

EXPLORING TRENDS IN SUSTAINABLE TOURISM LEADERSHIP AND MANAGEMENT: A BIBLIOMETRIC ANALYSIS

Abstract

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The tourism industry is vital for many countries' economies and social progress. Its rapid growth can harm the environment, local communities, and cultural heritage, so innovative and sustainable tourism management is urgently needed to resolve these issues.

This research paper presents a bibliometric analysis to explore current research trends in leadership and management for sustainable tourism.

The primary aim of this research is to identify and analyze the key themes, emerging trends, and potential research gaps within the existing literature on leadership and management practices in the context of sustainable tourism development.

A systematic search will be conducted within prominent academic databases, through Scopus. Relevant articles published past 20 years will be identified using search terms like "leadership," "management," "tourism," "hospitality," "sustainability". Bibliometric software VOS will be utilized to analyze the retrieved data, focusing on parameters such as publication volume, authorship patterns, top-cited journals, publication trends over time, and keyword co-occurrence analysis.

Utilizing network visualization, this study reveals strong collaborative networks among researchers exploring leadership and management for sustainable tourism.

This research provides an up-to-date and comprehensive overview of leadership and management practices for sustainable tourism through a bibliometric analysis.

By analyzing publication trends, authorship patterns, and keyword co-occurrence, this study sheds light on the current research landscape within this domain. The identification of research gaps will offer valuable insights for researchers and practitioners, contributing to the development of more effective leadership and management approaches for achieving sustainability goals in the tourism industry.

Keywords leadership, management, sustainable tourism, hospitality industry

Review

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INTRODUCTION

Research in leadership and management for sustainable tourism has grown significantly in recent years, addressing a wide range of global themes and challenges. This paper builds on this rich literature by analyzing a significant articles in the Scopus database to identify current trends and reveal future research directions. Using a network visualization approach, was uncovered a number of distinct thematic clusters, providing a detailed picture of the ever-evolving intellectual landscape of this important field.

The theme of the research is investigating leadership and management role within the field of sustainable tourism through a bibliometric analysis. The paper aims to investigate the evolution of research surrounding the question: "How has the role of leadership and management in sustainable tourism evolved?"

1. LITERATURE REVIEW

The tourism industry holds considerable importance in the economies and social advancement of many countries, particularly in rural and remote regions. Nevertheless, the swift expansion of tourism can have adverse effects on the environment, local communities, and cultural heritage. Hence, there is a pressing requirement for inventive and sustainable approaches to tourism management to tackle these challenges (Pongsuppat et al., 2023).

In the hospitality industry, studies have indicated that leadership plays a crucial role in fostering innovation within service delivery. It has been found to exert both direct and indirect influences on service innovation. Additionally, leadership has been shown to positively impact innovative work behavior among employees. Moreover, the establishment of conducive environments for innovation directly enhances employee behavior, bolstering the generation of innovative ideas and solutions. (Papaioannou et al., 2024).

Previous research by authors such as Bavik (2020) on leadership behaviors has often focused on reviewing the roots and outcomes of specific actions that leaders take, with a tendency to limit the focus to behaviors associated with only one leadership style.

Although qualitative methodologies can provide valuable insight into the evolution of the field, it is important to also use quantitative methodologies to reduce subjectivity and strengthen conclusions (Huertas Valdivias et al., 2022).

Recognizing the limitations of qualitative methods in achieving a comprehensive understanding of publication trends, Koseoglu et al. (2016) and Zupic & Cater (2015) advocate for software-assisted bibliometric analysis. This quantitative approach offers a more objective lens to study research on specific phenomena within hospitality and tourism.

Furthermore, as highlighted by Huertas Valdivia et. al (2022), bibliometric studies remain valuable regardless of a field's maturity, providing crucial insights into research focus and evolution.

The environmental footprint of tourism poses a major threat to sustainable development. We must urgently implement strategies to minimize this impact and achieve a more sustainable future for tourism. (Mikayilov, Mukhtarov, Mammadov and Azizov, 2019)

The study conducted by Papaioannou et al. (2024) affirmed that leadership, organizational culture, customer-oriented strategy and human resource empowerment all contribute positively to innovation and quality management within luxury resorts.

As Koiwanit and Filimonau (2023) present, stakeholder collaboration is a fundamental strategy for advancing sustainability initiatives across various sectors, including tourism. This collaboration involves individuals and organizations from both private and public sectors, working together towards common sustainability goals, such as environmental conservation, economic development, and community well-being. The success of stakeholder collaboration relies on mutual commitment, interest, and trust among participants.

As per the research conducted by Indrayania and Wahyudia (2020), it is recommended that the hotel leader implements a policy on environmental management. This policy should aim to enhance the motivation of environmental management staff by providing essential infrastructure such as a wastewater treatment plant and ensuring adequate funding for its operations.

2. METHODOLOGY

The aim of this study is to conduct a descriptive and evaluative examination of leadership and management practices within the realm of sustainable tourism. This examination draws upon articles sourced from Scopus international database.

To gain a comprehensive understanding of leadership and management for sustainable tourism, this research explores:

1. How are leadership and management practices for sustainable tourism distributed across publication years, authors, institutions, countries and journals within the Scopus database?
2. How do leadership and management practices for sustainable tourism research in the Scopus database among authors, intellectual influence through citations and thematic connections through keyword co-occurrence?
3. How are leadership and management practices for sustainable tourism evolving based on the published research?

To gain a deeper understanding of current research trends, this study employed a bibliometric approach. By applying Scopus and VOSviewer software, a thorough analysis of the content in relevant articles was achieved.

To identify relevant research on leadership and management practices in sustainable tourism, a comprehensive search was conducted within the Scopus database. A search string was developed consisting of five main keywords: 1) leadership, 2) management, 3) tourism, 4) hospitality, 5) sustainability, focused on articles published between 2014 and 2024 period.

Following this filtering process, 4.700 articles were obtained. In the second stage, documents written in English were selected. Thus, the number of the documents decreased to 4.546.

Table 1: Literature review process: inclusion and exclusion criteria

Stage	Content	Description
Stage 1	Scientific database	Scopus
	Indexation	All
	Date	21.03.2024
	Search Period	1 January 2014 – 21 March 2024
	Searchedkeywords	TITLE-ABS-KEY (Leadership OR Management AND tourism OR Hospitality AND sustainability) AND PUBYEAR > 2014 AND PUBYEAR < 2024
	Initial result	4.700 documents
Refining stages		
Stage 2	Language	English = 4.546 documents
	Final result	4.546 documents

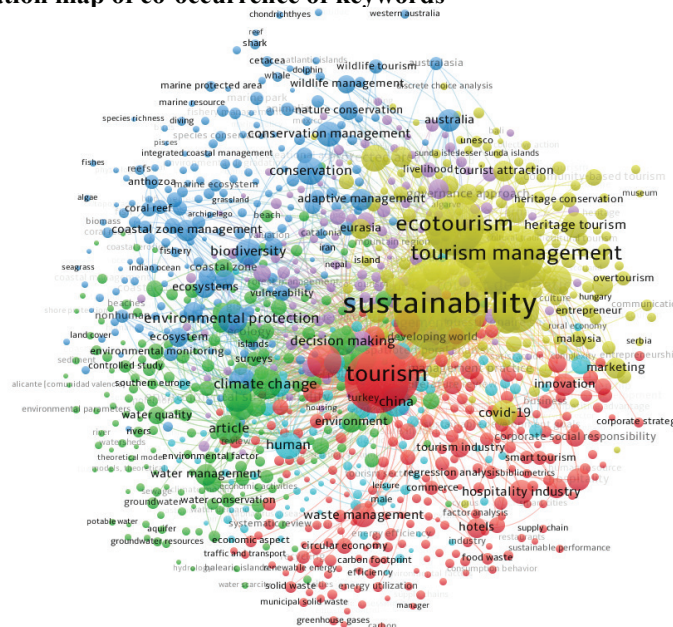
Source: Own processing after Scopus (2024)

3. RESULTS

This chapter examines the key themes and research trends within leadership and management for sustainable tourism. The Scopus scientific database was utilized to identify relevant articles, which were subsequently analyzed after applying specific filters to extract valuable insights.

To visualize the thematic connections between these articles, a network visualization technique was employed. In this network map, the size of each circle represents the frequency of a particular keyword, while the thickness of the connecting lines indicates the strength of the relationship between keywords. Color-coding further highlights distinct thematic clusters within the research field, drawing inspiration from the work of Van Eck & Waltman (2017).

Figure 1: Network visualization map of co-occurrence of keywords



Source: Authors after VOS Viewer (2024)

Figure 1 presents a network visualization map highlighting the most frequently co-occurring keywords within the analyzed research on leadership and management for sustainable tourism. From the 4,546 articles identified in the analyzed period, over 1,000 keywords met a specific threshold for this analysis.

The visualization reveals six distinct clusters of these high-frequency keywords. This interconnected network map demonstrates both the thematic focus and diversity of the research field. The size of each circle represents the frequency of a particular keyword's occurrence, while the thickness of the connecting lines indicates the strength of the relationship between keywords. A closer examination of the map suggests a prominent focus on keywords directly related to leadership and management practices within the context of sustainable tourism. These clusters likely represent the main thematic areas of current research interest. Notably, the size of these clusters suggests they are among the most well-developed research areas within the field. Six key thematic areas emerged from the analysis, presented here as clusters:

Cluster 1 (red) presents the key words: “tourism industry”, “sustainable development”, “leisure industry”, “hotel management”, “tourism sustainability”, “developing countries”, “smart tourism”, “waste management”, “environmental management”. It emphasizes integrating sustainability principles into core tourism industry operations, including hotel management, waste management, and environmental practices. This cluster also explores the potential of smart technology and its role in achieving these goals, particularly within developing countries. This suggests a focus on actionable solutions for broader industry adoption of sustainable practices.

Cluster 2 (green) appears to revolve around the key word: “climate change” and creates interconnections between the following addressed topics: “economics”, “ecology”, “water management”, “environment”, “decision making”, “article”, “quality control”. Cluster 2 suggests research that explores the complex interplay between climate change, its environmental and economic impacts on tourism destinations, and the decision-making processes needed to ensure sustainable tourism development under these new circumstances. The focus on “quality control” might indicate an interest in maintaining positive tourist experiences while adapting to climate change limitations.

Cluster 3 (blue) appears to be centred on the concept of “environmental protection” and revolves around the key words “biodiversity”, “adaptive management”, “conservation management”, “biodiversity”, “ecosystem”, “environmental impact”. It emphasizes the importance of environmental protection for sustainable tourism. It focuses on strategies like adaptive and conservation management to minimize tourism’s impact on biodiversity and ecosystems. The emphasis on understanding “environmental impact” suggests a proactive approach to mitigating negative consequences.

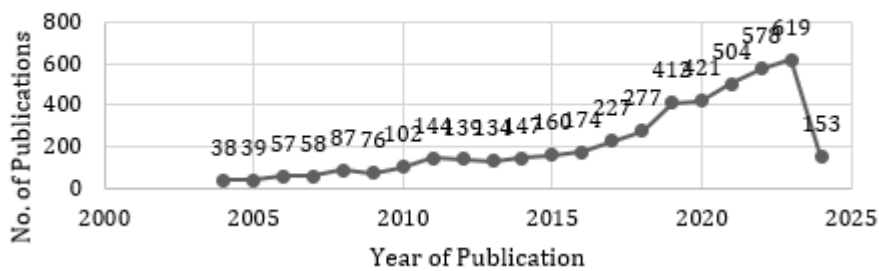
Cluster 4 (yellow) is constructed around the key word “sustainability”, with the following interconnections: “ecotourism”, “tourism management”, “resilience”, “stakeholder”, “protected areas”, “cultural heritage”, “crisis management”. It highlights the importance of stakeholder collaboration to ensure the resilience of protected areas and cultural heritage sites.

Cluster 5 (purple) is built around the key word “resource management” and realizes the following interconnections: “local participation”, “natural resources”, “project management”, “legislation”. It recognizes the importance of responsible management of natural resources like water, land, and wildlife for sustainable tourism development. It emphasizes involving local communities in decision-making processes (“local participation”) and implementing effective project management strategies to ensure responsible resource use. The focus on “legislation” suggests an interest in understanding and potentially influencing legal frameworks that can support sustainable resource management practices in tourism.

Cluster 6 (turquoise) takes a human-centric approach to sustainable tourism. It is constructed around the key word “human” and around it the following interconnections are realized: “behavior”, “organisation and management”, “seasonality”, “economic development”, “public policy”, “motivation”. It emphasizes understanding tourist behavior and motivations, along with effective organizational management for sustainability. Additionally, this cluster explores the economic and social aspects of tourism through “economic development” and “public policy,” suggesting an interest in finding a balance between economic benefits and responsible practices. Finally, the focus on “seasonality” highlights the need to manage tourism in a way that considers fluctuations in tourist numbers throughout the year.

Overall, these clusters collectively contribute to a holistic understanding of sustainable tourism, encompassing environmental, economic, social and organizational dimensions.

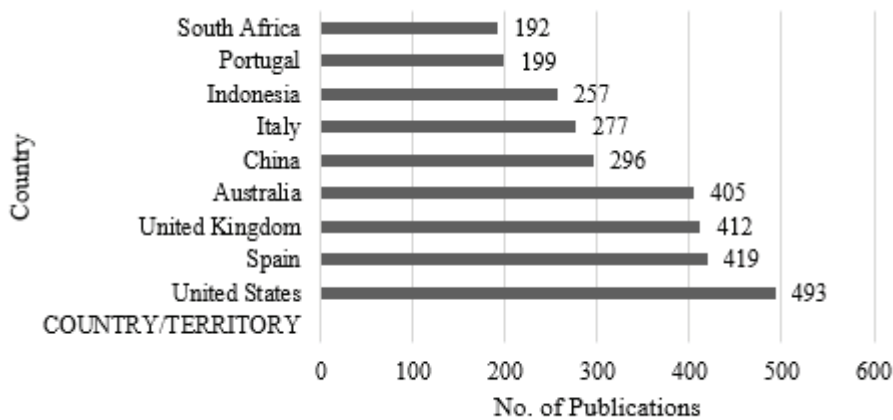
Figure 2: Number of papers published by year



Source: Own processing after Scopus (2024)

The depicted trend highlights a distinct increase in the volume of published articles throughout the analysed timeframe, underscoring a burgeoning academic interest and research productivity in the domain of leadership and management within sustainable tourism. The observed decline in article numbers for 2024 can be attributed to the limited timeframe analysed, rather than indicating a warning interest.

Figure 3: Number of publications by country



Source: Own processing after Scopus (2024)

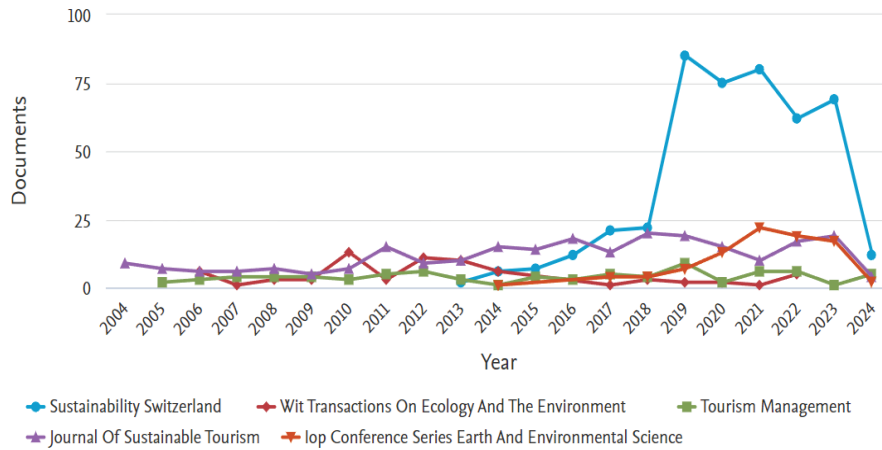
This graphic highlights the geographical distribution of research in leadership and management for sustainable tourism.

While some countries, like the United States, Spain, the United Kingdom and Australia, stand out as major contributors based on publication output, this doesn't diminish the global interest in this field.

The focus on sustainable tourism across various regions suggests a collaborative nature of research, where scholars worldwide are working towards solutions for a more sustainable future of tourism.

While the top publishing countries likely boast strong research infrastructure and prioritize sustainability, this ranking doesn't account for quality or collaboration, highlighting the need for a more nuanced view of global research.

Figure 4: Distribution of papers in journals



Source: Own processing after Scopus (2024)

The journal distribution illustrates the interdisciplinary nature of leadership and management in sustainable tourism research, encompassing fields such as environmental sciences, tourism management, sustainable tourism, ecology and more. Journals with a higher number of publications in this domain likely concentrate on sustainability issues, indicating their importance as platforms for disseminating research findings.

There was a notable surge in publication activity in the “Sustainability Switzerland” journal, during the period from 2018 to 2022, coinciding with the pandemic era when discussions surrounding leadership and management for sustainable tourism were prominent among academic researchers.

Table 2: Distribution of papers in journals

Position	Journal name	Number of documents
1	Sustainability Switzerland	453
2	Journal Of Sustainable Tourism	245
3	Iop Conference Series Earth And Environmental Science	89
4	Tourism Management	80
5	Wit Transactions On Ecology And The Environment	70
6	African Journal Of Hospitality Tourism And Leisure	56
7	Current Issues In Tourism	50
8	Ocean And Coastal Management	49
9	Journal Of Cleaner Production	42
10	Journal Of Ecotourism	41

Source: Own processing after Scopus (2024)

This table ranks journals according to their publication count, spotlighting those making substantial contributions to the field. Leading journals serve as crucial platforms for disseminating research in leadership and management sustainable tourism, underscoring their thematic emphasis and influence within the academic sphere.

Table 3: Top 10 authors and institutions making notable contributions in leadership and management for sustainable tourism field

Authors			Rank	Institution		
Author name	Contribution (Papers)	Percent		Institution name	Contribution (Papers)	Percent
Font, X.	24	0.528%	1	University of Johannesburg	64	1.408%
Hall, C.M.	20	0.440%	2	Griffith University	64	1.408%
Saarinen, J.	17	0.374%	3	The University of Queensland	56	1.232%
Filimonau, V.	14	0.308%	4	Chinese Academy of Sciences	43	0.946%
Moscardo, G.	14	0.308%	5	University of Surrey	41	0.902%
Ruhanen, L.	12	0.264%	6	James Cook University	40	0.880%
Dodds, R.	11	0.242%	7	Universidade do Algarve	37	0.814%
Gössling, S.	11	0.242%	8	Oulun Yliopisto	36	0.792%
Higham, J.E.S.	10	0.220%	9	Universidade de Aveiro	33	0.726%
Fyall, A.	9	0.198%	10	Griffith Business School	33	0.726%

Source: Own processing after Scopus (2024)

Table 3 provides valuable insights into the leading authors and institutions driving research in leadership and management for sustainable tourism. While no single author dominates the field, researchers like Font, X. and Hall, C.M. stand out with significant contributions (over 20 papers each). Universities like Griffith University and The University of Queensland appear to be major research hubs, with high publication output in this field.

The table highlights the collaborative nature of research in this field. While some authors have published more papers, the percentages remain relatively low, indicating that knowledge production is spread across a network of scholars.

Overall, Table 3 serves as a starting point for exploring the intellectual landscape of sustainable tourism leadership and management research. By delving deeper into the work of these authors and institutions, we can gain a better understanding of the current state of knowledge and identify key areas for future research.

CONCLUSION

Cluster analysis of keywords in sustainable tourism leadership and management research reveals diverse thematic areas, underscoring the multifaceted nature of sustainable tourism and the need for integrated approaches across environmental, economic, social, and organizational dimensions.

The article depicts global research distribution in sustainable tourism leadership and management. While countries like the United States, Spain, the United Kingdom, and Australia are prominent contributors, the widespread interest worldwide indicates collaborative efforts towards sustainable tourism solutions, despite the ranking's limitations in assessing quality and collaboration.

The journal distribution underscores the interdisciplinary nature of leadership and management in sustainable tourism research, encompassing fields like environmental sciences, tourism management, sustainable tourism, and ecology. Journals with higher publication counts in this domain likely prioritize sustainability issues, highlighting their significance as platforms for sharing research findings.

The paper provides a foundation for understanding the intellectual landscape of sustainable tourism leadership and management research, offering insights into key contributors and institutions. Further exploration of their work can deepen our understanding of current knowledge and guide future research endeavors.

Overall, the paper provides valuable insights into the intellectual landscape of sustainable tourism research, guiding future endeavors for a more sustainable future.

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