Sustainable Leadership: A Scientific Literature Positioning using Scientometric Analysis

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Abstract

Managing the company by considering the environment, society, and long-term Sustainable leadership contribution. This paper aims to review the status and visual map position of research in the internationally Sustainable leadership publication indexed Scopus that used a bibliometric perspective. The research was carried out using bibliometric techniques. Data analysis as well as visualization utilising VOSViewer program and the Scopus function for analyze search results. In this review, the details collected applied to 159 documents issued from 1998 through 2019. The study reveals that Kantabutra, S., and Mahidol University were the most active individual scientists and affiliated institutions in Sustainable leadership publication. In Sustainable leadership, Business, Management, and Accounting, Sustainability Switzerland were the most areas of study and dissemination sources. There were two worldwide group maps with collaborative researchers. In order to identify the body of knowledge created from twenty-one years of publication, this study constructed a convergence axis grouping comprising of sustainable leadership
1. Introduction

With increasing globalization, growing complexities and instability, technical advances, high-performance capillary action in tension, exhaustion, and a higher likelihood of deviant actions over the past decade, the market scenario has undergone a metamorphosis. Institutions need sustainable leadership in this unstable world that is ethical, enabling, empathic, and inspiring instead of manipulating, requesting, and disrupting the attainment of short-term goals (Sharma). Sustainable construction is a critical global problem and nowadays, even more than before, it is not possible to exaggerate the value of responsible and efficient sustainable development in industry and business. If we are to ensure the resiliency of financial prospects, our capacity to decrease the impact on the environment while expanding efficiency and competitiveness is crucial (McCusker). There is no question that, in past years, sustainability is now one of the most critical market concerns. There is consensus among leaders and practitioners that sustainability is not integrated as needed, despite the value of sustainability (Le Roux and Pretorius). Integrated Planning and Management 4.0 is educating people, developing people, innovating, linking access to resources, and changing (Jedaman et al.). Leadership is known as being one of the variables that help the achievement of project managers. Leadership thus functions as a combination of the actions of the manager and the synergy of subordinates to accomplish organizational goals. There are many forms of leadership behaviors that have been practiced by infrastructure industry leaders, but certain moral concerns such as corruption, mismanagement, and leaks among industry leaders are still present. Consequently, to alleviate all circumstances that would affect either companies and communities in the construction sector, a newly developed leadership style such as sustainable leadership (SL) is required. SL is known for its holistic plan, which integrates the sustainability concept into this one. In fact, FFS relies not only on the leader's skill and resolve, but it is necessary to sustain a continuous effort and achieve results (binti Zulkiffli and binti Ahmad Latiffi). Product innovation and outstanding sustainable leadership combine to create a sustainable organization (Christofi et al.).

Initial concern for sustainability grew from the fields of economic development and environmental studies. Recently, however, its popularity has started to increase among organizational and management scholars as well. Sustainable leadership is distinguished from the classic notion of leadership in that it places more emphasis on long-term prosperity than short-term gains. This emphasizes the role of the leader not only in promoting production output, but also in ensuring that it is produced continuously (Lee). The task of creating a sustainable supply of person knows who can work efficiently in various cultural contexts is often faced by organizations. The company needs to implement effective succession strategies to achieve effective leadership in order to establish a sustainable management structure across the various functional units (Sharma and Sengupta). leaders so how they can learn leadership skills and knowledge and improve their self-perception of their skills (Segovia-Pérez et al.). Three aspects (sustainable management, sustainable projects, and sustainability activity) are involved in sustainable leadership (Al-Zawahreh et al.). The first one is the study of sustainable leadership, focused on the attributes of individuals and communities and rooted in its principles, policies, processes, and organizational principles. The second illustrates the relationship between the management of human capital, protection of the environment, and organizational success. The third group considers the contradictions and contradictions between the management of human capital and sustainable practices: Human resource department, on the one hand, should concentrate on reducing the production finances and efficiency (in the near term); on the other hand, its efforts must ensure the long-term sustainability of its organizational results. ’s final class talks about the relationship between both the management of human resources and the social aspects of sustainability, particularly with relation to the individual obligation of a company and the interaction between the business and its stakeholders (Macke and Genari). The role of the organisation of the boss, usually the Chief executive, in the company's long-term growth and maintenance. Sustainability has been identified as a giant-trend that companies can
not overlook. What differs from prior innovations, such as IT and the consistency of innovations, however, requires a more personal dedication by the leader to effective execution of an organisation, since the essence of its survival is more directly linked to personal beliefs (Joyce Stuart).

In general, the area of Sustainable Leadership publication The studies were limited to one sample. topic only. One example is the research of results by Jari Metsämuronen, Tuomo Kuosa, and Reijo Laentukken, (2013). has researched Sustainable leadership and future-oriented decision making in educational governance - a Finnish case (Metsämuronen et al.). Sustainable leadership research limited in generally in an institution (Kantabutra and Saratun), aspect (Kantabutra and Suriyankietkaew) Country (Kantabutra), in one period (Hesse and Lurie). Unfortunately, despite presenting a broad image map visualized year over year with details from several published studies at the global scale, there has not been much publication on Sustainable Leadership. The strong positive relationship regarding affiliation, scholars, and the impact of scholarly studies has also not been explicitly discussed by any publication. This paper's Purpose to review the status and visual map position of research in the internationally Sustainable Leadership publication indexed Scopus that used a bibliometric perspective.

2. Research Methods

This review mapped the status of the study conducted in the last 21 years at the global level on the basis of sustainable leadership. In August 2020, this study collected data from the Scopus utilizing document search queries (Septianto and Purnomo). The research was carried out using bibliometric techniques. Data analysis as well as visualization utilising VOSViewer program and the Scopus function for analyze search results (Purnomo, Septianto, et al.),(Purnomo, Rosyidah, et al.). A bibliometric network, researchers, number of studies, academic affiliation, region, area, keywords, and author collaboration, is developed and visualized using the VOSViewer tool (Natakusumah). This study identifies sustainable leadership keywords to recognize and look for Scopus database publications with 159 globally published documents from 1998 through 2019. The research confined collection of data to 2019 and excluding 2020. In order to reflect the state of the study over the entire year, the annual academic data collected from January to December. (TITLE-ABS-KEY (“sustainable leadership”) AND PUBYEAR <2020) is the query input command which is implemented while mining academic publication data on online database of Scopus.

The research applies a co-authorship analysis with authors' analysis units and full calculation systematic techniques utilizing VOSViewer to gain the collaboration research network of the international researcher. The research conducted an in-depth co-occurrence analysis with keyword relation analysis as well as a full systematic technique of calculation utilizing VOSViewer to generate a keyword map network.

3. Result and Discussion

3.1 Sustainable Leadership Publications Most Common Nation

![Figure. 1. Nation Number of Annual Publication of Sustainable leadership]
In Figure 1 is the Nation Number of Annual Publication of Sustainable leadership publications, the United States with 30 academic documents was the leading research nation. Then, with 25 articles, the United Kingdom followed, Thailand with 23 documents, Australia with 20 documents, Finland with 7 documents, India with 7 documents, Thailand with 7 documents, Australia with 20 documents, Finland with 7 documents, Canada with 4 documents, Malaysia with 4 documents, Spain with 4 documents, and India with 21 documents.

3.2 Sustainable Leadership Most Common Organizational Affiliations

![Organizational Affiliation Number of Annual Publication of Sustainable leadership](image)

The leading research organizations in Sustainable leadership publications was Mahidol University with 19 documents, Followed by Macquarie University with 8 documents, Australian Catholic University with 4 documents, Tampereen Yliopisto with 4 documents, University of Hull with 4 documents, Boston College with 4 Critical Panepistemio documents with 7 documents, Khon Kaen University with 3 documents, Griffith University with 3 documents.

3.3 Sustainable Leadership Publications Most Individual Researcher

![Most individual Sustainable leadership Publication Researcher](image)

The researcher in the area of Sustainable Leadership to the most writings was Kantabutra, S., 13 documents with it. Pursued by Suriyankietkaew, S., with six documents, Avery, GC, with five documents, Hargreaves, A., with four documents, Dimovski, V., with three documents, Kostoulas-Makrakis, N., with three documents, Penger, S., with three documents, Peterlin, J., with three documents, Yuenyong, C., with three documents.
3.4 The Largest Frequency of Publication of Sustainable Leadership by Subject Area

![Figure 4. The Largest Frequency of Publication of sustainable leadership by Subject Area](image)

With (31.7 percent), business, management and accounting in the subject area was the highest frequent subject area in international publications on sustainable leadership. Followed by Social Sciences with 27.0%, Economics, Econometrics and Finance with a proportion of 8.1%, Engineering with a proportion of 6.2%, Energy 4.2%, Environmental Science with a proportion of 4.2%, Medicine with a proportion of 3.9%, Computer Science with a proportion of 2.7%, Arts and Humanities with a proportion of 1.9%, Nursing with a proportion of 1.9% and others with a proportion of 8.1% as shown in Figure 4. Field of Research.

3.5 Most Frequency of Sustainable Leadership Research by Document type

![Figure 5. Most Frequency of Sustainable Leadership Research by Document type](image)

The Largest Frequent Document scientific Type in Sustainable Leadership Publication is Article (62.9%) with 100 documents, then Conference Paper (14.5%) with 23 documents, Book Chapter (11.3%) with 18 documents, Review (6.9%) with 11 documents and Book (2.5%) with 4 documents, Notes (1.3%) with 1 document and Conference Paper (0.6%) with 1 document.
3.6 Year Documents of Sustainable leadership Publication Sources

The leader in the annual number of sources of Sustainable leadership publications is “Sustainability Switzerland” with 7 documents. Followed by “Industrial And Commercial Training” with 4 documents, “Asia Pacific Journal Of Business Administration” with 3 documents, “International Journal Of Educational Management” with 3 documents, “Journal Of Educational Change” with 3 documents as shown in Figure 6.

3.7 Documents per year from the Sustainable Leadership Field

From Figure 7, it can be seen that the increase of international academic document publications scientific in the Sustainable Leadership area has increased every year. The peak of the publication of international academic documents in the field of Sustainable Innovation was the highest in 2019 with 19 documents, this also means that in 2020 there will be an increase in research on Sustainable Leadership. Whereas in 2018 there are 17 documents, in 2017 there are 18 documents, in 2016 there are 12 documents, in 2015 there are 15 documents published.
### 3.8 Sustainable Leadership Publication Article Cited

<table>
<thead>
<tr>
<th>Document title</th>
<th>Authors</th>
<th>Year</th>
<th>Source</th>
<th>Cited by</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 The Seven Principles of Sustainable Leadership</td>
<td>Hargreaves, A., Fink, D.</td>
<td>2004</td>
<td>Educational Leadership 61(7), pp. 6-13</td>
<td>132</td>
</tr>
<tr>
<td>3 Leadership for sustainable futures: Achieving success in a competitive world</td>
<td>Avery, G.C.</td>
<td>2005</td>
<td>Leadership for Sustainable Futures: Achieving Success in a Competitive World</td>
<td>81</td>
</tr>
</tbody>
</table>

![Figure. 8. Most Frequencies of Sustainable Leadership Article cited](image)

From Figure 8, it can be seen that the top 3 international publications cited in the area of Sustainable Leadership. The most publications are the work of Sahlberg, P. in 2007 entitled “The Education policies for raising student learning: The Finnish approach”. There are 225 documents cited.

### 3.9 Publication of the Map

With analysis and visualization of the VOSViewer program, construction was developed on the Sustainable Leadership keyword framework for the Sustainable Leadership of publication theme map. Three repetitions were the criterion for the minimum amount of keyword-related documents. Therefore, 46 keywords among 783 keywords reached the thresholds.
From Figure 9, there were eight publication theme groups dependent on study keywords regarding the international academic publication of Sustainable leadership, simplified as well as abbreviated as LOPEC themes:

1. Leadership cluster (Purple). The keywords such as ethics, Policy dominated this cluster.
2. Organizational and Management cluster (Green). The keywords such as organizational culture, adult, nursing care, article, male human, and education dominated this cluster. Many of these keywords are linked to themes in Organizational and Management.
3. Policy cluster (Yellow). The keywords such as palliative therapy and palliative care dominated this cluster. Many of these keywords are linked to themes Policy cluster.
4. Economic and Social Effect cluster (Red). The keywords such as globalization, decision making, human resource management, innovation, higher education, and sustainability dominated this cluster. Many of these keywords are linked to themes Sustainable Leadership.
5. Corporate Sustainability cluster (Blue). The keywords such as honeybee leadership, aglo/us leadership, transformational leadership, and sustainable leadership dominated this cluster. Many of these keywords are linked to themes Corporate Sustainability.

Even these two smaller groups (Yellow and Purple) are still rising and will receive more exposure in the future as industry, business, and the increasing number of celebrities or influencers created from this network increase.
3.10 Author Collaboration Network

Two substances were used as criteria for the minimum collection of publications each author. Thus, 17 authors out of 282 authors were identified that reached the thresholds. In the Sustainable Leadership literature, there was a collaboration trend between two collaborative groups between authors, as seen in Fig. 10. Network of Author Collaboration assembled with the application VOSViewer.

![Network of Author Collaboration](image)

**Figure 10. Author Collaboration Network**

1. Sooksan Kantabutra research while affiliated with Mahidol University, Bangkok, Thailand.
2. Gayle Avery research while affiliated with Macquarie University, Sydney, Australia.
3. Suriyankietkaew, S. research while affiliated with Mahidol University, Bangkok, Thailand.
4. Avery, G.C. research while affiliated with Macquarie Graduate School of Management.
5. Thabrany H., Director in Institute for Sustainable Leadership and an Honorary Fellow at the Australian Catholic University, Sydney.

There is a pattern of collaboration between two groups between researchers in the field of Sustainable leadership as seen in Figure 10. The red cluster contains Sooksan Kantabutra, Gayle Avery, and Suriyankietkaew. We can see that the three authors are connected to each other and are dominated by the same country, namely Thailand. We can see that the green cluster contains Avery, G.C, and Thabrany H. We can see that the three authors are connected and dominated by the same country, namely Sydney, Australia.

4. Conclusion

The results of this research revealed that there is an annual trend towards a spike in the amount of international publications on sustainable leadership, there were maps and visual patterns. With 159 papers, the United States was the country with the greatest contribution to publications in sustainable leadership studies. In the publication of sustainable leadership publications, Mahidol University Studies was the most active research institution with 19 papers. In the sustainable leadership publication, the individual academic
researcher with the most prolific publications was Kantabutra, S. 13 papers with it. With (31.7 percent), the most intensively studied areas published in the sustainable leadership publication were Business, Management, and Accounting. The “Sustainability Switzerland” with 7 scientific documents was the majority of annual documents by the source in the sustainable leadership publication. With 19 papers, the highest publication of worldwide scholarly publications in sustainable leadership studies was in 2019. The works of Sahlbreg, P. were mostly publications with the most citations. In 2007, entitled “The Education policies for raising student learning: The Finnish approach” cited 225 documents. There were two researcher partnership groups linked to the publication of sustainable leadership.

In terms of contributing knowledge implications, this study recommends a classification of the convergence axis comprising of publication in sustainable leadership to classify the body of knowledge created from twenty-one years of academic publication: Economic and Social Effect, Organizational and Management, Corporate Sustainability, Policy and Leadership, abbreviated as LOPEC themes. The identification of key themes in the sustainable leadership, as practical implication, contributes to an awareness of the creation of practical studies to clarify general contexts and topics, as well as research gaps. All this will lead to fresh research addressing a lack of study and specialized expertise in the disciplines. The most studied themes often reflect the ability to contribute of sustainable leadership to managing the company by considering the environment, society, and long-term sustainable development goals.

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References


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