

LEADERSHIP FOR SUSTAINABLE DEVELOPMENT: A REVIEW OF EMERGING DIMENSIONS OF SUSTAINABLE LEADERSHIP AND OPPORTUNITIES FOR FUTURE RESEARCH

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The aim of the research is to review the narrative of sustainable leadership in the light of current challenges such as geopolitical over composition, economic risk, supply chain disruption and inflation, and to provide guidance for future research and practical implementation. We conducted the research by examining the documents in the Scopus database that specifically address sustainable leadership in industry. In doing so, we determined intensity of research, geographical research presence, the most explored country industries and prevalence by type of research. It became apparent that despite its almost 20-year presence in the academic literature, sustainable leadership as an independent research construct is still in the development phase and has much potential for further progress. This is confirmed by the small number of articles, authors and geographical absence in most parts of the world. Accordingly, further research on sustainable leadership is needed to achieve greater currency and in-depth understanding both in the academic field and in business. In this sense, we propose constructive interaction of researchers from the fields of business and management with researchers from the field of education.

Keywords:

sustainable development, sustainable leadership, sustainability leadership, corporate sustainability, business and management

1 Introduction

In recent years, institutional pressure from governments, civil societies and non-governmental organizations has encouraged many companies to address the challenges of sustainable development by integrating environmental and social considerations into their business operations (Li et al., 2019). As it is difficult for companies to integrate the concept of sustainable development into their operations, scholars are actively seeking solutions, noting that introducing the concept of sustainable development into leadership is key to changing the situation and building a sustainable organization (Gerard et al., 2017; Di Fabio and Peiró, 2018). For this reason, sustainable leadership (hereafter: SL), which encourages organizations to adopt sustainable development, has attracted much attention (Dalati et al., 2017; Piwowar-Sulej et al., 2021).

Lambert (2011) and Hargreaves and Fink (2011) postulate that SL should honor the past and the present in order to develop the future; therefore, they should adopt the principles of sustainability. In the context of current challenges - geopolitical over-compositions, economic risks, supply chain disruptions and inflation - this is all the more challenging. In terms of sustainable development, the assertions of some scholars (Tideman, Arts and Zandee, 2013; Daly and Cobb, 1989) who believe that the fundamental problem lies in outdated economic models that use simplistic assumptions about the human view of the world are therefore all the more relevant. This is because the aforementioned worldview ignores human psychology, sociology, biology and ecology and is therefore no longer appropriate. Our ability to meet these challenges depends on an urgent generational shift in beliefs, attitudes and behaviors at the individual, organizational and societal levels (Taşçı and Titrek, 2020).

Therefore, businesses cannot operate independently of the environment and society, so adopting a model of sustainable development requires a deeper review of economic fundamentals that would enable leaders to make decisions that are good for business, society and the environment (Tideman, Arts and Zandee, 2013). In this sense, adopting sustainability concepts allows an organization a competitive advantage and a way to continuously improve efficiency. The real value lies in using sustainability as a driver for new innovations, technologies or business processes that seek a better way to run a business (Slankis, 2006: 2).

In line with the above, we aim to answer the following questions in the research:

1. To what extent is SL studied and practiced as an independent construct?
2. What are the main characteristics of the study of SL?
3. What are the trends and guidelines for the study of SL in the future?

Accordingly, we would like to point out that previous research of this kind has been quite general, whereas our research will focus on the study of SL in the area of different industries (agriculture and food, consumer goods, financial services, real estate and construction, manufacturing, resources, technology). This seems particularly important as industrialization has traditionally been the growth engine of economic development, which is why the United Nations (2023) calls for a "new generation of sustainable industrial policies" based on integrated national planning to increase investment and build a foundation for the future.

2 Evolution of sustainable leadership

A leader is someone who can formulate a vision and inspire people to work together to realize it, responding to any changes and challenges that arise along the way (Peters, 1989). While sustainable leaders additionally care about the welfare of humanity and act according to moral principles. Their typical characteristics are inclusion (Visser and Courtice, 2011), which is based on empathy, respect for all employees, their personality and specific talents, an environment where each individual can express their ideas and suggestions without fear (Vladić, Maletič, D. and Maletič, M., 2021). In addition, sustainable leaders focus on capacity building, sustainable change, and long-term results, which makes them look beyond immediate short-term benefits to a broader context (Hallinger and Suriyankietkaew, 2018). A key objective of SL is to achieve a balance between people, the environment and revenue in the current life of the company, thereby ensuring that the company creates the necessary social capital to survive the crisis (Avery, 2005).

Reddin (1977) synthesized a number of leadership typologies and concluded that distilling existing knowledge in this way provides clarity and allows scholars to better analyze different leadership behaviors. Based on this, for example, Pearce et al. (2003) described different leadership models (directive, transactional, transformational, and empowered). On the other hand, SL has not been given the

epithet of its own leadership model in the past. For example, Poff (2010) saw sustainability leadership simply as a form of ethical leadership, while McCann and Holt (2010) saw it more as servant leadership. Tideman, Arts and Zandee (2013) see SL as an extended form of transformational leadership with an additional emphasis on values, while Schüz (2016) prioritizes responsible leadership and links it to the dimensions of sustainable corporate responsibility. A recent study of Di Fabio and Peiró (2018) argued about a new integrated SL concept, i.e. human capital sustainability leadership (HCSL) which integrates four dimensions of leadership styles, such as ethical, servant, mindful and sustainability leadership to provide a holistic view of SL for sustaining human capital.

According to the Tideman, Arts and Zandee (2013), more research will be needed, with the aim of verifying and validating the model of SL in practice and establishing best practices for managers to develop the necessary qualities. A literature review by Santana and Lopez-Cabrales (2019) on the performance of sustainable human resource management found that SL is an underdeveloped and marginalized topic. Leadership in general is a multifaceted phenomenon that needs to be explored in more detail (Kjellström et al., 2020).

3 Methodology

For the needs of the research, we will use bibliometric analysis as it is an appropriate method to address the set objectives of this work, as it can help to understand the complexity of SL literature and analyze a large amount of scientific data (Donthu et al., 2021) in an organized way to generate new knowledge, research directions and insights (Massaro et al., 2016).

3.1 Data searching

Study follows other relevant studies in the sustainable development field who mainly adopted Scopus as the preferred database to conduct bibliometric analysis based on the co-occurrence terms (Hallinger and Suriyankietkaew, 2018; Ligorio, 2022; Eustachio, 2023). Accordingly, we searched for relevant studies in the scientific literature represented by journal articles. The Scopus database was searched for keywords related to "sustainable leadership" OR "sustainability leadership" which produced 531 initial documents. In the additional search string, we used the

keywords "sustainable development" AND "leadership" with 4384 hits. Searching process and the selection process were performed between January 2007 and December 2023.

3.2 Data screening

Table 1 lists the inclusion and exclusion criteria used to screen article titles and abstracts. The authors followed a two-stage approach to screening and quality assessment of the documents. First, the authors read the documents' titles and abstracts. After performing the analysis and excluding inappropriate articles, we found that our criteria coincide with the subject area "Business, Management and Accounting", and that articles from the criterion "sector" are not found in other subject areas. In the first review, there were a total of 151 mentioned articles. In the next stage, the documents selected in the first stage, the authors read the full-length papers. Thus, after a careful review and reading, we additionally eliminated articles not related to our research questions: eco-effectiveness, climate change, corporate social responsibility, morality, total quality management, benchmarking.

Table 1: Inclusion and Exclusion Criteria

Criterion	Inclusion	Exclusion
Study type	Peer reviewed empirical and theoretical/conceptual studies; conference articles included if high quality	
Language	English	Any other language
Sector	Industry	Medicine, Agricultural Sciences, Physics and Astronomy, Computer Science, etc.
Relevance	Sustainability leadership Addresses sustainability leadership Level of analysis: firm level practices and processes	Not directly relevant to the research question Level of analysis: not firm-level practices and processes Technical research on predictive maintenance

3.3 Data extraction and synthesis

In order to obtain as much in-depth information as possible, we approached the analysis from two sides. First, we obtained bibliometric data from 25 articles exported from Scopus database into a .csv file. We analyze the data using R software and Biblioshiny which connects with the Scopus API to automatically collect metadata regarding scholars' complete scientific production list (Aria and Cuccurullo, 2017; Derviş, 2019). This was followed by the second phase of the research, where this time we exported the .csv file to Excel. Given that the data set from the selected articles was heterogeneous, from multiple contexts and contained a mix of empirical (qualitative and quantitative) and conceptual articles, we used an integrative and qualitative cross-case analysis approach to synthesis, each article being equivalent to a case (Mays, Pope and Popay, 2005).

4 Results

4.1 Intensity of research

Through analysis, we found that there are 25 articles in the Scopus database that directly examine SL in industry, with an annual growth rate of 8.16%. There are currently 30 active authors in the field, while we record 36% international co-authorship. The most active researchers are Kantabutra, Avery, Iqbal, Suriyankietkaew. According to the analysis of literature in the field of SL, made by Hallinger and Suriyankietkaew (2018), they are representatives of Sustainable Leadership School, which is small but especially important because the authors located in this school, have made the headway in defining and examining SL as an independent construct. It is indicative that the above-mentioned group of researchers is focused on the study of SL without the admixture of different models (entrepreneurial, responsible, ethical, authentic, transformational, servant) of leadership in connection with sustainable development. In addition, they do not study sustainable leadership only in the context of a closed organizational system, but are always interested in the public social context as well. This consequently means that such refined and targeted SL could have great possibilities for practical application and further development.

Table 2: Rank order of the ten most highly cited authors on sustainable leadership in industry, 2009–2023

Rank	Author	h_index	g_index	m_index	Citations	Articles
1	Kantabutra, S.	7	9	0,5	201	9
2	Avery, G.C.	6	6	0,44	328	6
3	Iqbal, Q.	3	4	0,6	68	4
4	Suriyankietkaew, S.	3	3	0,273	64	3
5	Bergsteiner, H.	2	2	0,143	214	2
6	Piwowar-Sulej, K.	2	3	1	19	3
7	Ahmad, N.H.	1	1	0,2	49	1
8	Branco, M.C.	1	1	0,143	9	1
9	Chaves, C.	1	1	0,143	9	1
10	Cheng, C-F.	1	1	0,25	5	1
11	Chowdhury, F.	1	1	0,25	5	1

4.2 Geographical research presence

The largest contribution to scientific articles in the field of SL in industry was made by educational institutions and researchers on Thailand (12). This was certainly supported by the politics of King Bhumibol Adulyadej, who, following the financial crisis in 1997, laid the foundations for the Philosophy of Sufficiency Economy, which promotes self-sufficiency and sustainability in agriculture and industry. The basis of the subject philosophy are Buddhist values, whose three major components are wisdom, moderation, and caution, while morality and knowledge should be always applied. With this purpose, six Royal Development Study Centers have also been established to conduct research and development activities to ease problems faced by residents in each region of the country (Languepin, 2019). They are followed by researchers from Australia (7), who have great collaboration (4) with Thai colleagues. They are followed by Saudi Arabia and Poland (3), where researchers Iqbar and Piwowar-Sulej, who have been particularly active recently, participate together. This can certainly be attributed to the activity of Saudi Arabia, which, even more than other countries, advocates to achieve the Sustainable Development Goals of the United Nations 2030 Agenda. Credit goes to the Saudi king Salman bin Abdulaziz who in 2016 launched the Vision project, which aims,

based on the key component of sustainability in a broad spectrum, transforming their unique strategic location into a global hub connecting three continents, Asia, Europe and Africa.

4.3 The most explored country industries

By far the most research was done on companies located in Thailand (12). It concerns various areas of industry, namely: telecommunications, banking, construction, manufacturing, and the food industry. This makes Thailand the world's leading country in research of SL in the field of industry. It is followed by research in Pakistani industry (3), which was probably fostered in a broader perspective by the atmosphere in which the Pakistani government, due to social inequality, population growth and industrial pollution, promotes various sustainable projects, as "the current social and environmental indicators and other related figures are horrific and mind-boggling" (Mehdi, 2019). The research was directed particularly on the hospitality industry and other types of industries, which are not specifically mentioned in the research. In China, India, Germany, 2 surveys were done and 1 in Canada, Portugal, Romania and USA.

4.4 Prevalence by type of research

In terms of prevalence by type of research, a balance between quantitative and qualitative studies should be acknowledged. There are 12 quantitative surveys which samples consisted of employees from small- and medium-sized enterprises (SMEs) across diverse industries. They are followed by case study research (11), including those based on: a) multi-method case study approach, which includes in-depth interview sessions with top management team members and employees, multi-data collection methods included non-participant observations made during visits to the enterprise, and reference to internal and published documentation and information, b) including survey by questionnaire c) or ex-post facto research, d) analysis of managerial practices through companies' annual reports and financial overview. Among them, the first approach dominates, while the last two are quite rare. The last one was, for example, used in the initial phase of establishing the study of SL. The remaining two studies belong to the field of conceptual studies, as they are based on the authors' past research.

5 Discussion and conclusion

After analysis, the paper concludes that SL is a relatively young field that still offers much potential for future development and research. This is also confirmed by the small number of articles, authors and geographical absence in most parts of the world. Additional explanations are provided below.

To better understand all the nuances of the discussion, we must first take note of the fact that 193 countries in the UN General Assembly adopted the 2030 Development Agenda entitled "Transforming our world: the 2030 Agenda for Sustainable Development". It is necessary to start with this and in this context also address all the implications related to SL. Considering that implementation involves national governments and sub-national authorities, while non-state actors are businesses and civil society (Llanos et al., 2022), there are surprisingly few studies on SL. This is even more so considering that industry is the biggest factor in implementing sustainable solutions due to its scale and overall (social, environmental, and cultural) impact. It can therefore be concluded that current leaders are not up to the challenges of sustainable development, whose main characteristics are the satisfaction of all stakeholders and a long-term vision. A small number of authors dominate the geographical area of practical exploration of SL, so it is imperative that others join them in disseminating SL and its results in practice. Because sustainability is not the task of the chosen ones, but of every individual.

The main researchers working on SL as an independent construct come from the Indo-Pacific region; most research is also carried out in companies from this part of the world, while increased activity can be recognized in the Middle East. Examples of SL practices from other parts of the world are rare and/or do not have the scope to provide insight into the use of SL characteristics in practice. Therefore, there is a need for larger part of the world to become more actively involved in the implementation and research of SL. This is even more necessary because leadership, as a complex process by which one person influences others to accomplish a mission, task or goal and guide the organization to become more coherent and cohesive (Clark, 1997), is a fundamental role in implementing the concept of sustainable development. Given that a person conducts this process using their leadership attributes (beliefs, values, ethics, character, knowledge and skills), in light of the study's findings, a change in mindset and behavior is required if we want to

achieve the Sustainable Development Goals. It is necessary to move forward because current leadership models have been developed for the "typical American worker": a white male with a high school education working in manufacturing (Hogan, Curphy and Hogan, 1994), while transformational leadership, as the most studied leadership model, has no component of inclusion and sustainability.

In the long term, the authors assume that a global change in the perception of the importance and implementation of SL will require the constructive interaction of researchers from the fields of business and management with researchers from the field of education. The aim is to explore the extent to which sustainable development and SL are present in the formal education of young people in the educational system. Because it is precisely through a change of mindset and the high-quality implementation of sustainable mechanisms in the school system that we will create a better and fairer world.

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