 2025, which means that it is widely dispersed in terms of discipline and intellectually diverse. The 5.92 point of growth per year is indicative of a long-term interest in the scholarship and not the sporadic focus, indicating that the issue is no longer a niche but a well-established area of interest. The literature has a healthy balance between foundational contributions and the most recent and influential studies as the mean age of documents is 5.19 with 11.6 citations per document. The discipline is marked with a high degree of collaborative patterns, which is evidenced in the numbers of 1,548 authors, a rather modest share of single-authored writings (195), and an average number of co-authors per writing (2.76), which highlights the interdisciplinary and team-oriented nature of the discipline. Nevertheless, the level of international co-authorship is low (10.58%), which implies that it can be increased. The intellectual content has also been advanced in the richness of using key words where author keywords are 1,761 and Keywords Plus, 1,355 as evidence of conceptual diversity and fragmentation of themes. In general, all these signs indicate a dynamic, cooperative, and conceptually developing research environment, with great potential possibilities of further theorization and the involvement of more scholars around the world.

Table 1: Overview of extracted articles

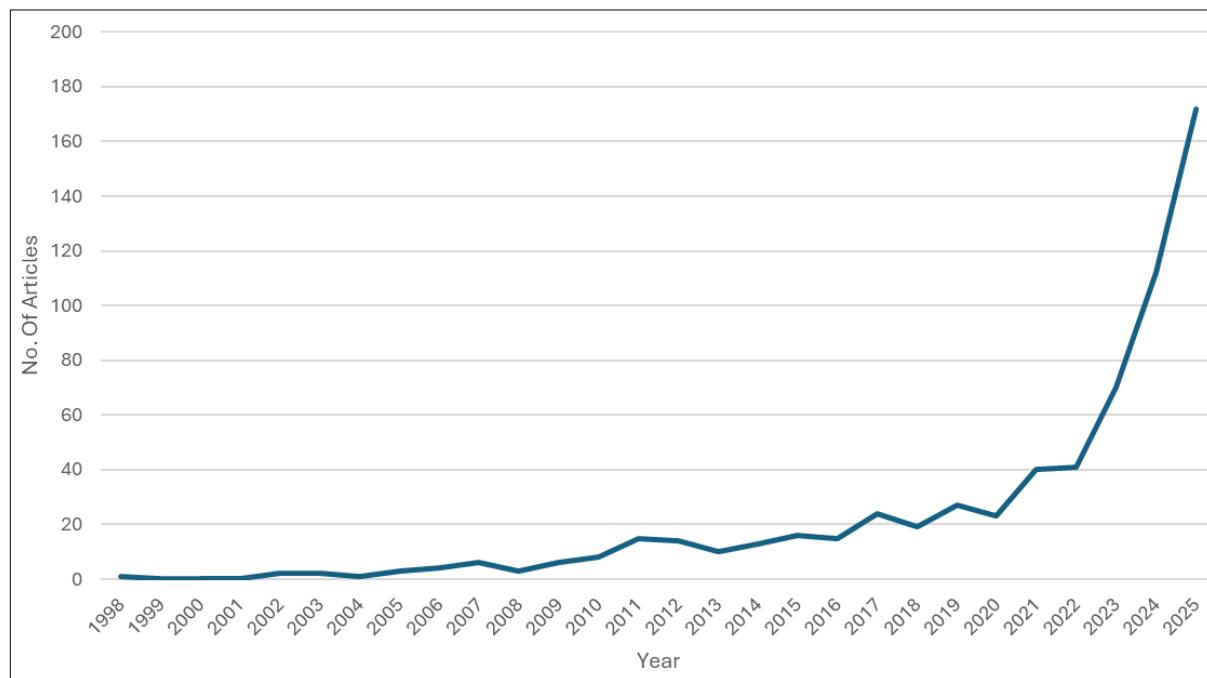
| Description | Results |
|---------------------------------|-----------|
| Timespan | 1998:2025 |
| Sources (Journals, Books, etc) | 317 |
| Documents | 652 |
| Annual Growth Rate % | 5.92 |
| Document Average Age | 5.19 |
| Average citations per doc | 11.6 |
| References | 0 |
| Document contents | |
| Keywords Plus (ID) | 1355 |
| Author's Keywords (DE) | 1761 |
| Authors | |
| Authors | 1548 |
| Authors of single-authored docs | 168 |
| Authors collaboration | |
| Single-authored docs | 195 |
| Co-Authors per Doc | 2.76 |
| International co-authorships % | 10.58 |

Source: Authors' compilation

Publication trend

The trend of annual publications in figure 1 demonstrates a clear evolutionary pattern of the field with time. Between 1998 and the mid 2000s the academic output was minimal as it was an exploratory phase with little scholarly focus. There is a gradual rise between the years 2008 and 2016, which points to the increasing conceptual awareness and the creation of the streams of research as their foundation. Since 2017, the trend is stronger and has more significant variation of year-to-year changes which is indicative of thematic diversification and

expansion of methods. The most interesting observation is that there is an exponential increase in publications in the period 2021-2025, and the number of articles rises exponentially, reaching its maximum point in 2025. This acceleration is an indication of transition between the incremental growth and mainstream academic consolidation, which is probably caused by the increase in the global concerns, policy-irrelevance, and cross-disciplinary focus. All in all, the trend can be described as the shift of the field towards the young research area towards the fast-growing and high-impact scholarly sphere.



Source: Authors' compilation

Fig 1: Publication Trend

Influential sources

The journal topography is narrow but at the same time interdisciplinary according to the source-wise distribution of publications in table 2. Sustainability becomes the most prevailing outlet, with 61 articles, indicating its key position in the formulation and propagation of main debates in the discipline. The next ones are Frontiers in Psychology (12 articles) and the Journal of Cleaner Production (8 articles), which means that they are well engaged in perspective of both the psychological and environmental management. The availability of journals like Technical and Vocational Education, Educational Management Administration, and the International Journal of Education indicates that the field is becoming increasingly relevant in the education and leadership research, whereas journals like Administrative Sciences, Journal of Global Responsibility, and Journal of Health Organization indicate that it can be applied in the context of governance, ethics, and healthcare. Also, the Springer Proceedings in Business and AIP Conference Proceedings as conference-based sources imply the further conceptual evolution and initial academic investigation. On the whole, the given distribution illustrates the fact that, although the literature is rooted in the handful of high-impact journals regarding

sustainability, it is methodologically and thematically varied in terms of management, psychology, education, and applied sciences, which once again supports the multidisciplinary nature of the field.

Table 2: Top 15 Most Contributing Journals

| Sources | Articles |
|--|----------|
| Sustainability | 61 |
| Frontiers in psychology | 12 |
| Journal of cleaner production | 8 |
| Technical and vocational education and training | 8 |
| Springer proceedings in business and economics | 7 |
| Verbum et ecclesia | 7 |
| Administrative sciences | 6 |
| Discover sustainability | 6 |
| Journal of global responsibility | 6 |
| Lecture notes in networks and systems | 6 |
| International journal of educational management | 5 |
| Aip conference proceedings | 4 |
| Educational management administration & leadership | 4 |
| Industrial and commercial training | 4 |
| Journal of health organization and management | 4 |

Source: Authors' Compilation

Influential authors

The productivity analysis by authors in table 3 brings out the existence of a core group of highly influential scholars who have continuously influenced the growth of the field. Iqbal Q becomes the most prolific author with 28 publications that indicate an active and long-lasting working activity on various research stages. Kantabutra S (21 articles) and Piwowar-Sulej K (16 articles) come next having made a central contribution to the development of theoretical and empirical knowledge, specifically in the area of sustainability-based leadership and organizational research. Suriyankietkaew S, Avery G and Ahmad N are also authors who represent a much closer second depth in the continuity and depth of scholarly production. The fact that there is a number of authors who had middle levels of publications (e.g., Bulmer E, Lee H, Dimovski V, Peterlin J) indicates that there is a distributed system of knowledge, and a number of scholars provide their own, specialized focus, but no control is held by a single group of researchers. In general, this trend represents a leader-centered but cooperative intellectual system, where a small community of prolific writers stabilizes the field whereas a broader circle of researchers facilitates its proliferation and development.

Table 3: Top 15 most productive authors

| Authors | Articles | Articles fractionalized |
|-------------------|----------|-------------------------|
| Iqbal q | 28 | 11.2666667 |
| Kantabutra s | 21 | 15.5 |
| Piwowar-sulej k | 16 | 7.0666667 |
| Na n | 11 | 11 |
| Suriyankietkaew s | 10 | 6.25 |
| Ahmad n | 9 | 2.7833333 |
| Avery g | 8 | 4.5 |
| Bulmer e | 6 | 2.1666667 |
| Bencsik a | 5 | 3.5 |
| Lee h | 5 | 2.1166667 |
| Dimovski v | 4 | 1.1166667 |
| Lee s | 4 | 0.75263158 |
| Peterlin j | 4 | 1.1166667 |
| Riera m | 4 | 1.5 |
| Abid g | 3 | 0.7 |

Source: Authors' Compilation

Influential articles

The citation analysis in table 4, finds a group of seminal and high impact publications to have made a foundational contribution to the intellectual underpinnings of the field. Avery (2011) in *Strategy and Leadership* (300 citations) is the most influential having a pivotal role in the conceptualization of sustainable leadership and connecting it to long-term organizational performance. It is then succeeded by Macke *et al.* (2019) in the *Journal of Cleaner Production* (267 citations) and Sahlberg (2007) in *Educational Policy* (259 citations) which indicates the high cross-fertilization between sustainability, management, and educational leadership literatures. The leader theories, including Boyatzis (2006) and Hargreaves (2004, 2007), are also present, which implies that the discipline is well-established in the existing leadership and

learning paradigms. Earlier works by Iqbal, Hallinger, Piwowar-Sulej and Suriyankietkaew can show how more recent empirical studies have applied these original concepts to such contexts as cleaner production, sustainable development, and higher education. In general, the pattern of citation indicates a theoretically sound, but gradually developing body of knowledge, in which the traditional leadership scholarship remains to be used to inform the more recent streams of research on sustainability.

Table 4: Top 15 most cited articles

| Paper | Total citations |
|--|-----------------|
| Avery g, 2011, strategy leadersh-a | 300 |
| Macke j, 2019, j clean prod | 267 |
| Sahlberg p, 2007, j educ policy | 259 |
| Boyatzis r, 2006, acad manag learn educ | 202 |
| Osterblom h, 2015, plos one | 188 |
| Avery g, 2005, leadersh for sustainable futures: achieving success in a compet world | 178 |
| Hargreaves a, 2004, educ leadership | 176 |
| Iqbal q, 2020, j clean prod | 170 |
| Burawat p, 2019, int j qual reliab manage | 167 |
| Iqbal q, 2021, sustain dev | 137 |
| Hallinger p, 2018, sustainability | 128 |
| Piwowar-sulej k, 2023, j clean prod | 118 |
| Hargreaves a, 2007, eur j educ | 107 |
| Suriyankietkaew s, 2022, sustainability | 94 |
| Iqbal q, 2022, int j sustain high educ | 92 |

Source: Authors' compilation

Keyword analysis

The occurrence analysis as a keyword provides the conceptual framework and the existing thematic priorities of the literature in table 5. No surprise, the most central words are sustainable leadership (255 occurrences) and leadership (146), which proves that the field has been made specific to leadership-oriented sustainability discussion as opposed to other fields that are not directly environmental. Sustainability (94) and sustainable development (85) are closely related concepts, which means that they are highly aligned with the severely sustainable development agenda. The widespread usage of performance-related terms (performance, sustainable performance, impact) is an indication of an increasing empirical emphasis on the outcomes and organizational performance. Transformational leadership, ethical leadership, and servant leadership are among the examples of leadership styles that focus on theoretical pluralism and comparative models of leadership. The existence of such keywords as innovation, knowledge management, decision making and organizational culture proves the growing interest towards the internal organizational process that can lead to the sustainability results. Further, the presence of context-specific words, including higher education, students, curricula, firms, SMEs and geographical indicators, including Thailand, are indicators of applied and sectoral diversification. Lastly, the new methodological and analytical themes such as mediating

and moderating roles and artificial intelligence indicate a localized and ever-growing, theory-based, and methodologically advanced research profile that is growing

beyond the conversation of concepts to explanatory and predictive frameworks.

Table 5: Top 50 Authors' Keywords

| Words | Occurrences | Words | Occurrences |
|---------------------------------|-------------|---------------------------------|-------------|
| Sustainable leadership | 255 | Human | 13 |
| Leadership | 146 | Leadership style | 13 |
| Sustainability | 94 | Mediating role | 13 |
| Sustainable development | 85 | Environmental sustainability | 12 |
| Performance | 51 | Organization | 12 |
| Transformational leadership | 46 | Students | 12 |
| Innovation | 37 | Thailand | 12 |
| Management | 32 | Firms | 11 |
| Impact | 24 | Moderating role | 11 |
| Organizational culture | 22 | Curricula | 10 |
| Higher education | 20 | Emotional intelligence | 10 |
| Sustainable performance | 19 | Knowledge | 10 |
| Corporate sustainability | 18 | Responsibility | 10 |
| Education | 18 | Servant leadership | 10 |
| Sustainable | 18 | Sustainability leadership | 10 |
| Behavior | 17 | Work | 10 |
| Ethical leadership | 17 | Artificial intelligence | 9 |
| Model | 17 | Corporate social responsibility | 9 |
| Corporate social-responsibility | 16 | Integration | 9 |
| Knowledge management | 16 | Job satisfaction | 9 |
| Leadership development | 16 | Organizations | 9 |
| Decision making | 15 | Corporate | 8 |
| Sustainable development goals | 15 | Green innovation | 8 |
| Article | 13 | Engagement | 8 |
| Culture | 13 | Ethics | 8 |

Source: Authors' compilation

Influential countries

The geographical concentration of the publications in table 6 demonstrates the geographically varied and uneven research world. China (116) and USA (100) beat the top as well indicating that the two countries have a good institutional capacity, funding in research and policy interest towards sustainability and leadership studies. The UK (71) and India (63) rank just after that, which means that they are actively involved in both the theoretical and practical research, especially on the field of education, management, and policy-making. It is interesting to note that some of the emerging economy-based countries and Asia-Pacific nations are the dominant ones, such as Australia, Thailand, Malaysia, Pakistan, and Indonesia, which speaks volumes of the increased topicality of sustainable leadership in the fastest-growing and developing economies. The European impact is shown by Poland and Spain, whereas Canada, South Africa, and Saudi Arabia are the signs of the further rest of the world dissemination, both developed and developing. On the whole, this trend implies that although the field is characterized by a small number of countries with high research intensity, sustainable leadership has become an agenda of research around the globe, and more and more scholars in the Global South are engaging in it, but there are still prospects of further collaboration between regions and comparative studies.

Table 6: Top 15 most productive countries

| Region | Freq |
|--------------|------|
| China | 116 |
| USA | 100 |
| UK | 71 |
| India | 63 |
| Australia | 53 |
| Thailand | 50 |
| Malaysia | 48 |
| Poland | 41 |
| Saudi Arabia | 39 |
| Pakistan | 34 |
| Spain | 30 |
| Indonesia | 28 |
| Canada | 27 |
| South Korea | 26 |
| South Africa | 24 |

Source: Authors' compilation

Future direction

Future studies on sustainable leadership must not be limited to normative and descriptive models but must be theory-based, multi-level and domain-integrative in nature which reflects the dynamic complexity of organizational and societal systems. A potential future direction is the process of analyzing the relationship between sustainable leadership and the digital

transformation, specifically the ways in which artificial intelligence, big data analytics and digital systems of governance redefine the ability of leaders to balance their economic, social, and environmental goals. Digital leadership capability, information availability in algorithm decisions, and stakeholder engagement through technology are variables that will benefit systematic empirical testing to gain knowledge of how sustainability-oriented leaders use technology to create long-term value.

The other important thing to incorporate both psychological and behavioral approaches in the sustainable leadership research. Future research must examine some micro-level processes like leader moral identity, sustainability mindfulness, cognitive complexity, emotional intelligence and moral disengagement and how these affect pro-sustainability decision making and employee outcomes. In that regard, the analysis of sustainable leadership in the light of self-determination theory, social identity theory, and moral foundations theory can add to the cognizance of how leaders can create internal drive towards sustainability among their followers.

Organizational and HRM wise, the future research should inquire how sustainable leadership would be replicated into sustainable HRM practices such as green HRM, inclusive talent management, sustainable performance appraisal and employee well-being systems. The mediating and moderating variables that may be empirically tested include the psychological safety, green creativity, employee voice, and organisational learning capability, thus the relationship between sustainable leadership and innovation, resilience and long-term organisational performance.

On the strategic and governance component, the researchers ought to investigate how sustainable leadership can facilitate the development of ESG integration, sustainability focused corporate governance and responsible investment decisions. Research that would be done in the future is the role of sustainable leaders in making boards more sustainable, enhancing the quality of disclosure of ESG, integrated reporting and stakeholder trust and this is so because capital intensive and environmental sensitive sectors are studied. The connection between sustainable leadership and financial performance, the value of the firm, and risk management is one of the vital, but not sufficiently studied areas.

The cross-cultural and generational approach also provides good sources of future research. The institutional settings and contexts of comparative studies on the role of national culture, regulatory environment, and institutional pressure can be used to analyze whether sustainable leadership has been enacted and effective. Also, the rising numbers of Generation Z and Millennials in the labor force demand a study into the consistency of sustainable leadership with values-based careers, purpose orientation, ethical consumption, and climate activism, which impacts the attractiveness and retention of employers. Lastly, it is desired that future studies will embrace superior methodological designs, such as longitudinal, multilevel modelling, mixed-method, as well as configurational designs, such as fsQCA and SEM. These methods can be used to embrace the dynamic, paradoxical, and

systemic aspect of sustainable leadership so as to allow the scholars to shift to more sound causal accounts and predictive models.

Conclusion

The present paper systematically presents the literature on sustainable leadership synthesis and illuminates its conceptual area, theoretical basis, and gaps in research. The review reveals how sustainable leadership is more than the conventional methods of leadership through clearly incorporating the long-term orientation, and balancing between economic, social, and environmental goals. Although there is a growing academic focus on the construct, literature is still quite diverse, and there is little integration of theory and lapses in empirical elaboration. The study, based on the synthesis of previous studies, will add to a more consistent vision of sustainable leadership as a multi-level and dynamic phenomenon that exists in a complicated organizational and social setting.

Theoretical implications

Theoretically speaking, this review contributes to the body of knowledge in leadership by differentiating between sustainable leadership and the other similar constructs like ethical, responsible and servant leadership. It highlights the importance of multilevel and systems-based theorizing in order to describe the interactions among individual leaders, organizational processes and institutional environments. The results point to an unsatisfactory state of longitudinal studies, construct operationalization, and theory-based empirical tests, which creates a clear program of future theory construction and test validation.

Practical implications

In practical terms, the findings imply that sustainable leadership does not just entail the symbolic sustainability programs. Sustainability requires organizations to incorporate into their leadership development, structure of governance, and strategic decision making. By building the capabilities of leaders in systems thinking, ethical judgment and stakeholder engagement, it is possible to build resilience of the organization, innovativeness, and long-term value creation. These insights are especially applicable to managers, policymakers and educators who want to match the leadership practices with sustainability objectives.

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