

Exploring tourists' perceptions of sustainable tourism: a bibliometric approach

SARKAR Apurba¹ - POPOVA Rosina²

DOI [10.29180/978-615-6886-27-9_12](https://doi.org/10.29180/978-615-6886-27-9_12)

Abstract:

The global tourism industry now focuses on sustainable tourism, which protects the environment, respects local cultures, and supports economic growth. To promote responsible travel, policymakers must consider tourists' perceptions of sustainable tourism. These perceptions help develop effective policies and practices. This study employed bibliometric methods to explore research trends on tourists' perceptions of sustainable tourism from 1992 to 2024. A total of 205 English-language scholarly articles from 121 sources were analysed using bibliometric tools to evaluate publication trends, journal performance, author contributions, document impact, and key research themes. The analysis reveals a steady annual growth of 12.86% in publications on this topic, highlighting its increasing significance. Meanwhile, the 30.73% rate of international collaboration indicates that researchers worldwide are increasingly collaborating in this field. The keyword and co-word analysis further identifies the main research topics, popular themes, and emerging research areas within this field of study. The findings also highlight existing research gaps and offer valuable guidance for researchers and policymakers seeking to develop sustainable tourism strategies grounded in tourists' perspectives.

Keywords: Sustainable Tourism; Tourists' Perceptions; Tourism Research; Tourist Behaviour; Bibliometric Study

JEL Classification: Z32

Introduction

Due to global warming and growing environmental concerns, sustainable development has become a top priority in many industries. Tourism actively supports sustainable practices while also benefiting from their outcomes. Sustainable tourism basically focuses on reducing negative economic, social, and environmental impacts now and in the future (Baloch et al., 2023; Roblek et al., 2021). It has become a key priority in government agendas and a driving force behind innovation in the tourism industry. Tourists today are not just passive consumers. They play a key role in sustainable tourism. Their values, expectations, and awareness actively influence how sustainability is shaped in tourism destinations around the world (Basendwah et al., 2024). Consequently, understanding how tourists perceive sustainable tourism is crucial for developing effective destination plans and promoting responsible travel behaviours. In recent years, there has been a growing research interest in understanding tourists' attitudes, motivations, and behaviours toward sustainability. This growing interest is driven by the increasing visibility of challenges such as climate change, cultural erosion, and over-tourism. Scholars have explored tourists' willingness to spend more on sustainable and eco-conscious services (Suhardono et al., 2025; Suryawan et al., 2025; Gökteş & Çetin, 2023; Musa & Nadarajah, 2023). They have also looked at how environmental certifications and green

¹ Master student, Faculty of International Business, Budapest University of Economics and Business, Budapest, Hungary, Email: apurbasarkarsammo@gmail.com, ORCID: 0009-0009-9749-7140

² Master student, Faculty of International Business, Budapest University of Economics and Business, Budapest, Hungary, Email: rosinapopova3@gmail.com

communication affect tourists' decisions (Nelson et al., 2021; Lee et al., 2019; Martínez García de Leaniz et al., 2018). These studies reveal that tourists hold diverse and shifting views on sustainability. Their perceptions are influenced by factors such as nationality, destination type, travel experience, and their level of awareness about sustainability (Mohaidin et al., 2017; Jin et al., 2016).

With rapid growth in research publications on this topic, bibliometric analysis offers a reliable and systematic approach to evaluate how studies on tourists' perceptions of sustainable tourism have developed. It enables a clear overview of the evolving academic landscape. This study uses the Scopus database to look at research published between 1992 and 2024. It tracks the development of academic discussions, identifies key contributors, and highlights the field's main topics. Earlier literature reviews have mostly looked at sustainable tourism in a broad sense. They have also used qualitative summaries of selected studies rather than quantitative analysis. In contrast, this study focuses on filtering articles by their titles' keywords. This approach ensures that authors accurately capture research specifically about tourists' perceptions of sustainability.

The present paper makes several key contributions to sustainable tourism research. First, this study identifies the most influential authors, institutions, and countries contributing to this study area. This reveals the primary hubs of academic influence and leadership. Second, the study identifies key thematic clusters and emerging research areas. These include perception-based segmentation, modelling sustainable behaviours, the impact of eco-labels, and changes in tourist awareness after the pandemic. Third, the study highlights gaps in current knowledge and suggests directions for future research. It emphasises the need to explore technological tools, behavioural economics, and cross-cultural comparisons in understanding tourists' perceptions. Lastly, this study offers practical insights for tourism marketers, planners, and policymakers. It highlights the need to adapt strategies to reflect travellers' growing concern for sustainability and responsible tourism. The primary goal of this study is to address the following key research questions:

RQ1: What is the intellectual and conceptual structure of the research field concerning tourists' perceptions of sustainable tourism?

RQ2: What are the major themes, trends, and influential contributions (authors, institutions, countries) in the literature on tourists' sustainable behaviour and awareness?

RQ3: How have the research themes and focus areas evolved, particularly with environmental awareness, responsible travel, and post-pandemic shifts?

RQ4: What are the key gaps in the current literature, and what future directions can be proposed for advancing the study of tourists' perceptions in the context of sustainability?

The structure of this study comprises four key sections that systematically explore the research objectives. The second section outlines the methodology, including data collection strategies and the application of a bibliometric tool. The third section presents the study's results and analysis using performance metrics and science mapping tools. It identifies leading authors, highlights key research themes, and examines patterns of collaboration in the field. Finally, the fourth section discusses the implications of the findings, addresses limitations, and suggests avenues for future research on tourists' perceptions of sustainable tourism.

\

Methodology

Figure 1 describes the data retrieval process and analysis flowchart. This study applies bibliometric analysis to systematically examine the academic literature on tourists' perceptions of sustainable tourism across the entire study period. In 1969, Pritchard first introduced bibliometric analysis as a powerful quantitative tool for evaluating the growth, structure, and dynamics of academic fields (Pritchard, 1969; Salinas-Ríos & García López, 2022). This method is significant for identifying key authors, influential journals, collaboration patterns, and dominant research themes (Keathley-Herring et al., 2016). It also provides a data-driven perspective for understanding the intellectual landscape and scientific development of the study area. To ensure a high-quality and comprehensive dataset, this study relies exclusively on the Scopus database. Scopus is widely recognised for its broad and reliable coverage of peer-reviewed literature across multiple disciplines (Schotten et al., 2017). Scopus provides comprehensive metadata, including author affiliations, citations, and co-authorship information.

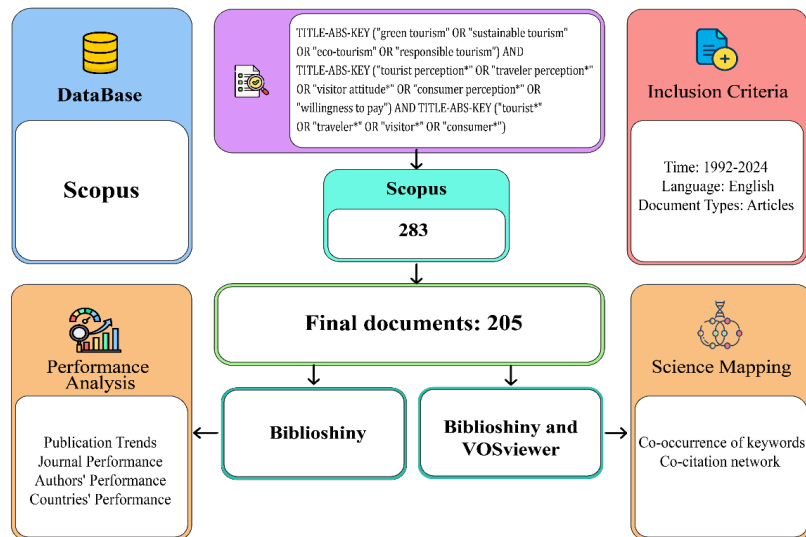


Figure 1. *Data retrieval process and analysis flowchart*
Source: *Authors' work*

This rich data enhances the accuracy and depth of bibliometric analyses. The data collection process involved conducting a title-specific keyword search using the phrase “tourists’ perceptions” AND “sustainable tourism,” focusing on journal articles published between 1992 and 2024. The title-based filtering method ensures conceptual clarity and thematic relevance while minimising the inclusion of unrelated works. Initially, 283 documents were found. To ensure the dataset remained relevant, consistent, and manageable, the search was limited to English-language articles published between 1992 and 2004. After applying these criteria, the final dataset included 205 English articles. Following the guidelines of Donthu et al. (2021) and Weismayer & Pezenka (2017), this study applies a bibliometric method that combines performance analysis with science mapping. Using the Biblioshiny package in R, performance analysis was conducted to assess scientific productivity among authors, institutions, countries, and journals. In contrast, VOSviewer was used for science mapping to investigate the intellectual structure by examining keyword co-occurrence and co-citation networks. These analyses collectively help chart the thematic evolution of the field and identify emergent frontiers for future research.

Results

This research explores tourists' perceptions of sustainable tourism and is divided into five key dimensions: literature output, journal-level performance, author-level contributions, document-level significance, and thematic insights.

Scientific production (based on years and countries)

Figure 2 illustrates the trend in annual progress in research output on tourists' views of sustainable tourism from 1992 to 2024. According to Table 1, the annual growth rate of publications is 12.86%, indicating steady, sustained interest in the research area over the years. In total, 205 journal articles were sourced from 121 different publications. In 1992, just one article was published. After that, only a few articles appeared occasionally until 2007. Starting with 4 articles in 2008, the annual number of published articles has steadily increased. In 2019, the yearly publication count entered double digits with 16 articles. This growth continued steadily, reaching 48 publications by 2024. This expansion reflects the rising focus on sustainability by international organisations, such as the UN, and the tourism industry. The United Nations established the 2030 Agenda for Sustainable Development in 2015, highlighting the importance of sustainable tourism (Boluk et al., 2021). Additionally, the designation of 2017 as the International Year of Sustainable Tourism for Development further boosted global attention to this issue (Cardia, 2017). The study also reveals that the documents in the dataset are, on average, 6 years old and have each received 22.77 citations, highlighting their significance. Figure 3 shows the top 10 research contributions by country. Spain leads the field with 70 articles, followed by China with 56 publications and the USA with 48. Spain, the USA, and China support tourism research through strong funding, universities, and research centres. Italy and Malaysia also make notable contributions, with 44 and 39 publications, respectively. Additional key contributors include Indonesia (29), India (28), Portugal (28), Romania (23), and South Korea (23). This geographic diversity shows involvement from both developed and emerging economies. Simultaneously, International collaborations account for 30.73% of the publications, highlighting the field's global and collaborative nature.

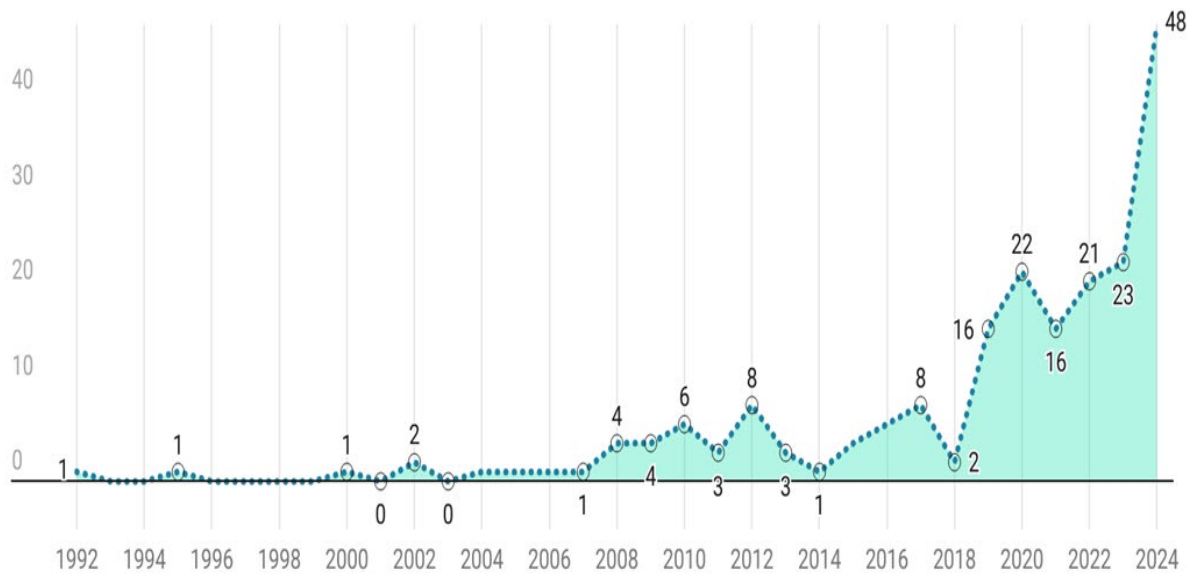


Figure 2: Annual scientific production
Source: Authors' work

■ CHINA
 ■ INDIA
 ■ INDONESIA
 ■ ITALY
 ■ MALAYSIA
 ■ PORTUGAL
 ■ ROMANIA
 ■ SOUTH KOREA
 ■ SPAIN
■ UNITED STATES OF AMERICA

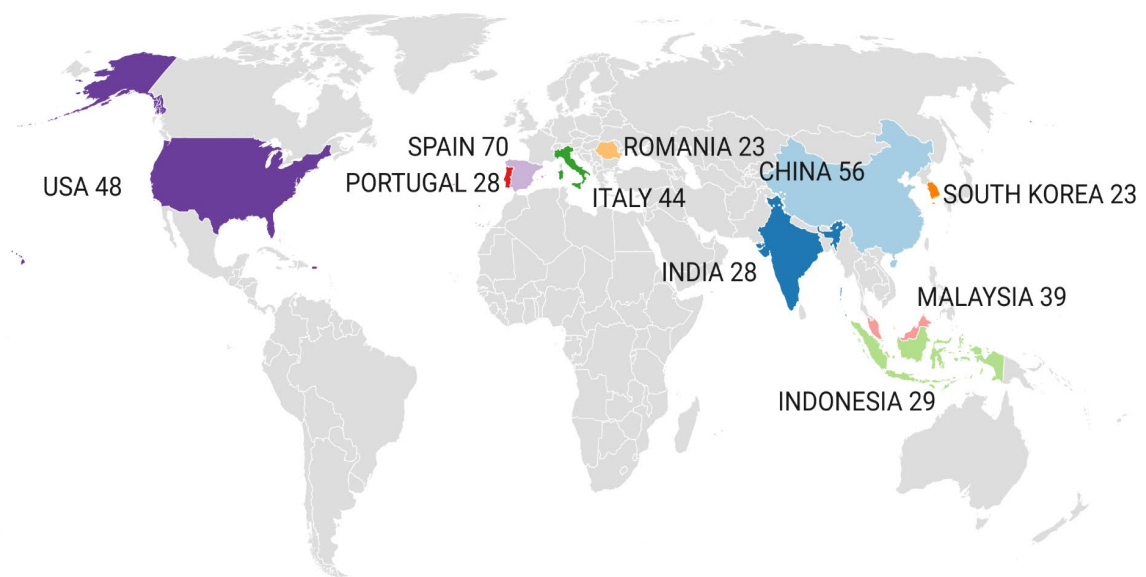


Figure 3: Countries' scientific production.
Source: Authors' work.

Table 1: Demographic information.
Source: Authors' work.

Main Information About Data	
Timespan	1992:2024
Sources (Journals, Books, etc)	121
Documents	205
Annual Growth Rate %	12.86
Document Average Age	6
Average citations per doc	22.77
References	12376
Document Contents	
Keywords Plus (ID)	551
Author's Keywords (DE)	748
Authors	
Authors	615
Authors of single-authored docs	15
Authors Collaboration	
Single-authored docs	16
Co-Authors per Doc	3.18
International co-authorships %	30.73
Document types	
Article	205

Average citations and most cited countries

Between 1992 and 2024, research on tourists' perceptions of sustainable tourism has seen significant growth in scholarly interest, with variations in the average number of citations per article. Figure 5 shows that the year 2000 had the highest average citations per article (130.00), followed by 2006 (89.00) and 1995 (87.00). Meanwhile, the number of publications has risen sharply in recent years. It increased from just 1 article in 1992 to 48 articles in 2024, reflecting growing research interest in the field. However, the average number of citations per article was lower in 2023 and 2024, at 11.87 and 2.81, respectively. This is expected because newer articles have had less time to gather citations. In general, this data helps identify impactful research areas and guides researchers on where to concentrate their efforts for meaningful contributions. Figure 4 highlights the ten most impactful and influential countries in this research field. In terms of total citations, the United States leads with 453 citations, followed by Spain (389) and China (339). When considering average citations per article, Canada (151.00) and France (141.00) are the most impactful nations in the area. It is highlighted that, although their total number of publications is lower, their research has a significant impact. Sweden also showed strong research quality, with an average of 94.50 citations per article. This indicates that smaller research communities can produce highly influential work. The United Kingdom and Cyprus further follow with 43.90 and 51.50 citations per article, respectively. While China and Korea have contributed a large volume of publications, their average citations per article are relatively low, at 17.00 and 17.80, respectively. This demonstrates that publishing many articles does not always mean the research has a strong impact, so more high-quality, influential studies are

needed. Overall, this data provides important insights to support future collaborations, funding choices, and policy development.

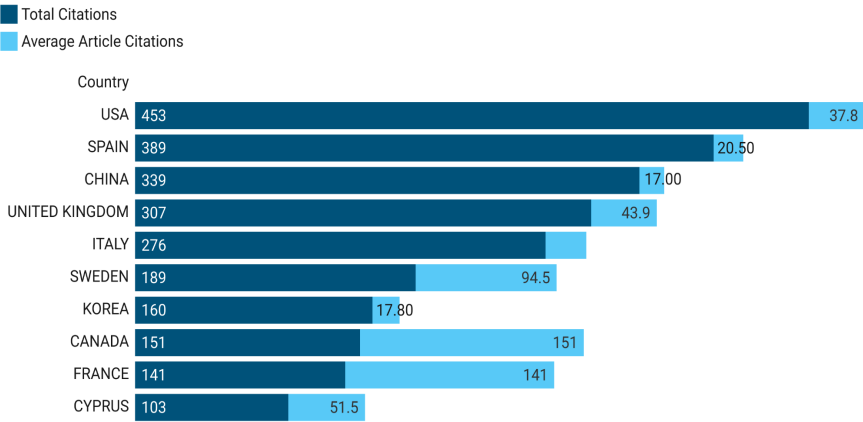


Fig. 4: Top 10 cited countries.
Source: Authors' work.

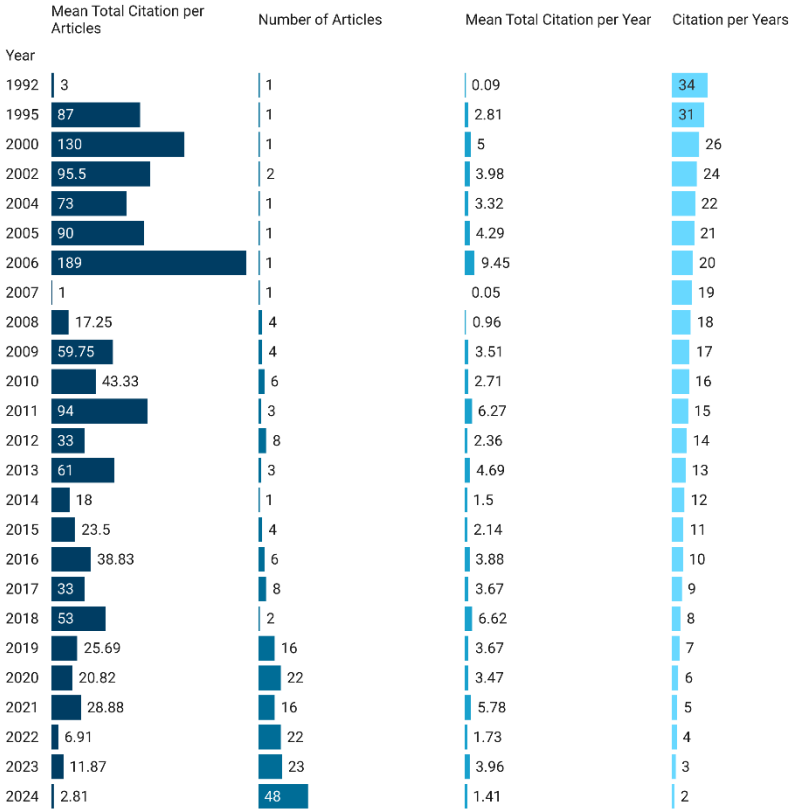


Figure 5: Average citations per year.
Source: Authors' work.

Most cited documents and impact

Table 2 presents a descriptive overview of the top 10 most-cited documents in the Tourists' Perceptions of Sustainable Tourism study field. Among them, "*Prospective tourist preferences for sustainable tourism development in Small Island Developing States*" stands out with 200 total citations. It reflects significant academic interest, with an average of 40 citations per year and the highest normalised citation score of 6.93. Researchers frequently cite this paper because it addresses policy needs, focuses on global sustainability, uses innovative methods, explores tourist behaviour, and is applicable to many contexts. Another widely cited and highly impactful work is '*Tourist perceptions of climate change: A study of international tourists in Zanzibar*,' which has received 189 citations globally. The study is widely cited for its investigation of climate change impacts on tourists, its provision of actionable insights for policymakers, and its well-structured case study with rigorous methods. Concurrently, *the impact of values, environmental concern, and willingness to accept economic sacrifices to protect the environment on tourists' intentions to buy ecologically sustainable tourism alternatives* (169 citations), and *the use of choice experiments in the analysis of tourist preferences for ecotourism development in Costa Rica* (167 citations), highlights tourists' growing inclination toward sustainable options. Meanwhile, with 151 total citations and an average of 9.44 per year, "*Does the tourist care? A comparison of tourists in Koh Phi Phi, Thailand and Gili Trawangan, Indonesia*" highlights scholars' interest in tourists' responses towards sustainability. In parallel, "*The Case for Offshore Wind Farms, Artificial Reefs and Sustainable Tourism in the French Mediterranean*" and "*Tourist and Resident Perceptions of the Physical Impacts of Tourism at Lake Balaton, Hungary*" address sustainability challenges in tourism and provide practical, policy-relevant insights. These studies examine tourist behaviour, environmental management, and policy frameworks, influencing multiple research areas and earning 141 and 130 citations, respectively. The findings reflect growing academic interest in understanding the psychological dimensions of sustainability perceptions. The studies titled "*Tourists' Perceptions of Responsibility: An Application of Norm-Activation Theory*" and "*Sustainability of Green Tourism Among International Tourists and Its Influence on the Achievement of a Green Environment: Evidence from North Cyprus*" have comparatively lower total citations because they are recent, focus on specific topics, and target a smaller audience. However, they introduce new theories, explore niche destinations, reveal tourist behaviour, and provide useful policy insights, making them influential in their fields. Overall, the table highlights scholars' growing interest in a wide range of studies and maps out the intellectual structure and evolution of the research field.

Table 2: *Ten most cited articles.*

Source: *Authors' work.*

Article	Sources	TC	TC per Year	Normalized TC
<ul style="list-style-type: none"> Prospective tourist preferences for sustainable tourism development in Small Island Developing States 	(Grilli et al., 2021)	200	40.00	6.93
<ul style="list-style-type: none"> Tourist perceptions of climate change: A study of international tourists in Zanzibar 	(Gössling et al., 2006)	189	9.45	1.00

<ul style="list-style-type: none"> • The impact of values, environmental concern, and willingness to accept economic sacrifices to protect the environment on tourists' intentions to buy ecologically sustainable tourism alternatives 	(Hedlund, 2011)	169	11.27	1.80
<ul style="list-style-type: none"> • The use of choice experiments in the analysis of tourist preferences for ecotourism development in Costa Rica 	(Hearne & Salinas, 2002)	167	6.96	1.75
<ul style="list-style-type: none"> • Does the tourist care? A comparison of tourists in Koh Phi Phi, Thailand and Gili Trawangan, Indonesia 	(Dodds et al., 2010)	151	9.44	3.48
<ul style="list-style-type: none"> • The case for offshore wind farms, artificial reefs and sustainable tourism in the French Mediterranean 	(Westerberg et al., 2013)	141	10.85	2.31
<ul style="list-style-type: none"> • Tourist and resident perceptions of the physical impacts of tourism at Lake Balaton, Hungary: Issues for sustainable tourism management 	(Puczko & Ratz, 2000)	130	5.00	1.00
<ul style="list-style-type: none"> • Tourists' perceptions of responsibility: an application of norm-activation theory 	(Gao et al., 2017)	124	13.78	3.76
<ul style="list-style-type: none"> • Tourists' perceptions of environmentally responsible innovations at tourism businesses 	(Andereck, 2009)	102	6.00	1.71
<ul style="list-style-type: none"> • Sustainability of green tourism among international tourists and its influence on the achievement of green environment: Evidence from North Cyprus 	(Ibnou-Laaroussi et al., 2020)	98	16.33	4.71

Note: (TC = Total Citation).

Most relevant sources and impact

Based on the number of publications and significant academic influence, the data in Figure 6 and Table 3 highlight the most relevant and impactful sources in the field of tourists' perceptions of sustainable tourism. The h-index shows the number of papers a researcher or journal has that are cited enough to reflect their impact (Wykes et al., 2013). The g-index examines the most cited papers and gives greater weight to highly cited ones to reflect overall impact (Ali, 2021). The m-index divides the h-index by the number of years they have been publishing to show how quickly their work gains impact (Nocera et al., 2024). *Sustainability (Switzerland)* stands out as the most productive journal, publishing 27 articles since 2016. With an h-index of 15, g-index of 25, and m-index of 1.5, this journal exhibits a strong academic impact. It has also accumulated 659 citations, reflecting its continued relevance and influence in the field. However, its prominence seems more due to publishing many papers across a wide

range of topics than to consistently influential contributions. In contrast, although the *Journal of Sustainable Tourism* has published only 15 articles, it demonstrates the greatest impact with 988 total citations and an h-index of 13. Since 1995, the journal has demonstrated a consistent scholarly impact, reflected by its m-index of 0.419. This comparison highlights an important issue in the literature. Publishing many articles does not always make a journal highly influential. Instead, a journal's reputation, thematic focus, and the quality of its research are what determine its impact. The performance of emerging journals such as *Tourism Review* shows that newer journals can quickly become influential, as seen in their high m-index (0.714). *Tourism Management and Environment, Development and Sustainability* have each published four articles. However, they have received 363 and 50 citations respectively, highlighting a significant difference in impact and emphasising the importance of quality over quantity.

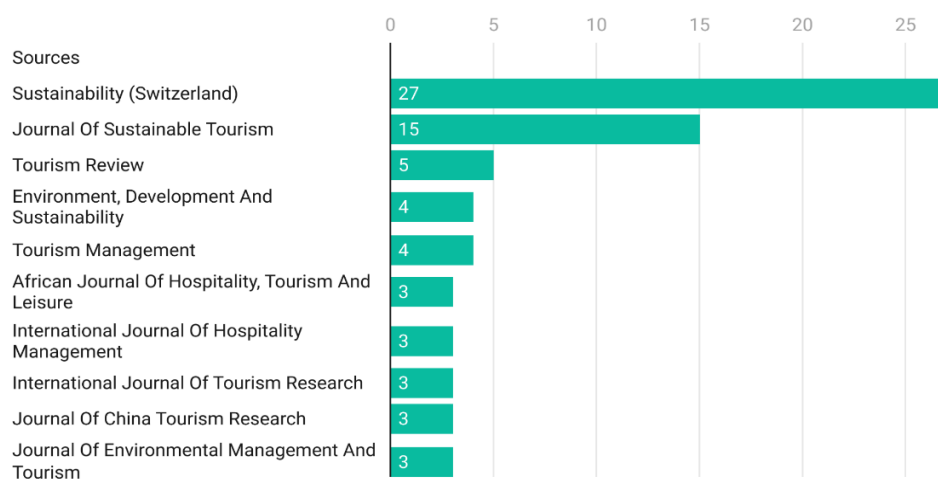


Figure 6: Top 10 relevant sources.
Source: Authors' work.

A journal's discipline and the audience it reaches strongly influence research visibility. Additional Regional and specialised journals, such as the International Journal of Hospitality Management, the Journal of Environmental Management and Tourism, and the African Journal of Hospitality, Tourism and Leisure, have published a modest number of articles. However, they show consistent academic influence, especially within their regional contexts. Moreover, emerging journals such as *the Asia Pacific Journal of Tourism Research* and the *Asia Pacific Journal of Marketing and Logistics* have recently gained attention. This indicates an increasing academic and regional engagement with sustainable tourism research. In summary, the discussion reveals a diverse mix of high-output and high-impact journals that significantly shape the academic landscape of sustainable tourism. Researchers can target high-impact journals to increase the visibility of their work. They should also contribute to a variety of journals to bring in diverse perspectives and make sustainable tourism research more inclusive.

Table 3: Most relevant sources.
Source: Authors' work.

Sources	h_index	g_index	m_index	TC	NP	PY_start
Sustainability (Switzerland)	15	25	1.5	659	27	2016
Journal of Sustainable Tourism	13	15	0.419	988	15	1995
Tourism Review	5	5	0.714	110	5	2019
Tourism Management	4	4	0.308	363	4	2013
Environment, Development and Sustainability	3	4	0.125	50	4	2002
International Journal of Hospitality Management	3	3	0.3	29	3	2016
Journal of Environmental Management and Tourism	3	3	0.5	18	3	2020
African Journal of Hospitality, Tourism and Leisure	2	3	0.222	9	3	2017
Asia Pacific Journal of Marketing and Logistics	2	2	0.125	12	2	2010
Asia Pacific Journal of Tourism Research	2	2	1	12	2	2024

Note: (TC = Total Citation, PY = Publication Year, NP = Number of Publication).

Bradford's Law states that in any research field, most research articles are published in a small group of core journals (Desai et al., 2018). These core sources produce the majority of the scholarly literature, while other journals publish fewer articles. In the shaded core area of Figure 7, several journals stand out for publishing the most articles. These core journals, such as *Sustainability (Switzerland)*, *Journal of Sustainable Tourism*, *Tourism Review*, *Environment, Development and Sustainability*, and *Tourism Management*, are key sources in the field's literature. Overall, this discussion highlights a rich blend of high-output and high-impact journals that collectively shape the scholarly landscape of sustainable tourism. Further, this plays a key role in guiding scholars and researchers to identify key research trends and shape the future directions of this field of study. Conversely, reliance on core journals could create a

publication bias, where certain methodologies, regions, or theoretical approaches dominate the field.

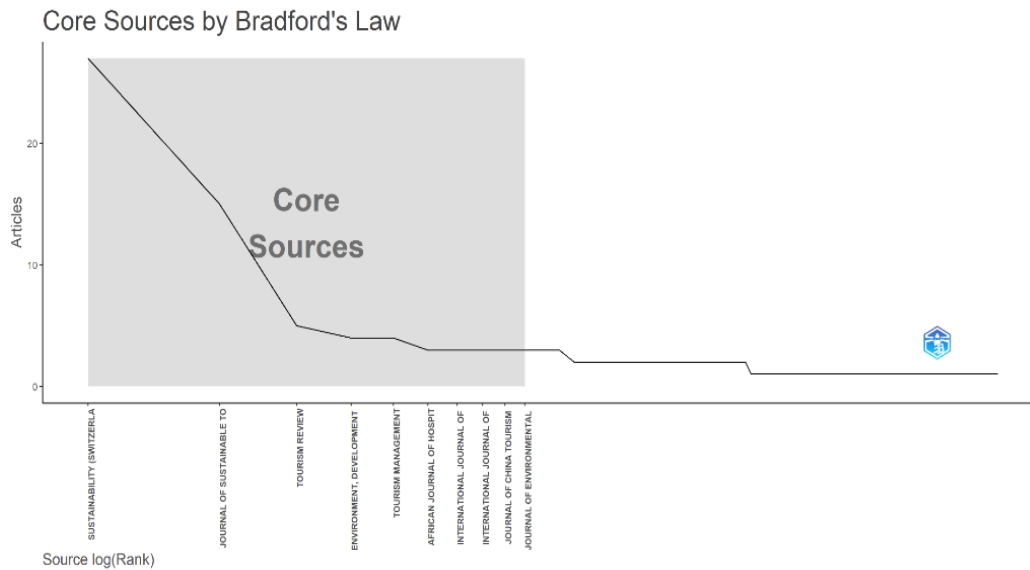
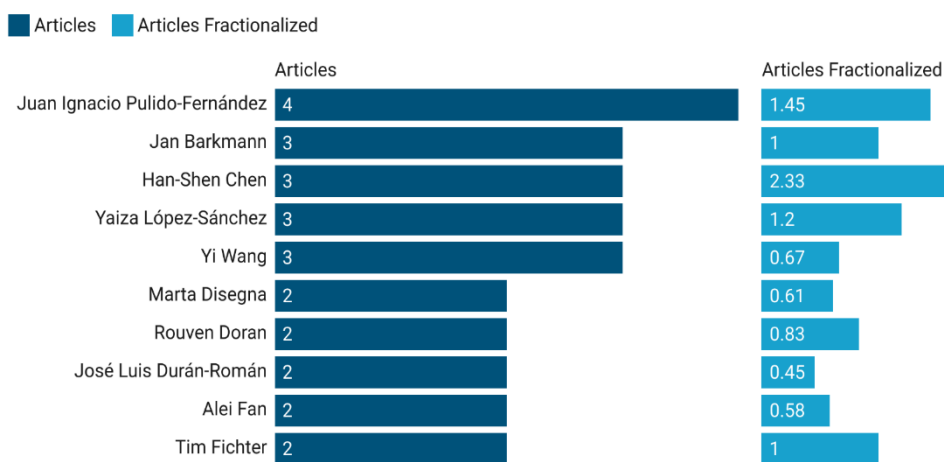


Figure 7: Core sources by Bradford's Law.
Source: Authors' work.



Created with Datawrapper

Fig. 8: Most contributing authors.
Source: Authors' work.

Most contributing authors

Figure 8 presents the top ten contributing authors in the field of tourists' perceptions of sustainable tourism. Among them, Juan Ignacio Pulido-Fernández stands out with 4 published articles. His fractionalized contribution score of 1.45 shows that he made a strong individual contribution to the field. Simultaneously, Han-Shen Chen has made a notable impact by contributing three articles to the field. His impressive fractionalized score of 2.33 highlights his active role in collaborative research efforts. In contrast, Jan Barkmann and Yaiza López-Sánchez each wrote 3 articles, with contribution scores of 1.00 and 1.20. Yi Wang also has 3 articles but a lower score of 0.67, suggesting the author had a smaller share per publication. Table 4 shows the influence of authors whose research has significantly shaped the field of tourists' perceptions in sustainable tourism. In terms of author impact, Han-Shen Chen stands

out with an h-index of 3, a g-index of 3, and a total of 35 citations. Since his first research was published in 2019, he has shown an emerging influence in the field. Rouven Doran and Svein Larsen each have an h-index and g-index of 2. They have also accumulated 87 total citations each, showing consistent research activity since 2014. Marta Disegna, with 2 articles and 44 citations, also demonstrates a continued scholarly contribution since 2012. Notably, Stefan Gössling has published only 2 articles but has a high total citation count of 218. This indicates that his work has had a strong impact since 2006. Meanwhile, Alei Fan is a newer contributor who started publishing in 2023. Despite this, she has shown promise with a strong fractionalized score and 23 citations. Overall, these metrics show that a wide range of scholars are contributing to the field. They are making an impact not only through the number of publications but also through the quality of their research. This influence will guide and inspire future research in the field and also create opportunities for potential collaboration. However, a small group of researchers contributes most of the research, which means their perspectives may strongly influence the field's topics and direction. Additionally, new researchers like Alei Fan are beginning to make a mark in the field. Even so, the small number of highly cited recent publications shows there is still a lack of diverse voices and global representation.

Thematic analysis

The tree map (Figure 9) and word cloud (Figure 10) illustrate the most frequent keywords in the literature on tourists' perceptions of sustainable tourism. These visual tools help identify key themes and recurring topics within the research field. The keyword "ecotourism" stands out as the most frequently used term, appearing 63 times and representing about 11% of all keywords in the study. This highlights its central role in the research on tourists' perceptions of sustainable tourism. Researchers focus on ecotourism because it covers many aspects of sustainable tourism and clearly represents environmentally responsible travel. Next is "willingness to pay," which appears 47 times (8%), showing a strong research focus on how much tourists are willing to spend on sustainability. Keywords like "perception" and "tourist destination" both appear 31 times, each at 5%. This highlights a clear focus on how tourists see and experience different places. Other important keywords are "tourism development" with 25 mentions (4%), "sustainability" with 20 mentions (3%), "tourism management" with 17 mentions (3%), and "environmental protection" with 16 mentions (3%). Geographic and thematic keywords such as "Spain," "Taiwan," "climate change," "biodiversity," and "public attitude" highlight the wide-ranging, global nature of this research area. These frequency percentages reveal the main topics in sustainable tourism research. They indicate the areas receiving the most attention from researchers and help guide future investigations. Overall, this tree map and word cloud reveal the most dominant themes in sustainable tourism research, while also making less frequent topics visible. These underrepresented areas highlight potential gaps in the literature and suggest opportunities for further study. In this way, the visualisations not only summarise existing knowledge but also provide a roadmap for shaping future research directions.

Table 4: Authors' impact.
Source: Authors' work.

Author	h_index	g_index	m_index	TC	NP	PY_start
Han-Shen Chen	3	3	0.429	35	3	2019
Jan Barkmann	2	3	0.111	16	3	2008
Marta Disegna	2	2	0.143	44	2	2012
Rouven Doran	2	2	0.167	87	2	2014
Alei Fan	2	2	0.667	23	2	2023
Stefan Gössling	2	2	0.1	218	2	2006
Colin Michael Hall	2	2	0.133	54	2	2011
Mastura Jaafar	2	2	0.182	12	2	2015
Carlos Jurado-Rivas	2	2	0.286	45	2	2019
Svein Larsen	2	2	0.167	87	2	2014

Note: (TC = Total Citation, PY = Publication Year, NP = Number of Publication).

The thematic map (Figure 11) provides a clear overview of the key themes within the research area of tourists' perceptions of sustainable tourism. On the map, centrality indicates how important each theme is, while density indicates how much it has been studied or developed. The upper-right quadrant, known as Motor Themes, contains themes such as tourism, environmental protection, and conservation that are well-developed and highly relevant to the research area's structure. Still, researchers focus heavily on environmental topics, which can lead to the neglect of social and cultural aspects of sustainable tourism. In contrast, the upper-left quadrant, known as Niche Themes, includes topics such as contingent valuation, economic analysis, and investment. These themes are well-developed but less relevant to the main field and may not be widely discussed in academic research. These areas mainly matter for policy and economic planning, but their low centrality shows they are not well connected to core environmental and behaviour-focused research. Meanwhile, the lower-right quadrant shows Basic Themes, which include keywords such as ecotourism, willingness to pay, and tourist destination. These themes are highly relevant because they help researchers understand how tourists think, decide, and act regarding sustainable tourism, yet they remain underdeveloped. Marzo-Navarro et al. (2024) examined memorable tourism experiences in the Aragon River Valley and found that activities combining novelty, co-creation, and contact with nature encourage tourists to behave in environmentally responsible ways. Such experiences also contribute to the development of sustainable rural tourism. Therefore, future studies should explore and develop these areas further. Finally, the lower-left quadrant, Emerging or Declining Themes, includes coastal zone, Europe, animal welfare, animalia, and wildlife management. Their low centrality and density suggest that these topics may be either new areas of exploration or losing traction within the broader research landscape. Overall, the thematic map shows that environmental and conservation issues are central to tourists' views on sustainable tourism. Meanwhile, economic and behavioural topics are becoming more important, helping researchers identify main focus areas, spot new trends, and find gaps for future study.

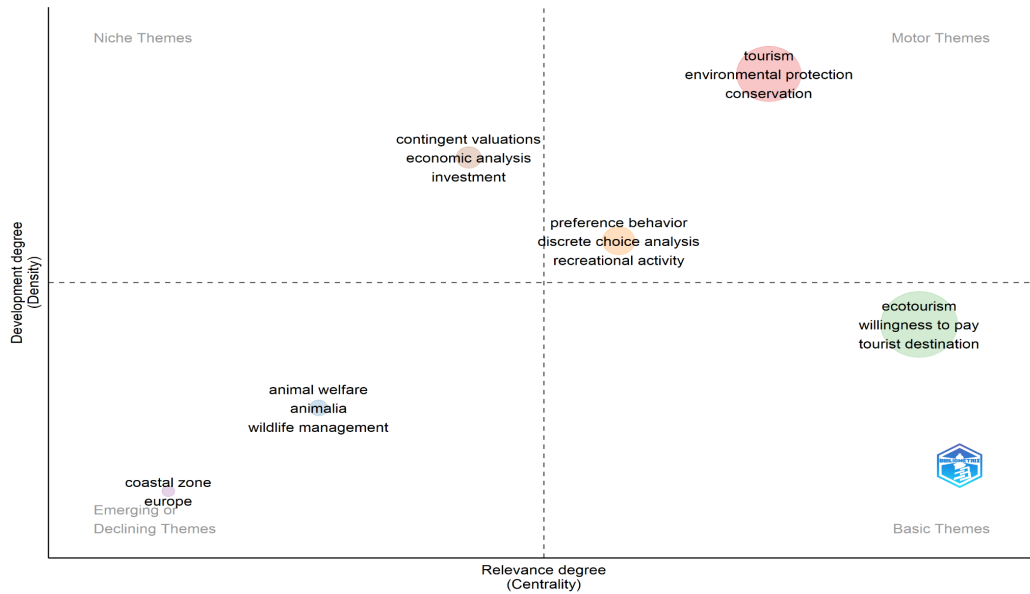


Fig. 11: Thematic map.
Source: Authors' work.

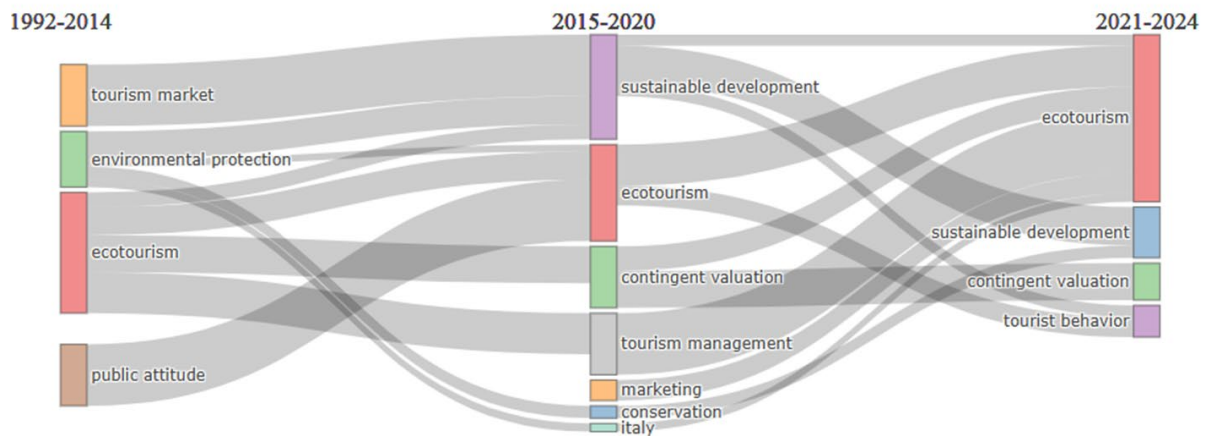


Fig. 12: Thematic evaluation.
Source: Authors' work.

The thematic evaluation map (Figure 12) illustrates how academic focus on tourists' perceptions of sustainable tourism has evolved in response to global sustainability goals and the COVID-19 pandemic. During the pre-Sustainable Development Goals (SDGs) era (1992–2014), scholarly attention was largely directed toward foundational topics such as the tourism market, environmental protection, ecotourism, and public attitudes. As people became more aware of the environment and ecotourism grew, policymakers and researchers started studying how tourism affects sustainability. During this time, the main concern was understanding how tourism affects the environment and what people think about it. At the same time, ecotourism emerged as a significant area of interest, emphasising nature-based and environmentally responsible travel practices. While ecotourism dominates, other dimensions of sustainability (social equity, cultural preservation, and economic resilience) are less studied. With the launch of the United Nations Sustainable Development Goals in 2015, the post-SDGs period (2015–2020) marked a shift toward more structured and globally aligned research. Alongside

ecotourism, researchers paid more attention to incorporating SDG goals into tourism to promote sustainable development. Other themes like contingent valuation, tourism management, marketing, and conservation also started to be focused. Researchers studied these topics to gain a clearer, more practical understanding of tourists' views on sustainable tourism. However, researchers focus mostly on Europe, North America, and East Asia, leaving developing regions underrepresented. In the post-COVID era (2021–2024), research shifted again to examine how the COVID-19 pandemic affected tourism and to address the resulting challenges. Ecotourism and sustainable development continued to be key areas of focus. In the meantime, tourist behaviour also emerged as an important theme, showing increased interest in how global crises affect travel attitudes and decisions. Researchers also showed a similar interest in contingent valuation, particularly in understanding the economic aspects of sustainable tourism. Post-COVID studies basically focus on short-term behavioural shifts, but researchers need to critically examine long-term impacts on sustainable tourism practices. Overall, the thematic progression reveals a shift from basic environmental and market concerns to more integrated and behaviour-focused research. It will also guide future researchers to focus on emerging themes and make meaningful contributions.

Using Multiple Correspondence Analysis (MCA), the Conceptual Structure Map (Figure 13) provides a clear visualisation of the thematic structure within the literature on tourists' perceptions of sustainable tourism. The most significant cluster (red) focuses on broad themes related to environmental and policy issues. Key terms such as environmental management, sustainable tourism, climate change, environmental impact, and economics highlight the broad environmental effects of tourism. These terms also stress the importance of protecting and managing the environment effectively. Though Scholars often propose frameworks and policies, few test whether they actually change tourist behaviour or destination outcomes. Güzel et al. (2020) show that tourist guides actively shape how tourists perceive and behave regarding sustainability. Future research could include such qualitative perspectives to better understand how sustainable tourism behaviours develop in practice. In contrast, the blue cluster highlights key themes such as ecotourism, tourist attraction, tourism management, willingness to pay, and stakeholder, reflecting a more empirical and behaviour-focused perspective. This cluster also focuses on using quantitative techniques like regression analysis and contingent valuation to explore individual attitudes, preferences, and behaviours. Regression and contingent valuation are common in behaviour-focused studies, but they cannot capture the cultural or emotional side of tourist perceptions. So, Future studies need to place greater emphasis on qualitative or mixed-method approaches.

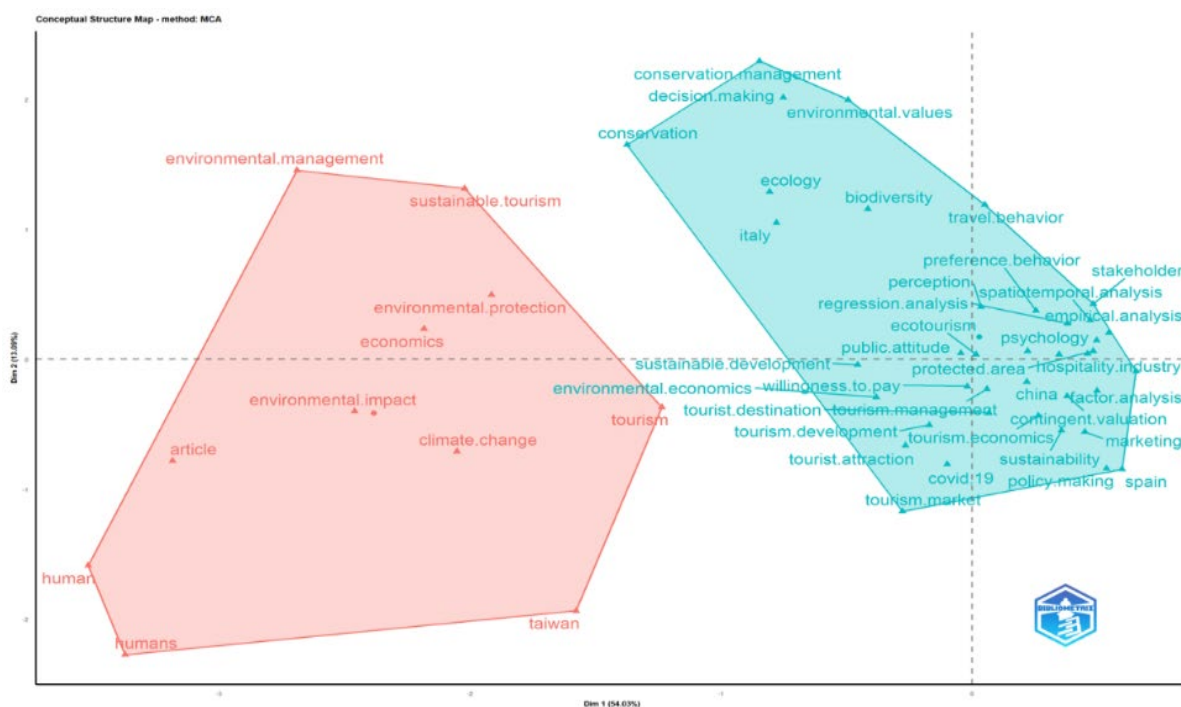


Fig. 13: Conceptual structure map.
Source: Authors' work.

Simultaneously, keywords such as public attitude, decision making, and perception reflect scholarly interest in how tourists respond to sustainability issues. The research field encompasses many areas, including economics, management, environmental science, and social science. Still, most studies remain in isolation, so integrating disciplines is needed to understand sustainable tourism fully. Overall, the map reveals a clear thematic division between policy-oriented research and behaviour-oriented studies. This highlights how sustainable tourism research draws on many disciplines. It also shows promising chances to link these areas for better understanding and progress.

Co-occurrence and bibliometric coupling

The Keyword Co-occurrence Map (Figure 14) provides a comprehensive overview of the thematic landscape in research on tourist perceptions and sustainable tourism. Table 5 highlights six main keyword clusters, showing the key research themes. First cluster (Red) focuses on the environmental and economic foundations of sustainable tourism. Key terms like biodiversity, climate change, conservation, environmental management, environmental protection, and tourism emphasise the main concerns of environmental sustainability. They also stress the need to include ecological factors in tourism planning and development. Even though environmental issues are well studied, research often ignores the social and cultural side of sustainable tourism. Future studies should combine environmental, economic, and social perspectives to provide a more complete understanding of sustainable tourism impacts. The second cluster (Green) focuses on strategic and policy perspectives. Keywords like sustainability, policymaking, stakeholders, COVID-19, tourism economics, and tourism market highlight the broader, macro-level issues of sustainable tourism, including how policies respond to crises like COVID-19 and strategies for developing tourism markets with sustainability in mind. Although research often focuses on policies and crisis management, it rarely shows how these policies influence what tourists actually do. There is a clear literature gap to connect

Table 5: *Clusters of keywords co-occurrence.*
Source: *Authors' work.*

Cluster	Number of Keywords	Keywords
Cluster 1 (Red) Environmental and Economic Foundations of Sustainable Tourism	15	Biodiversity, Climate Change, Conservation, Decision Making, Eco-Tourism, Ecology, Economics, Environmental Impact, Environmental Management, Environmental Protection, Human, Humans, Protected Areas, Sustainable Development, Tourism
Cluster 2 (Green) Strategic and Policy Perspectives	9	COVID-19, Environmental Economics, Policy Making, Stakeholder, Sustainability, Sustainable Tourism Development, Tourism Economics, Tourism Market, Tourist Destination
Cluster 3 (Blue) Tourist Experience and Perceptions	8	Environment, Nature-Based Tourism, Perception, Questionnaire Survey, Responsible Tourism, Tourist Attraction, Tourist Behaviour, Visitor Attitudes
Cluster 4 (Yellow) Psychological Factors and Consumer Perspectives in Tourism	7	Consumption Behaviour, Ecotourism, Hospitality Industry, Marketing, Psychology, Public Attitude, Tourist Perceptions
Cluster 5 (Purple) Economic Valuation and Decision-Making	7	Choice Experiment, Contingent Valuation, Contingent Valuation Method, Sustainable Tourism, Tourism Development, Tourism Management, Willingness to Pay
Cluster 6 (Pink) Media, Branding, And Communication Aspects of Tourism	5	Destination Image, Green Tourism, Hotels, Social Media, Tourist Perception

Based on the number of shared references cited, the bibliometric coupling network (Figure 15) illustrates the structural relationships among academic publications focusing on tourist perceptions in the context of sustainable tourism. In this network, each node represents a scholarly publication. Larger nodes, such as those of Gössling et al. (2006), Grilli et al. (2021), and Hedlund (2011), indicate greater influence, as evidenced by higher levels of citation coupling and centrality within the field. Conversely, smaller nodes, such as those by Wibawa et al. (2023) and Hossain et al. (2024), reflect newer or more peripheral contributions. The network is also divided into different colour groups, each of which represents a particular topic or theme. The red cluster, based on studies such as Hearne & Salinas (2002), Craik (1995), and Dodds et al. (2010), primarily focuses on environmental awareness and ecotourism behaviour. The research shows that environmental values affect sustainable tourism actions, but most studies are theoretical and few test whether these values actually lead to real behaviour. The

green cluster, highlighted by important research such as Hedlund (2011), Grilli et al. (2021), and Kleinrichert et al. (2012), emphasises tourists' values and environmental concerns. It highlights people's willingness to pay extra for sustainability and explains their choice of sustainable tourism. Many tourists are willing to spend extra for sustainable options. Most studies, however, focus on this willingness rather than examining how it influences their real-world behaviour. The blue cluster includes recent studies such as Teeroovengadum (2019), Chi & Han (2020), and Hossain et al. (2024). These works focus on tourists' environmental values and intentions, emphasising their behaviour through data-driven analysis. However, these studies mainly look at what tourists say they intend to do, so we still don't fully understand their actual behaviour. The yellow cluster includes important studies like Gössling et al. (2006) and Lopez-Sanchez & Pulido-Fernández (2017). It focuses on economic factors, particularly those that affect tourists' willingness to pay for sustainability in popular tourist destinations. Even so, without considering other key aspects, such as social, psychological, and environmental factors, it is harder to fully understand sustainable tourism behaviour. The purple cluster includes authors like Doran et al. (2015) and Pulido-Fernández & López-Sánchez (2016). It explores the psychological and economic factors that influence responsible travel behaviours and choices related to sustainable tourism. The research gives useful insights, but it doesn't fully explain how tourists' thoughts and finances influence their real-world travel choices. Overall, this network highlights a growing and active field of study. By understanding how various topics and approaches are linked, researchers can build on existing knowledge, avoid duplication, and explore new areas that need more attention. It also encourages interdisciplinary collaboration and guides the development of more focused, relevant research questions in sustainable tourism.

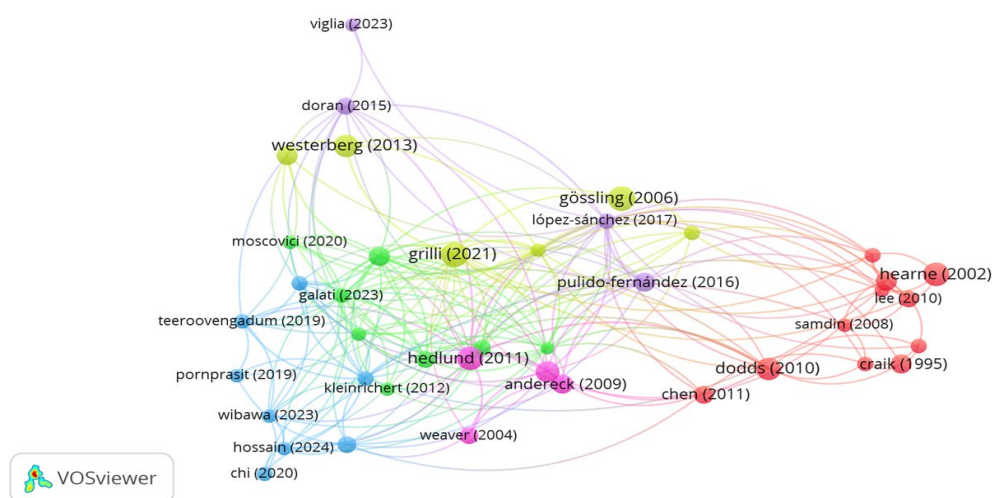


Figure 15: *Bibliometric coupling network.*
Source: *Authors' work.*

Discussion

This bibliometric analysis provides a comprehensive examination of the evolution of research on tourists' perceptions of sustainable tourism from 1992 to 2024. The increasing volume of publications each year indicates a strong and growing scholarly focus on sustainable development and tourist responsibility. Geographically, Spain leads with 70 publications, followed by China with 56 and the USA with 48. This shows that these countries play a key role in advancing research on tourists' views about sustainability. About 30.73% of the publications involve international collaboration, showing that researchers from different

countries often work together. This is important because sustainable tourism involves shared challenges and goals across countries. This collaboration and publication trend helps future scholars recognise emerging research patterns, identify gaps, and prioritise key topics for further study. Journals are key to spreading research findings, and since 2016, *Sustainability* (Switzerland) has been the leading journal, publishing 27 articles in this area. In terms of impactful contributors, Juan Ignacio Pulido-Fernández stands out with four published articles in this field. These impactful contributions set high standards for research quality and help guide the direction of the field. Influenced by global sustainability goals and the impact of the COVID-19 pandemic, the thematic evaluation map highlights how research focus has shifted over time. Using the keywords from existing literature, the tree map and word cloud identify the main research themes. Moreover, the thematic map provides a clear view of key topics and areas of interest, including ecotourism, behavioural intentions, economic valuation, and sustainability policy. The Keyword Co-occurrence Map further provides a detailed view of the connections between key concepts in sustainable tourism research. It highlights the interdisciplinary nature of the field, including environmental, economic, psychological, and policy-related topics. Beyond that, the bibliometric coupling network illustrates the structural relationships among academic publications. It reveals how research communities are connected through shared references. Overall, this study not only maps the current state of knowledge on tourists' perceptions of sustainable tourism but also identifies key gaps and opportunities. It guides future research toward more integrated, context-sensitive, and impactful work.

Limitations of the study

Although the study contributes significantly to the field, it has some limitations. First, the analysis relies solely on literature indexed in Scopus. This means it may miss relevant studies found in other databases, such as Web of Science, Google Scholar, or PubMed. Secondly, bibliometric analysis primarily examines citation and co-citation patterns to assess impact. However, it does not assess the quality or depth of the articles, which may limit the understanding of their actual scholarly impact. The study includes only English-language articles published between 1992 and 2024, which may introduce a language bias. At the same time, the study excludes other types of publications, such as books, conference papers, and reports. This may result in missing important regional or local studies published in different formats or languages. Bibliometric coupling and keyword analysis help identify main themes and trends in the research. However, they might miss new or interdisciplinary topics that are not yet well represented but could be important in the future. Acknowledging these limitations offers important context for interpreting the results. This also highlights the need to include qualitative reviews and a wider range of data sources in future research.

Implications and future research directions

This bibliometric analysis offers valuable insights for both researchers and practitioners involved in sustainable tourism development. The different themes identified in the research show that tourists' perceptions are complex, encompassing environmental identity, economic willingness, psychological motivations, and behaviour. Understanding these diverse perspectives can help scholars and policymakers develop more effective strategies that resonate with different tourist segments. At the same time, tourism professionals can redesign marketing strategies to better attract tourists by aligning with their perspectives on sustainable tourism. However, based on the study findings, several research gaps remain that future studies should explore. Prospective studies should include a more diverse range of geographic contexts, especially from regions that are currently underrepresented. This approach will help capture a broader range of tourist perceptions and address various sustainability challenges more

effectively. In recent times, the world has faced different crises such as the COVID-19 pandemic, climate change, and economic instability. Future research could further explore how these crises reshape tourist attitudes and behaviours towards tourism sustainability. Quantitative methods such as contingent valuation and regression analysis are often used in research. However, more mixed-methods and qualitative studies are needed to understand better the deeper motivations and cultural factors shaping tourists' perceptions. Recently, emerging technologies, social media, and digital communication have become major influences across different sectors. These research areas hold great potential for future exploration, especially in understanding how they shape sustainable tourism and affect consumer behaviour. Finally, future studies can follow the findings of this research. The thematic analysis highlights key research areas and provides clear direction for future exploration in the field.

Conclusion

In recent times, sustainability has become a key global concern. Understanding tourists' perceptions helps tourism planners and business developers create better strategies to promote responsible travel and tourism destinations. This bibliometric study offers a comprehensive overview of research on tourists' perceptions of sustainable tourism from 1992 to 2024. The study identifies key journals, influential authors, and emerging research topics, providing valuable insights for both scholars and practitioners. The analysis reveals important themes, including environmental awareness, economic willingness, and psychological motivations. These themes underscore the complexity of tourists' attitudes and the multifaceted factors driving sustainable tourism behaviour. It also emphasises the role of international cooperation and diverse geographic contributions in shaping the research landscape. This global perspective enriches the understanding of sustainable tourism by incorporating varied contexts and challenges. By mapping the thematic structure and publication trends, this research lays a strong foundation for future studies aimed at advancing sustainable tourism by improving the understanding of tourist attitudes. Overall, this study provides useful insights, offers a clear direction for future research, and supports real-world efforts in sustainable tourism.

References

- Ali, M. J. (2021). Understanding the 'g-index' and the 'e-index.' *Seminars in Ophthalmology*, 36(4), 139–139. <https://doi.org/10.1080/08820538.2021.1922975>
- Altamira, M. B., & Putri, K. D. A. P. Sustainable Tourism Behaviour through Walking Tour: A Qualitative Study of Walking Tour Participants in Jakarta. *Journal of Indonesian Tourism and Policy Studies*, 10(1), 3. <https://doi.org/10.7454/jitps.v5i1.170>
- Andereck, K. L. (2009). Tourists' perceptions of environmentally responsible innovations at tourism businesses. *Journal of Sustainable Tourism*, 17(4), 489–499. <https://doi.org/10.1080/09669580802495790>
- Baloch, Q. B., Shah, S. N., Iqbal, N., Sheeraz, M., Asadullah, M., Mahar, S., & Khan, A. U. (2022). Impact of tourism development upon environmental sustainability: a suggested framework for sustainable ecotourism. *Environmental Science and Pollution Research*, 30(3), 5917–5930. <https://doi.org/10.1007/s11356-022-22496-w>
- Basendwah, M., Amarneh, S., Majid, H. H., & Alawi Al-sakkaf, M. (2024). The Expectations and Motivations of Tourists from Green Destinations. *The Role of Artificial Intelligence in Regenerative Tourism and Green Destinations*, 207–222. <https://doi.org/10.1108/978-1-83753-746-420241013>

- Boluk, K. A., Cavaliere, C. T., & Higgins-Desbiolles, F. (2021). A critical framework for interrogating the United Nations Sustainable Development Goals 2030 Agenda in tourism. *Activating Critical Thinking to Advance the Sustainable Development Goals in Tourism Systems*, 1–18. <https://doi.org/10.4324/9781003140542-1>
- Boneta-Ruiz, A., Aramendia-Muneta, M. E., & Gómez-Cámara, I. (2025). From reviews to reality: tourist perceptions of sustainability in the top 15 global sustainable hotels. *Tourism Recreation Research*, 1–13. <https://doi.org/10.1080/02508281.2025.2495665>
- Cardia, G. (2017). Routes and Itineraries as a Means of Contribution for Sustainable Tourism Development. *Innovative Approaches to Tourism and Leisure*, 17–33. https://doi.org/10.1007/978-3-319-67603-6_2
- Chi, X., & Han, H. (2020). Exploring slow city attributes in Mainland China: tourist perceptions and behavioral intentions toward Chinese Cittaslow. *Journal of Travel & Tourism Marketing*, 37(3), 361–379. <https://doi.org/10.1080/10548408.2020.1758286>
- Craik, J. (1995). Are there cultural limits to tourism? *Journal of Sustainable Tourism*, 3(2), 87–98. <https://doi.org/10.1080/09669589509510713>
- Desai, N., Veras, L., & Gosain, A. (2018). Using Bradford’s law of scattering to identify the core journals of pediatricpaediatric surgery. *Journal of Surgical Research*, 229, 90–95. <https://doi.org/10.1016/j.jss.2018.03.062>
- Dodds, R., Graci, S. R., & Holmes, M. (2010). Does the tourist care? A comparison of tourists in Koh Phi Phi, Thailand and Gili Trawangan, Indonesia. *Journal of Sustainable Tourism*, 18(2), 207–222. <https://doi.org/10.1080/09669580903215162>
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285–296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
- Doran, R., Hanss, D., & Larsen, S. (2015). Attitudes, efficacy beliefs, and willingness to pay for environmental protection when travelling. *Tourism and Hospitality Research*, 15(4), 281–292. <https://doi.org/10.1177/1467358415580360>
- Gao, J., Huang, Z. (Joy), & Zhang, C. (2016). Tourists’ perceptions of responsibility: an application of norm-activation theory. *Journal of Sustainable Tourism*, 25(2), 276–291. <https://doi.org/10.1080/09669582.2016.1202954>
- Göktaş, L., & Çetin, G. (2023). Tourist tax for sustainability: Determining willingness to pay. *European Journal of Tourism Research*, 35, 3503. <https://doi.org/10.54055/ejtr.v35i.2813>
- Gössling, S., Bredberg, M., Randow, A., Sandström, E., & Svensson, P. (2006). Tourist Perceptions of Climate Change: A Study of International Tourists in Zanzibar. *Current Issues in Tourism*, 9(4–5), 419–435. <https://doi.org/10.2167/cit265.0>
- Grilli, G., Tyllianakis, E., Luisetti, T., Ferrini, S., & Turner, R. K. (2021). Prospective tourist preferences for sustainable tourism development in Small Island Developing States. *Tourism Management*, 82, 104178. <https://doi.org/10.1016/j.tourman.2020.104178>
- Güzel, F., Nacak, E., Bilgi, E., & Kalın, V. (2020). Sustainable Tourism and The Roles of Tour Guides in Destinations: A Qualitative Case Study in Turkey. *Journal of Economy, Culture and Society*, 0(0), 0–0. <https://doi.org/10.26650/jecs2020-0015>

- Hearne, R. R., & Salinas, Z. M. (2002). The use of choice experiments in the analysis of tourist preferences for ecotourism development in Costa Rica. *Journal of Environmental Management*, 65(2), 153–163. <https://doi.org/10.1006/jema.2001.0541>
- Hearne, R. R., & Salinas, Z. M. (2002). The use of choice experiments in the analysis of tourist preferences for ecotourism development in Costa Rica. *Journal of Environmental Management*, 65(2), 153–163. <https://doi.org/10.1006/jema.2001.0541>
- Hedlund, T. (2011). The impact of values, environmental concern, and willingness to accept economic sacrifices to protect the environment on tourists' intentions to buy ecologically sustainable tourism alternatives. *Tourism and Hospitality Research*, 11(4), 278–288. <https://doi.org/10.1177/1467358411423330>
- Hossain, MD. S., Hossain, MD. A., Al Masud, A., Islam, K. M. Z., Mostafa, MD. G., & Hossain, M. T. (2023). The integrated power of gastronomic experience quality and accommodation experience to build tourists' satisfaction, revisit intention, and word-of-mouth intention. *Journal of Quality Assurance in Hospitality & Tourism*, 25(6), 1692–1718. <https://doi.org/10.1080/1528008x.2023.2173710>
- Ibnou-Laaroussi, S., Rjoub, H., & Wong, W.-K. (2020). Sustainability of Green Tourism among International Tourists and Its Influence on the Achievement of Green Environment: Evidence from North Cyprus. *Sustainability*, 12(14), 5698. <https://doi.org/10.3390/su12145698>
- Jin, Q., Hu, H., & Kavan, P. (2016). Factors Influencing Perceived Crowding of Tourists and Sustainable Tourism Destination Management. *Sustainability*, 8(10), 976. <https://doi.org/10.3390/su8100976>
- Keathley-Herring, H., Van Aken, E., Gonzalez-Aleu, F., Deschamps, F., Letens, G., & Orlandini, P. C. (2016). Assessing the maturity of a research area: bibliometric review and proposed framework. *Scientometrics*, 109(2), 927–951. <https://doi.org/10.1007/s11192-016-2096-x>
- Kleinrichert, D., Ergul, M., Johnson, C., & Uydaci, M. (2012). Boutique hotels: technology, social media and green practices. *Journal of Hospitality and Tourism Technology*, 3(3), 211–225. <https://doi.org/10.1108/17579881211264495>
- Koko Suryawan, I. W., Rahman, A., Suhardono, S., & Lee, C.-H. (2025). Visitor willingness to pay for decarbonizing tourism: Supporting a net-zero transition in Nusa Penida, Indonesia. *Energy for Sustainable Development*, 85, 101628. <https://doi.org/10.1016/j.esd.2024.101628>
- Lee, K.-H., Lee, M., & Gunarathne, N. (2018). Do green awards and certifications matter? Consumers' perceptions, green behavioral intentions, and economic implications for the hotel industry: A Sri Lankan perspective. *Tourism Economics*, 25(4), 593–612. <https://doi.org/10.1177/1354816618810563>
- López-Sánchez, Y., & Pulido-Fernández, J. I. (2016). Factors influencing the willingness to pay for sustainable tourism: a case of mass tourism destinations. *International Journal of Sustainable Development & World Ecology*, 24(3), 262–275. <https://doi.org/10.1080/13504509.2016.1203372>
- Martínez García de Leaniz, P., Herrero Crespo, Á., & Gómez López, R. (2018). Customer responses to environmentally certified hotels: the moderating effect of environmental

- consciousness on the formation of behavioral intentions. *Journal of Sustainable Tourism*, 26(7), 1160–1177. <https://doi.org/10.1080/09669582.2017.1349775>
- Marzo-Navarro, M., Berné-Manero, C., & Pedraja-Iglesias, M. (2024). La perspectiva de los proveedores sobre experiencias turísticas memorables y destinos rurales sostenibles. Un estudio exploratorio. *Revista de Estudios Empresariales. Segunda Época*, 75–99. <https://doi.org/10.17561/ree.n2.2024.8787>
- Mohaidin, Z., Wei, K. T., & Ali Murshid, M. (2017). Factors influencing the tourists' intention to select sustainable tourism destination: a case study of Penang, Malaysia. *International Journal of Tourism Cities*, 3(4), 442–465. <https://doi.org/10.1108/ijtc-11-2016-0049>
- Musa, F., & Nadarajah, R. (2023). Valuing visitors' willingness to pay for green tourism conservation: A case study of Bukit Larut Forest Recreation Area, Perak, Malaysia. *Sustainable Environment*, 9(1). <https://doi.org/10.1080/27658511.2023.2188767>
- Nelson, K. M., Partelow, S., Stäbler, M., Graci, S., & Fujitani, M. (2021). Tourist willingness to pay for local green hotel certification. *PLOS ONE*, 16(2), e0245953. <https://doi.org/10.1371/journal.pone.0245953>
- Nocera, A. P., Boudreau, H., Boyd, C. J., Tamhane, A., Martin, K. D., & Rais-Bahrami, S. (2024). Correlation Between H-Index, M-Index, and Academic Rank in Urology. *Urology*, 189, 150–155. <https://doi.org/10.1016/j.urology.2024.04.041>
- Pritchard, A. (1969). DOCUMENTATION NOTES. *Journal of Documentation*, 25(4), 344–349. <https://doi.org/10.1108/eb026482>
- Puczko, L., & Rátz, T. (2000). Tourist and Resident Perceptions of the Physical Impacts of Tourism at Lake Balaton, Hungary: Issues for Sustainable Tourism Management. *Journal of Sustainable Tourism*, 8(6), 458–478. <https://doi.org/10.1080/09669580008667380>
- Pulido-Fernández, J., & López-Sánchez, Y. (2016). Are Tourists Really Willing to Pay More for Sustainable Destinations? *Sustainability*, 8(12), 1240. <https://doi.org/10.3390/su8121240>
- Roblek, V., Drpić, D., Meško, M., & Milojica, V. (2021). Evolution of Sustainable Tourism Concepts. *Sustainability*, 13(22), 12829. <https://doi.org/10.3390/su132212829>
- Salinas-Ríos, K., & García López, A. J. (2022). Bibliometrics, a useful tool within the field of research. *Journal of Basic and Applied Psychology Research*, 3(6), 9–16. <https://doi.org/10.29057/jbapr.v3i6.6829>
- Schotten, M., el Aisati, M., Meester, W. J. N., Steinginga, S., & Ross, C. A. (2017). A Brief History of Scopus: The World's Largest Abstract and Citation Database of Scientific Literature. *Research Analytics*, 31–58. <https://doi.org/10.1201/9781315155890-3>
- Suhardono, S., Phan, T. T. T., Lee, C.-H., & Suryawan, I. W. K. (2025). Design strategies and willingness to pay for circular economy service policies in sustainable tourism. *Environmental Challenges*, 18, 101081. <https://doi.org/10.1016/j.envc.2025.101081>
- Teeroovengadum, V. (2019). Environmental identity and ecotourism behaviours: examination of the direct and indirect effects. *Tourism Review*, 74(2), 280–292. <https://doi.org/10.1108/tr-11-2017-0190>

- Weismayer, C., & Pezenka, I. (2017). Identifying emerging research fields: a longitudinal latent semantic keyword analysis. *Scientometrics*, 113(3), 1757–1785. <https://doi.org/10.1007/s11192-017-2555-z>
- Westerberg, V., Jacobsen, J. B., & Lifran, R. (2013). The case for offshore wind farms, artificial reefs and sustainable tourism in the French Mmediterranean. *Tourism Management*, 34, 172–183. <https://doi.org/10.1016/j.tourman.2012.04.008>
- Wibawa, B. M., Pranindyasari, C., Bhawika, G. W., & Mardhotillah, R. R. (2021). Discovering the importance of halal tourism for Indonesian Muslim travelers: perceptions and behaviors when traveling to a non-Muslim destination. *Journal of Islamic Marketing*, 14(1), 61–81. <https://doi.org/10.1108/jima-07-2020-0210>
- Wykes, T., Lipczynska, S., & Guha, M. (2013). The h-index, the citation rating, impact factors and the aspiring researcher. *Journal of Mental Health*, 22(6), 467–473. <https://doi.org/10.3109/09638237.2013.850153>