Current Research on Ethical Consumption in the Tourism Sector: A Bibliometric Analysis

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Abstract:

This study investigates the role of ethical consumption within tourism through bibliometric analysis. Given tourism's significant impact on destination communities and the environment, understanding ethical consumption is vital. The bibliometric approach offers an objective, quantitative assessment of the field by analyzing keywords, citation patterns, and author collaborations, revealing key trends and influences in ethical consumption research. Findings indicate a growing focus on areas such as tourism experiences, sustainable development, technological innovations, environmental impacts, and social responsibility. The study underscores the increasing relevance of ethical consumption in tourism and highlights bibliometric methods as crucial for advancing research. Future work should focus on policy development, education, and industry practices to enhance ethical consumption and promote sustainable tourism.

Keywords:

Ethical consumption in the tourism, Bibliometric analysis, Current research status

1.Introduction

With the increasing attention to the United Nations' 2030 Agenda for Sustainable Development, the Sustainable Development Goals (SDGs) have become a focal point in international research. These goals aim to promote global environmental, social, and economic sustainability, with the tourism industry playing a crucial role in their achievement. A comprehensive assessment of the sustainability of the tourism industry requires in-depth analysis and research(Lozano-Oyola,et al., 2012). Against this backdrop, the concept of ethical consumption has emerged as a key issue. Consumer ethics, as the antithesis of business ethics, involves the ethical analysis of consumer behavior(Alsaad,et al., 2021). Consequently, understanding the importance of ethical consumption in tourism has become increasingly urgent as it directly relates to the practice and promotion of sustainability in the tourism industry.

Bibliometric analysis offers a quantitative research method to analyze scientific literature, revealing research trends and patterns(Apoorva, et al., 2022). By applying bibliometric, this study identified key authors, institutions, and publications in the field of ethical consumption in tourism, allowing for an analysis of the structure and dynamics of knowledge in this area. This methodology not only facilitated a comprehensive understanding of existing literature but also guided future research directions. This study aims to explore how



ethical consumption can promote sustainable development in the tourism industry. It employs bibliometric methods to delve into research approaches in ethical consumption in tourism. Through this research, it is expected to provide more effective strategies and recommendations to advance sustainable development in the tourism sector.

2. Research design

Ethical consumption, as a significant social phenomenon, refers to consumers considering ethics as a crucial factor when making decisions about products or services. With the increasing societal focus on ethical and environmental issues, academic and practical interest in ethical consumption has grown. This study aims to outline the evolution of the concept of ethical consumption, compare the application of traditional methods with bibliometric methods in this field, and analyze the current use of bibliometric methods in ethical consumption research. The concept of ethical consumption can be traced back to the 1970s when consumer concern for environmental issues began to rise, particularly gaining attention after the first Earth Day in 1970, and sparking public and academic interest in environmental conservation(Zhao & Xu, 2013). Early ethical consumption primarily centered on environmental protection and sustainable development, such as purchasing eco-friendly products and reducing resource waste. In the 21st century, with globalization and advancements in information technology, consumers started to pay more attention to product production processes, supply chain management, and corporate social responsibility (Cohen, et al., 2017). The concept of ethical consumption expanded to encompass human rights, animal welfare, fair trade, and other aspects. Academia also began systematically studying consumers' ethical motivations and their impact on purchasing behavior(Peattie & Crane, 2005). In recent years, as consumer awareness has further heightened, the concept of ethical consumption has become more diverse and complex. Researchers have begun exploring various dimensions of ethical consumption, including consumers' psychological factors, social influences, and their long-term effects on the market (Sweeney & Soutar, 2001). Modern ethical consumption research not only focuses on individual consumer choices but also extends to broader areas such as policy-making and corporate strategies(Schröder & McEachern, 2005).

Bibliometrics involves a systematic quantitative analysis of academic literature, including citation analysis, co-authorship network analysis, and thematic analysis (Hassan Shah,et al., 2022). This method reveals trends in research fields, hot topics, and collaboration among key researchers. By providing a systematic analysis of a large body of literature, it identifies major trends and key themes in a research area. It can uncover the level of academic interest in a particular topic and its evolution. Through analyzing the number of publications, citations, and changes in keywords, bibliometrics can unveil the development trends in the field of ethical consumption research. By employing bibliometric analysis, core literature and key researchers in this field can be identified. For instance, citation network analysis can reveal which publications have the greatest impact on ethical consumption research and the collaborative relationships among researchers(Leydesdorff & Persson, 2010). Bibliometrics also helps identify hot topics and research gaps in ethical consumption studies. Recent research may indicate an increasing focus on specific ethical consumption behaviors such as fair trade or animal welfare, while other areas may still lack sufficient research(Bornmann & Leydesdorff, 2014).



3.Data collection

On August 20, 2024, a search was conducted using the following strategy: ethical OR moral OR sustainable OR responsible OR green OR conscious (Topic) and consumption OR consumer (Topic) and tourism OR hospitality (All Fields) and Article (Document Types) and Hospitality Leisure Sport Tourism (Web of Science Categories) and 6223 Hospitality, Leisure, Sport & Tourism (Citation Topics Meso). This search yielded a total of 307 articles, which were subsequently narrowed down to 281 relevant SSCI publications following manual screening.

4.Data analysis

4.1 publications

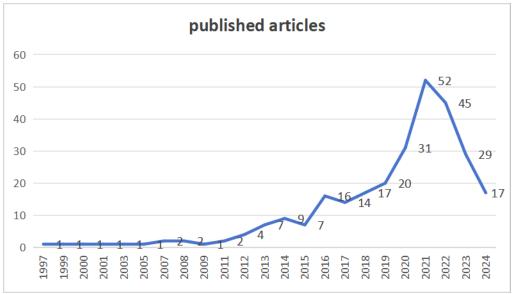


Figure 1. summary of published articles

A total of 281 articles were identified from 1997 to 2024, with an average annual publication rate of 10 articles. Notably, there was a significant increase in the number of publications from 2016 onwards, peaking at 52 articles in 2021. The accelerated growth in literature since 2016 may be attributed to several factors: firstly, a growing global concern for climate change and environmental issues has led scholars to delve deeper into the impact of tourism consumption on the environment; secondly, the rising environmental consciousness among consumers has increased the prevalence of ethical consumption behavior in the tourism market, attracting more scholarly attention; finally, policymakers and stakeholders in the tourism industry are increasingly seeking sustainable development models, providing a practical foundation and research demand for studies on ethical consumption.

4.2 keyword analysis and clusters

Keyword analysis is a crucial method for understanding hot topics and trends in research fields. By examining indicators such as keyword frequency, burstness, centrality, and PageRank, one can identify the main



themes and emerging trends in a research area. As shown in Table 1, "sustainable tourism" emerges as the most frequent keyword, indicating its centrality in ethical consumption research. Additionally, the high frequencies of "climate change" and "sustainable development" underscore the significance of environmental issues and sustainability as key dimensions in ethical consumption research.

Table 1. top 25 keywords in ethical consumption research

Rank	Freq	Burst	Burst Begin	Burst End	Degree	Centrality	Sigma	Page Rank	Label	Year
1	64	0			72	0.25	1	0	sustainable tourism	2005
2	48	5.63	2012	2019	73	0.27	3.76	0	consumption	2007
3	39	0			55	0.17	1	0	tourism	2011
4	35	0			47	0.1	1	0	satisfaction	2017
5	33	0			19	0.02	1	0	model	2007
6	32	0			39	0.07	1	0	impact	2017
7	26	0			44	0.09	1	0	behavior	2012
8	25	0			42	0.08	1	0	attitudes	2015
9	23	0			46	0.17	1	0	management	2007
10	19	0			47	0.08	1	0	experience	2014
11	18	0			25	0.02	1	0	intentions	2017
12	17	4.43	2012	2018	41	0.11	1.6	0	climate change	2005
13	17	0			37	0.06	1	0	destination	2012
14	17	0			34	0.07	1	0	perceptions	2011
15	17	0			34	0.07	1	0	perceptions	2011
16	17	0			32	0.06	1	0	sustainable development	2017
17	12	0			30	0.06	1	0	rural tourism	2009
18	12	0			26	0.02	1	0	intention	2007
19	11	0			35	0.06	1	0	travel	2018
20	11	0			32	0.04	1	0	image	2019
21	11	0			28	0.03	1	0	identity	2017
22	11	0			27	0.04	1	0	performance	2020
23	11	0			21	0.03	1	0	destination image	2013
24	11	0			20	0.03	1	0	community	2016
25	11	0			13	0	1	0	energy consumption	2018

Through keyword clustering analysis, the content can be categorized into 17 clusters, further condensed into seven main themes. These themes include: tourism experiences and satisfaction (Cluster 0 focusing on tourist satisfaction, emotional attachment, service quality; Cluster 5 emphasizing sustainable behaviors of tourists, ecotourism, and systems thinking), sustainable development and tourism (Cluster 1 concentrating on sustainable development, rural tourism, network analysis; Cluster 3 discussing the triple bottom line, sustainable tourism, destination branding, and Destination Management Organizations (DMOs); Cluster 9 involving sustainable development goals, management, and local and global tourism), technology and innovation applications (Cluster 7 exploring smart tourism, artificial intelligence, European tourism, and tourism productivity; Cluster 11 encompassing Google Trends, green low-carbon development, and topics on emerging technologies like metaverse tourism), environmental impacts and climate change (Cluster 8 addressing climate



change, air travel, technological myths, and future ideal states; Cluster 10 involving ecological awareness, slum tourism, and business models of rural and tourism destinations), cultural and culinary experiences (Cluster 6 focusing on Chinese culture, local cuisine, and cultural experiences), consumer behavior and economic impacts (Cluster 4 studying average length of stay, sustainable behavior changes, lifestyle, and consumption analysis), and social responsibility and ethics (Cluster 12 discussing responsibility, value perception frameworks, and donation requests).

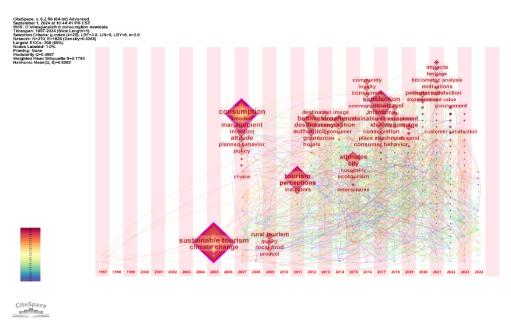


Figure 2. timezone of sustainable consumption in tourism

The in-depth bibliometric analysis of the field of "ethical consumption" was generated using the CiteSpace software. Spanning from 1997 to 2024, the analysis covers a 27-year period of research literature. By applying strict selection criteria, such as the g-index, LRF (Local Normalized Factor), L/N (link number), LBY (citations in the last two years), and e (citation influence), the analysis ensures a focus on the most influential and highly cited literature.

In terms of network characteristics, a network consisting of 370 nodes and 1828 edges reveals the intricate literature relationship network within the field of ethical consumption. With a network density of 0.0268 and highly clustered connected components, the interconnected research literature in this field forms a highly integrated knowledge structure. Furthermore, the high values of modularization (Q)(Newman, 2006) and silhouette coefficient (S)(Rousseeuw, 1987) further confirm the distinct modular features and effective clustering within the network, aiding in the identification of different research topics or subfields within the research domain.

The evolution of ethical consumption research can be traced through the changing keywords over time. Initially, studies may have focused on macro issues such as climate change and consumer behavior, while in recent years, attention has shifted towards more specific and nuanced concepts like local attachment, loyalty, sustainability, and satisfaction. This shift not only reflects a deepening and refining of research interests but also indicates the continuous expansion and deepening of the field of ethical consumption studies.



4.3 High-impact journals and articles

Highly cited journals and publications are crucial indicators of academic influence. Analyzing these sources helps identify core publications and key research findings in the field of ethical consumption. Table 2 reveals a significant surge in the presence of theses in the years 2018 to 2020, suggesting a growing interest among emerging scholars in ethical consumption, leading to an expansion in both the depth and breadth of research. Additionally, there are 15 highly cited journals. Overall, research interest has been steadily increasing since 2005, with peaks notably in 2018 and 2022. These papers demonstrate high impact and stability within the academic network, spanning across reputable journals, showcasing the interdisciplinary and extensive nature of the research. Future studies should focus on emerging areas, enhance collaboration and communication, and strive to improve research quality and depth. The paper ranked second exhibits the highest immediacy index (7.37) and a relatively high frequency (102), indicating widespread attention within a specific timeframe. While the paper ranked ninth has a lower immediacy index, its frequency of 54 suggests enduring attention over the long term.

Table 2. top co-cited journals by burstness analysis

Rank	Burst	Freq	Burst Begin	Burst End	Degree	Centrality	Sigma	Co-cited journals	Year
1	9.41	19	2018	2020	15	0.01	1.07	Thesis	2018
2	7.37	102	2007	2018	71	0.12	2.33	Journal of Sustainable Tourism	1999
3	5.74	19	2014	2019	25	0	1.03	International Journal of Contemporary Hospitality Management	2014
4	5.6	59	2022	2024	43	0.02	1.12	Tourism Review	2020
5	5.55	13	2013	2016	13	0.01	1.03	Tourist Studies	2013
6	5.23	16	2009	2019	35	0.02	1.12	Environment And Planning A-economy And Space	2009
7	4.5	17	2016	2020	41	0.01	1.06	Journal of Personality and Social Psychology	2016



8	4.11	26	2022	2024	30	0.01	1.05	Sustainable Development	2019
9	3.96	54	2005	2019	79	0.12	1.55	Ecological Economics	2005
10	3.88	18	2016	2019	23	0	1.02	Transportation Research Part A-policy And Practice	2016
11	3.78	45	2012	2016	38	0.02	1.07	Tourism And Hospitality Research	2012
12	3.75	8	2012	2014	25	0.03	1.12	Asia Pacific Journal of Tourism Research	2012
13	3.75	7	2001	2016	16	0.01	1.04	Science	2001
14	3.75	7	2016	2018	13	0	1	Journal Of Social Issues	2016
15	3.54	53	2012	2016	70	0.06	1.25	Anatolia: An International Journal of Tourism and Hospitality Research	2012
16	3.53	21	2013	2019	35	0.02	1.05	Global Environmental Change-human And Policy Dimensions	2005

A total of 855 articles were found to be highly cited in the field of ethical consumption, with Table 3 displaying the most frequently cited works. These articles typically represent classic or groundbreaking research in the field, exerting a profound influence on subsequent studies. The identified literature primarily delves into the interplay between climate change and the tourism industry, focusing on tourists' behavioral changes and feasibility in addressing climate change. Research indicates that while there is a general awareness of climate change, implementing sustainable practices during actual travel activities poses numerous challenges. On one hand, environmentally friendly behaviors in daily life do not readily translate into sustainable practices in touristic settings, particularly in high-consumption activities. On the other hand, the tourism industry plays a significant role in global carbon emissions, yet emission reduction targets are achievable through technological innovation and policy guidance. Overall, these studies underscore the importance of understanding



tourist behavior motivations, enhancing environmental awareness, and formulating effective policies to drive sustainable development in the tourism sector.

Table 3. top15 co-cited articles in sustainable tourism

Rank	Freq	Burst	Burst	Burst	Degree	Author	Year	Source	DOI	Cluster
1	15	4.34	Begin 2016	End 2021	19	E Juvan, S	2014	Annals of tourism	10.1016/j.annals.2014.05.012	ID 7
2	13	5.91	2014	2018	26	Dolnicar G Miller,	2010	Annals of tourism research	10.1016/j.annals.2009.12.002	8
3	10	3.79	2021	2024	13	CM Hall	2019	Journal of Sustainable Tourism	10.1080/09669582.2018.1560456	12
4	7	0			35	S Barr	2010	Journal of Transport Geography	10.1016/j.jtrangeo.2009.08.007	2
5	7	0			30	D Scott	2010	Journal of Sustainable Tourism	10.1080/09669581003653542	2
6	7	0			29	F Buffa	2015	Sustainability	10.3390/su71014042	1
7	7	0			28	A Hares	2010	Journal of transport geography	10.1016/j.jtrangeo.2009.06.018	2
8	7	0			20	S Gössling	2015	Journal of Sustainable Tourism	10.1080/09669582.2015.1008500	2
9	7	0			14	P Peeters	2010	Journal of Transport Geography	10.1016/j.jtrangeo.2009.09.003	2
10	7	0			14	B Mc- Kercher	2010	Journal of sustainable tourism	10.1080/09669580903395022	2
11	7	3.69	2022	2024	4	SM Rasooli- manesh	2023	Journal of Sustainable Tourism	10.1080/09669582.2020.1775621	3
12	7	3.69	2022	2024	2	J Henseler	2015	Journal of the academy of marketing science	10.1007/s11747-014-0403-8	3
13	6	0			34	YTH Chiu	2014	Tourism management	10.1016/j.tourman.2013.06.013	1
14	6	0			20	S Gössling	2012	Annals of tourism research	10.1016/j.annals.2011.11.002	2
15	6	0			13	R Buckley	2012	Annals of tourism research	10.1016/j.annals.2012.02.003	10

4.4 Authors with significant influence

The analysis of highly cited authors sheds light on key scholars in the field of ethical consumption research.



Their work has had a significant impact on academia and has provided guidance for practical applications. Among the 738 authors whose publications are highly cited in this research domain, 15 have been identified for analysis. As shown in Table 4, "BECKEN S" stands out as one of the most frequently cited authors, holding a prominent academic position and influence in the field of ethical consumption. Their studies collectively explore the interaction between climate change and the tourism industry, with a focus on destinations' adaptability to climate change, motivators for consumer behavior change, and the promotion of sustainable tourism practices. On one hand, the research indicates that island nations like Fiji demonstrate a certain level of adaptability in addressing climate change, while consumers are increasingly inclined to make travel decisions based on environmental quality. On the other hand, the studies emphasize the limitations of single behavior change strategies (such as individual travel style approaches) in promoting environmental conservation behaviors, and suggest the need for more comprehensive approaches to understand and facilitate sustainable shifts in tourist behavior. Furthermore, the research provides in-depth insights into tourist goal-directed behaviors, revealing the impact of goal disclosure on tourist behavior and its modulation by temporal distance.

Table 4. Top Co-cited author by burstness analysis

Rank	Freq	Burst	Burst Begin	Burst End	Degree	Centrality	Sigma	Author	Year
			_						
1	38	4.08	2005	2018	80	0.12	1.57	S. Becken	2005
2	14	4.17	2012	2018	55	0.07	1.34	S.Barr	2012
3	24	5.47	2012	2019	51	0.06	1.38	B.Mckercher	1999
4	22	4.77	2014	2018	50	0.05	1.28	G.Miller	2007
5	38	4.38	2022	2024	45	0.03	1.14	C.Fornell	2016
6	13	3.92	2022	2024	38	0.03	1.13	J.Henseler	2021
7	14	5.84	2022	2024	27	0.02	1.1	L.J.Su	2022
8	17	7.1	2022	2024	24	0.02	1.13	S.M.Rasoolimanesh	2022
9	17	4.33	2016	2018	34	0.01	1.03	D.Scott	2013
10	20	4.07	2013	2018	29	0.01	1.02	S.Gossling	2013
11	13	3.95	2013	2019	26	0.01	1.03	P.Peeters	2005
12	14	3.99	2021	2024	23	0.01	1.05	Ada.Tasci	2021
13	7	3.48	2018	2020	14	0	1.01	L.Dwyer	2018
14	11	4.28	2021	2022	14	0	1.01	D.B.Weaver	2021
15	11	3.38	2018	2020	6	0	1.01	D.Getz	2018

4.5 co-citation analysis

The analysis of citation networks reveals the interrelationships among literature in the realm of ethical consumption. Through this analysis, pivotal literature, crucial themes, and research trends within the field can be discerned. The citation network analysis reveals the interconnections among publications in the field of ethical consumption. By examining the citation network, we can identify core literature, key themes, and research trends within the field. As shown in Figure 3, the citation network exhibits clear modular characteristics, indicating the presence of multiple relatively independent yet interconnected subfields of research in the realm of ethical consumption. This modular feature assists researchers in identifying and focusing on specific research topics, while also enabling possibilities for interdisciplinary studies.



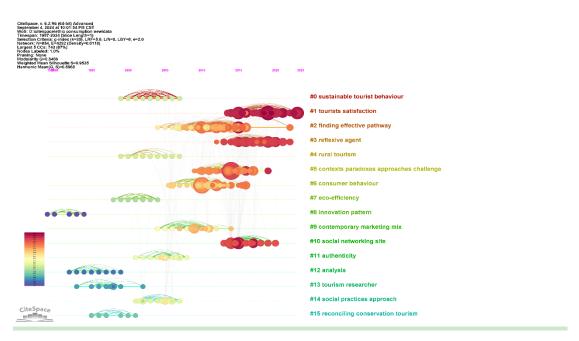


Figure 3. timeline analysis on co-citation in touristic ethical consumption

This framework highlights key areas in sustainable tourism, with Sustainable Tourist Behaviour as the central theme, addressing eco-friendly practices, rural tourism, and ecological efficiency. It closely examines Tourists Satisfaction regarding environmental and social impacts. The framework also explores how to Find Effective Pathways for integrating environmental practices, the role of tourists as Reflexive Agents in adjusting their behaviors, and broader Consumer Behaviour impacts on sustainability. At the heart of this analysis is the ongoing effort to balance environmental responsibility with enriching tourism experiences.

In Technology and Innovation, it covers Innovation Patterns in advancing sustainability, the incorporation of sustainable tourism into the Contemporary Marketing Mix, and the role of Social Networking Sites in promoting these practices. Theoretical aspects include Contexts Paradoxes Approaches Challenges in addressing complex issues, various Analysis methods, and the role of Tourism Researchers. Finally, it discusses Authenticity in tourism experiences, the influence of Social Practices Approach, and strategies for Reconciling Conservation Tourism with tourism development.

5. Conclusions

Empirical findings indicate a notable increase in the number of published papers from 2016 onwards, peaking in 2021, reflecting a growing global concern for climate change and environmental issues. Keyword clustering analysis revealed seven main research themes: tourism experiences and satisfaction, sustainable development and tourism, technology and innovation applications, environmental impacts and climate change, culture and culinary experiences, consumer behavior and economic impacts, social responsibility and ethics. The research unveiled core issues in sustainable tourism behavior, emphasizing the significance of environmental and sustainability dimensions in ethical consumer studies. It also highlighted the limitations of singular behavior change strategies in promoting environmental conservation actions, advocating for more comprehensive approaches to understand and facilitate the sustainable transformation of tourist behaviors.



In conclusion, despite a widespread awareness of climate change, achieving sustainable behavior in actual tourism activities still faces numerous challenges. Policymakers and tourism practitioners need to implement integrated measures to advance sustainable tourism behavior by enhancing tourists' environmental awareness and satisfaction, promoting environmental technological innovations, and formulating effective policies.

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