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SUSTAINABILITY OF STUDIES ON SUSTAINABLE TOURISM: A BIBLIOMETRIC APPROACH

Abstract. The core values of sustainability should be emphasised: economic development, social inclusion, equity as well as diversity, and environmental protection. Those values should be reflected in various characteristics of studies on sustainable tourism. And this is the question we ask in our paper: are the studies of sustainable tourism sustainable? To address that question, we applied a bibliometric analysis of papers published within the last ten years in the *Journal of Sustainable Tourism*, the most influential scientific journal strictly focused on sustainable tourism issues. The analysis has revealed some doubts related to financial support for the research presented in the papers published,

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open access to the investigated articles, the differentiation of scientific disciplines whose achievements are presented, the expected methodological triangulation applied in the investigated papers, spatial volatility of case study areas in empirical works presented in the journal and, finally, the Anglo-American domination in the discourse on sustainable tourism.

Key words: sustainability of science, sustainable tourism, bibliometric analysis, tourism research, Journal of Sustainable Tourism.

1. INTRODUCTION

The modern understanding of sustainable development was introduced by the United Nations (1987) in the Report of the World Commission on Environment and Development called “Our Common Future.” It stated that sustainable development “meets the needs of the present without compromising the ability of future generations to meet their own needs” (United Nations, 1987: 24). In 2015, a plan of action for the world in a 2030 perspective, “The 2030 Agenda for Sustainable Development” (United Nations, 2015), was adopted by the United Nations to trigger actions towards environmental protection, social inclusion and reduction of poverty, and economic prosperity.

The first definition of sustainable tourism was given by the World Tourism Organisation in 1996. According to the definition, sustainable tourism manages all areas in such a way that economic, social, and ecological needs are met along with cultural integration, environmental processes, protection of biodiversity, and supporting the development of society, in relation to the concept of sustainable development. It is concluded that sustainable tourism is also a process that considers the needs of current tourists, as well as the needs of future generations of travellers (UNWTO, 2018).

The core values of sustainability include economic development, social inclusion and equity, environmental protection (Fleurbaey *et al.*, 2014; Williams and Millington, 2004), and both biological and cultural diversity considered in parallel (McNeely, 2005). We assume that all these values should be reflected in various characteristics of studies on sustainable tourism, namely: financial support for the research, open access to articles presenting its achievements, differentiation of scientific disciplines involved, methodological triangulation applied, as well as the spatial volatility of case study areas in empirical studies.

The modern understanding of the core values of sustainability has reshaped the relations between nature and the social and economic activities of people. Nature rights require no justification and lead to the rejection of anthropocentrism (Williams and Millington, 2004). As thus, in terms of sustainable tourism studies, the need for an increase of interest in natural sciences in tourism research should be emphasised. Sustainable tourism should no longer be an exclusive domain of social sciences. As we see the need for a cooperative approach when discussing equity as the core value of sustainable development (Fleurbaey *et al.*, 2014),

a similar argument should be raised in the discussion on the issue of publishing the results of sustainable tourism studies. Journals are expected not only to be more open to authors representing various countries, but mostly to stimulate contributions from different research traditions. The goal of equity is to assure legitimacy of sustainable development (Brown and Corbera, 2003). A similar outcome is expected in studies on sustainable tourism.

The expected epistemological and sociocultural changes in sustainable tourism studies should occur over time and be influenced by the increasing contribution of non-Anglo-American research traditions. Through the discussion in this paper we wish to address both authors and readers of scientific papers presenting the results of sustainable tourism studies. However, the main expected audience includes the management and publishers of tourism journals, as well as agencies funding research on sustainable tourism.

This paper is organised as follows. First, we discuss the expected change in sustainable tourism studies. The following section considers bibliometric studies in sustainable tourism research. Then, the methods applied in this study are described. The following section presents the results of the research and a discussion on the contemporary issues of sustainable tourism studies. The paper ends with conclusions.

2. EXPECTED CHANGE IN SUSTAINABLE TOURISM STUDIES

From the moral point of view, tourism studies must go far beyond the simple questions about tourism phenomena, their determinants and consequences. Tourism studies, especially those dealing with sustainable tourism, are expected to contribute to the development of tourism, which is demanded from the perspective of both nature and human relations (Caton, 2012). The way we discuss the tourism research traditions we follow, and the ethics of tourism research we accept, are extremely significant from the perspective of future tourism in general, not just future tourism studies. It constitutes the responsibility of tourism scholars, research institutions, including research-financing institutions, as well as the responsibility of tourism scientific journals, which is the main focus of this paper.

Sustainable tourism is criticised as promoting particular behaviours and practices only, with no substantial discussion on the moral and ethical justification for those behaviours and practices, especially those receiving significant critique in practice (Caton, 2012). First, the definition of sustainable development does not reject capitalist mainstream fundamentals when suggesting economic growth as a goal of economic development. As Williams and Millington have suggested (2004), the concept of sustainability is weakened by both human-centred and growth-oriented approaches, and the consideration of nature as an economic asset. Such an understanding of

sustainability does not create a need for a radical change. Thus, the focus of sustainable tourism is, by definition, still on economic growth as well. It corresponds to the fact that sustainable tourism originated in the Anglo-American tradition and then was localised into various national contexts (Bao *et al.*, 2019).

It is argued that only the diversity of research traditions, methods applied, geographical contexts of research conducted, as well as the interdisciplinary approach, lead to an increase of contributions from tourism studies to solve the issues resulting from the dominance of neoliberal capitalism in tourism economies, namely: poverty, social and spatial inequalities, immigration, consumerism, degradation of bio and geodiversity, climate change, etc. (Causevic *et al.*, 2018). Significant risks related to the domination of Anglo-American traditions in research on tourism have been already identified. The preference for just one, neoliberal ideology should be emphasised (Butowski *et al.*, 2021). The mentioned focus of the 'sustainability' concept on economic growth is a direct result of that Anglo-American domination. This affects the discourse on sustainable tourism as well. In this study we hypothesise that the increasing contribution from non-Anglo-American traditions to trigger the investigated changes in research financing, open access, diversity of fields of studies, methods applied, research areas, and spatial scale of studies is expected.

Research-financing agencies are expected to understand the problem of Anglo-American dominance in the scientific discourse. Thus, national financial support for conducting research and publishing papers in open access should become a priority in non-Anglo-American countries. However, the problem of attracting research funding appears complicated in the world of commercialised academia. On the one hand, an increase in the financial support for studies on sustainable tourism seems promising, as research-financing agencies become aware of sustainable development goals for tourism. On the other, though, that commercialised approach to research might result in a decrease of ethics and quality of research granted, including delivering results expected by financing agencies or time pressure (Harvey, 2020).

Liburd (2012) indicated the subscription-based model of publishing scientific papers as unsustainable, be it in tourism research or other scientific fields of study. She has argued that the rapid increase of knowledge results in substantial increase of papers published. Compared to fixed financial resources of libraries subscribing to scientific databases, the model increases social inequalities of various stakeholders of the knowledge shared through the papers published while tourism research, like any other field of study, is expected to be sustainable and contribute socially, culturally, environmentally, and economically to the community, rather than raise profits for the owners of or shareholders in the industry and more prosperous academic centres (Chopin, 2018). As thus, open-access models of publishing research should be prioritised as much more sustainable. This is meant to make everyone able to use, enhance or challenge the knowledge we have (Liburd, 2012).

Unlike other industries, tourism research is relatively rarely funded by the industry or public agencies (Vaugeois *et al.*, 2017). Tourism studies typically have ex-

tremely limited financial resources, which makes them, or rather the agents offering them, important selectors of research projects, determining orientations, techniques, methodologies, etc. The tourist sector has a serious problem with trustworthy research and data, due to inadequate financial assistance. Richins (2000) has argued that local authorities can deal with development and tourism challenges when they make choices involving professional advice and research, which require funding.

Iaquinto (2018) complained that quantitative methods have dominated empirical tourism studies for most of its history. Fortunately, in the last decade, an increase in the variety of methodologies can be seen. This is the consequence of the fact that tourism is identified as a complex social phenomenon, and as thus it may be explored by the application of mixed methods (Molina-Azorín and Font, 2016). A mixed-method approach enables researchers to study various dimensions of the same research problem, and enrich the results (Hesse-Biber, 2010). However, methodological triangulation is still less popular than the mono-method approach (Iaquinto, 2018).

The increasing focus on top-ranked scientific journals, followed by limited opportunities to publish in those journals, lead to decreasing the impact of authors representing non-mainstream traditions (Causevic *et al.*, 2018; Poria *et al.*, 2015; Tokić and Tokić, 2015). It leads to a lock-in situation where only the contributions from a limited number of researchers representing the most influential scientific traditions, investigating selected issues in particular geographical contexts matter the most. Consequently, the loss of 'locality' is increasingly probable. An in-depth understanding of social, cultural, economic, and political realities rooted in places or regions becomes nearly impossible (Bao *et al.*, 2019). Higgins-Desbiolles (2022) promotes the 'truth-telling agenda' in tourism research. She argues against the ideas of imperialism and supremacy to support the values of sustainability. This kind of research approach refers to a better understanding of different stories embedded in various places. As thus, the sustainability of tourism research requires spatial volatility of research areas and a differentiation of geographical contexts.

3. BIBLIOMETRIC STUDIES IN SUSTAINABLE TOURISM RESEARCH

The bibliometric analysis has become an effective tool for understanding the key research topics in tourism studies (Lima Santos *et al.*, 2020). As Ruhanen *et al.* (2015) have noticed, we can observe the evolution in theoretical and methodological approaches, as well as the subjects and themes employed in the subfield of sustainable tourism research. The research in the field of sustainable tourism with the use of bibliometric analysis is gaining supporters and is discussed in the literature on a large scale (Table 1).

Table 1. Selected research on sustainable tourism using bibliometric analysis

Authors	Data sources	Main conclusions
Hasana et al. (2022)	Scopus	<ul style="list-style-type: none"> • <i>Journal of Sustainable Tourism, Journal of Ecotourism, Sustainability, Tourism Management, Environmental Management, Wit Transactions on Ecology and the Environment, and International Journal of Sustainable Development and World Ecology</i> are the leading journals in the field of ecotourism. • In terms of the authors' collaboration, there were no associations among developing countries.
Niñerola et al. (2019)	Scopus	<ul style="list-style-type: none"> • The literature related to sustainability issues in the field of tourism is significantly growing. • In terms of documents and citations, the United States is the leading country in research on sustainable tourism. • Sustainability is widely evidenced as a strategic approach for companies and tourist destinations.
Ruhanen et al. (2015)	Annals of Tourism Research; Journal of Travel Research; Journal of Sustainable Tourism; Tourism Management	<ul style="list-style-type: none"> • While the theoretical and methodological approaches appear to have matured over time, the subjects and themes in sustainable tourism research have remained constant, with some exceptions.
Garrigos-Simon et al. (2018)	Web of Science	<ul style="list-style-type: none"> • The leading journals in sustainable tourism are <i>Journal of Sustainable Tourism, Sustainability, and Tourism Management</i>. • 'Sustainability', 'tourism', 'sustainable tourism', 'sustainable development', 'ecotourism', and 'climate change' are the most frequent keywords in terms of sustainable tourism research. • The co-citation network indicates the existence of 4 groups of journals: journals oriented on the management of organisations, journals mainly associated with the analysis and management of destinations, journals with mainly environmental/ecological orientation, and journals associated with a geographical perspective.
Liu and Li (2020)	Science Citation Index (SCI); Social Science Citation Index (SSCI); Arts & Humanities Citation Index (A&HCI); Index to Scientific & Technical Proceedings (ISTP)	<ul style="list-style-type: none"> • The United States was an important contributor to ecotourism literature with the highest proportion of single country-authored publications and the largest number of publications of first authors, as well as co-authors' affiliation.

Authors	Data sources	Main conclusions
Liu and Li (2020)	Science Citation Index (SCI); Social Science Citation Index (SSCI); Arts & Humanities Citation Index (A&HCI); Index to Scientific & Technical Proceedings (ISTP)	<ul style="list-style-type: none"> • The research perspective changed from ecotourism resources to management and subsequently expanded to multi-stakeholders' involvement, showing that the study of ecotourism tended to be more specific. • Sustainable tourism was the main goal of ecotourism, which was reflected in the consistency between the ecotourism research and the aim and principles of sustainable tourism.
León-Gómez <i>et al.</i> (2021)	Web of Science	<ul style="list-style-type: none"> • The studies dedicated to sustainable tourism development and economic growth are increasing in quantity and quality, however, they are still not highly influential.
Cavalcante <i>et al.</i> (2021)	Web of Science	<ul style="list-style-type: none"> • 'Sustainability' and 'sustainable development' are the keywords most used to refer to tourism studies on sustainability. However, notions like 'perceived sustainability' were incorporated into the recent mainstream discourse on sustainable tourism. • Sustainable tourism is considered mainly by marketing studies on consumer behaviour variables, such as satisfaction, perceived image, experience, loyalty, and behavioural intentions.
Della Corte <i>et al.</i> (2019)	Web of Science	<ul style="list-style-type: none"> • The period between 2015 and 2019 was the most productive time in the field of sustainable tourism, especially topics connected with eco-tourism, community involvement, and environmental issues. Moreover, a wider emphasis on marketing was given in that period. • Sustainable tourism was also considered in specific contexts, such as hospitality or environmental conservation and preservation. • <i>Journal of Sustainable Tourism</i> had the highest number of published articles on sustainable tourism research.
Khanra <i>et al.</i> (2021)	Annals of Tourism Research; Journal of Travel Research; Tourism Management; International Journal of Contemporary Hospitality Management; International Journal of Hospitality Management; Journal of Sustainable Tourism	<ul style="list-style-type: none"> • Identification of 4 thematic areas of research relating to sustainable tourism: ecological preservation of tourist destinations, protection of residents' interests in tourist destinations, the carbon footprint of tourist mobility, and tourists' attitudes and behaviour toward sustainability. • Sustainable tourism and ecotourism were the most often used keywords.

Source: own work.

The main research problems of bibliometric studies on sustainability and tourism are: a) the identification of the most popular topics and research problems (Davidescu *et al.*, 2022; Iqbal *et al.*, 2022; Khanra *et al.*, 2021; León-Gómez *et al.*, 2021; Serrano *et al.*, 2019; Singh *et al.*, 2022; Trip *et al.*, 2021); b) the geographical volatility of studies (Garrigos-Simon *et al.*, 2018; León-Gómez *et al.*, 2021; Shasha *et al.*, 2020); c) the geographical distribution of authors (Jiménez-García *et al.*, 2020; Pahrudin *et al.*, 2022; Sánchez-Cañizares *et al.*, 2018); and d) the changes in the number of articles related to sustainable tourism over time (Mihalic *et al.*, 2021; Seguí-Amortegui *et al.*, 2019). There is definitely a lack of bibliometric studies on the moral and ethical issues of research on sustainable tourism. The additional purpose of this study is to fill the diagnosed research niche.

The conducted bibliometric research on sustainable tourism is largely based on the Web of Science (Franceschini *et al.*, 2016; Jiménez-García *et al.*, 2020; León-Gómez *et al.*, 2021; Pahrudin *et al.*, 2022; Rosato *et al.*, 2021; Serrano *et al.*, 2019; Trip *et al.*, 2021) or Scopus (Hasana *et al.*, 2022; Iqbal *et al.*, 2022; Niñerola *et al.*, 2019; Yoopetch and Nimsai, 2019). The analyses of detailed databases or individual journals are less frequent (Khanra *et al.*, 2021; Liu and Li, 2020). The most popular software used for bibliometric analysis are *VOSviewer* (Iqbal *et al.*, 2022; Khanra *et al.*, 2021) and *R-package bibliometrix* (Della Corte *et al.*, 2019; Pahrudin *et al.*, 2022).

4. DATA SOURCES AND METHODS

This study aims to identify whether the expected epistemological and socio-cultural changes in sustainable tourism studies occur over time and are influenced by the contribution of non-Anglo-American research traditions. Changes that signify the evolution of a research field are complex processes. As thus, applying only two determinants (time and non-Anglo-American research traditions) constitute the main limitation of this research. These changes include: an increase of financial support for research on sustainable tourism, an increase of open access to articles presenting the achievements of the research, a progressive differentiation of scientific disciplines involved in the research, development and popularisation of methodological triangulation applied in the research, and the increase of the volatility of case study areas in empirical studies.

To address the mentioned goal, a bibliometric analysis of empirical papers published in the *Journal of Sustainable Tourism* was conducted. The journal was selected deliberately, based on conclusions from previous studies indicating the *Journal of Sustainable Tourism* as the most prestigious and impactful

compared to other journals discussing the issues of sustainable tourism (Della Corte *et al.*, 2019; Hasana *et al.*, 2022). 710 research articles were published in the period between 2012 and 2021, along with 16 editorial notes and 174 theoretical papers. The focus on empirical articles is in line with the findings of Ruhanen *et al.* (2015). They show that theoretical and methodological approaches, as well as the subjects and themes studied in the subfield of sustainable tourism research, have evolved over time, with a clear shift away from definitional and conceptual reviews towards empirically-driven theory testing and development.

All the data was collected manually as metadata available in popular databases like the Web of Science or Scopus were not sufficient from the perspective of the study objective. The introduction sections of the investigated papers, as well as acknowledgements and notes on funding were reviewed to identify whether the studies were financially supported or not (see Fig. 1). Information on open access was presented directly on the journal's website (see Fig. 2). Methodological sections were investigated to identify the main field of study according to the OECD classification (see Fig. 3), methods applied (see Fig. 4), the countries of research areas (see Fig. 5), and the spatial scale of research (see Fig. 6). To address the issues resulting from Anglo-American dominance in the discourse on sustainable tourism, data on first authors' countries of affiliation was collected (see Fig. 7). According to Butowski *et al.* (2021), the Anglo-American affiliation was defined for all institutions located in countries with English as the official language, namely Australia, Canada, Ireland, New Zealand, United Kingdom, and the United States. A double-check procedure was applied to avoid issues resulting from possible errors in manual review and classification.

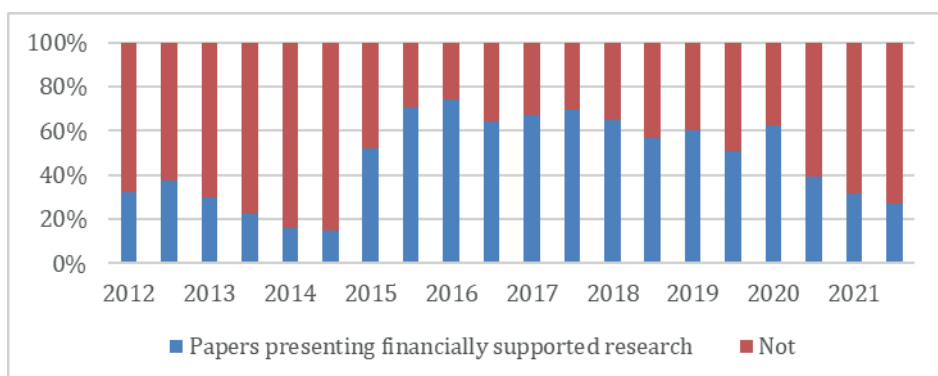


Fig. 1. Financial support for the research presented in papers published in the *Journal of Sustainable Tourism* in the years 2012–2021

Source: own work based on data retrieved from the *Journal of Sustainable Tourism*.

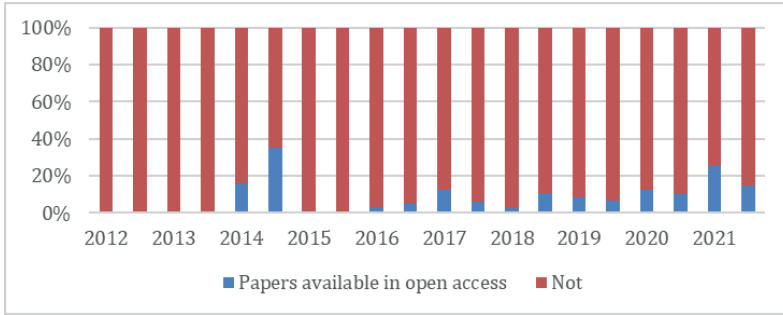


Fig. 2. Open access to papers published in the *Journal of Sustainable Tourism* in the years 2012–2021
Source: own work based on data retrieved from the *Journal of Sustainable Tourism*.

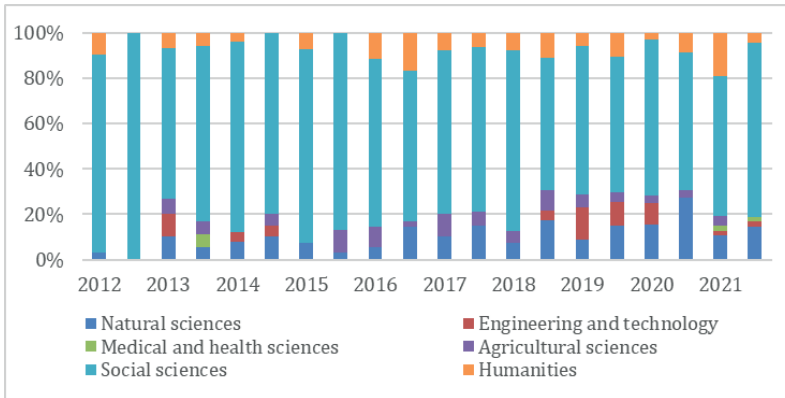


Fig. 3. OECD's fields of study of papers published in the *Journal of Sustainable Tourism* in the years 2012–2021
Source: own work based on data retrieved from the *Journal of Sustainable Tourism*.

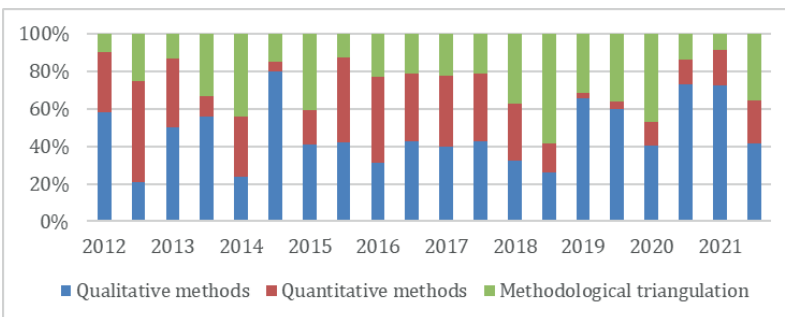


Fig. 4. Methods applied in papers published in the *Journal of Sustainable Tourism* in the years 2012–2021
Source: own work based on data retrieved from the *Journal of Sustainable Tourism*.

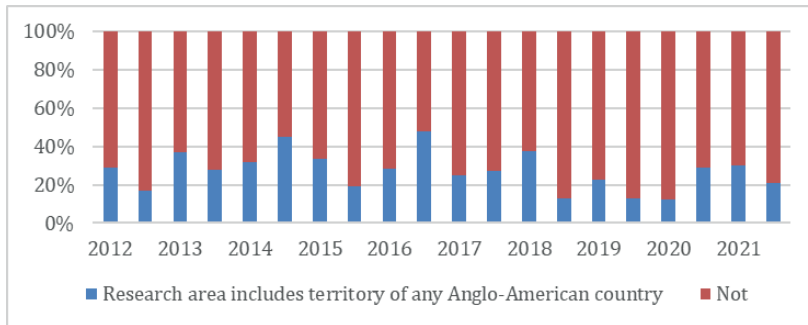


Fig. 5. Case study area of research presented in papers published in the *Journal of Sustainable Tourism* in the years 2012–2021

Source: own work based on data retrieved from the *Journal of Sustainable Tourism*.

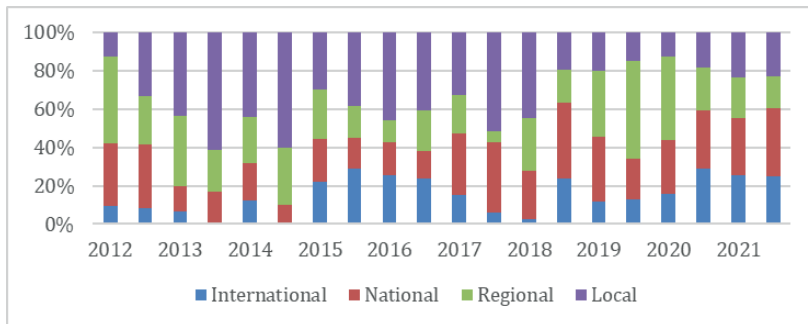


Fig. 6. Geographical scale of the research presented in papers published in the *Journal of Sustainable Tourism* in the years 2012–2021

Source: own work based on data retrieved from the *Journal of Sustainable Tourism*.

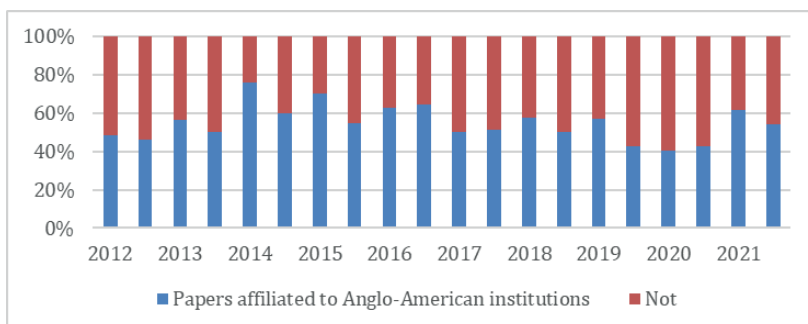


Fig. 7. Affiliation of the first authors of papers published in the *Journal of Sustainable Tourism* in the years 2012–2021

Source: own work based on data retrieved from the *Journal of Sustainable Tourism*.

To address the goal of the study, six linear models were estimated. The following variables were considered separately as dependent ones: the percentage of articles presenting financially supported research, the percentage of publications in open access, the relative standard deviation of the distribution of scientific fields, the relative standard deviation of the distribution of the methods applied, the percentage of studies in Anglo-American territories, and the relative standard deviation of the distribution of the spatial scale of research. The values of the variables were calculated for each six months of the period between the years 2012 and 2021. The time and share of papers whose first authors were not affiliated with Anglo-American countries were considered as independent variables in each estimated linear model.

5. CONTEMPORARY CHANGES OF SUSTAINABLE TOURISM STUDIES: RESULTS AND DISCUSSION

The question of this study is whether the expected epistemological and sociocultural changes in sustainable tourism studies occur over time and are influenced by the contribution of non-Anglo-American research traditions. We hypothesised that both time and an increase of the number of non-Anglo-American contributions should trigger an increase of the following variables: the percentage of articles presenting financially supported research, and the percentage of publications in open access, while the following dependent variables were expected to decrease: the relative standard deviation of the distribution of scientific fields, the relative standard deviation of the distribution of methods applied, the percentage of studies on Anglo-American territories, and relative standard deviation of the distribution of the spatial scale of research (see Table 3).

Significant changes over time occurred in three out of six investigated dependent variables (see Tables 2 and 3), namely those describing the increase in open access, more equal interest of various scientific disciplines in sustainable tourism (the lower the relative standard deviation of a distribution, the better), and a more equal distribution of the spatial scale of research (neither local, regional, national, nor international studies were neglected). However, the scale of these changes over time, although statistically significant, was small. Despite the critique of the subscription-based model of publishing (Liburd, 2012) which is applied by the publisher of the *Journal of Sustainable Tourism*, increasing authors' interest in open access across time should be emphasised. This seems promising in terms of the future equality of access to knowledge disseminated through the investigated journal.

Table 2. Linear models estimating the impact of time and non-Anglo-American research traditions on the expected changes of sustainable tourism studies in the years 2012–2021

Dependent variable	Intercept	Time (semi-annual)	Share of papers whose first authors are not affiliated to Anglo-American countries
The percentage of articles presenting financially supported research	0.3043 (0.229)	0.0088 (0.008)	0.1692 (0.510)
The percentage of publications in open access	0.1388 (0.101)	* 0.0072 (0.004)	-0.2860 (0.225)
Relative standard deviation of the distribution of scientific fields	*** 1.9271 (0.257)	*** -0.0303 (0.009)	-0.0752 (0.572)
Relative standard deviation of the distribution of methods applied	0.1437 (0.290)	0.0027 (0.010)	0.6723 (0.646)
The percentage of studies in Anglo-American territories	*** 0.5747 (0.094)	-0.0031 (0.003)	** -0.5919 (0.210)
Relative standard deviation of the distribution of spatial scale of research	0.3812 (0.240)	** -0.0192 (0.008)	0.6437 (0.535)

Source: own work based on data retrieved from the *Journal of Sustainable Tourism*. Standard errors in parentheses. Codes of statistical significance: 0.00 ‘***’ 0.01 ‘**’ 0.05 ‘*’ 0.10

This research confirmed the expected increase of interest from different scientific fields. This is in line with Laws and Scott’s (2015) findings who have stressed that tourism as a research field is a mosaic of the interests of various disciplines. Although the evidenced change is in accordance with the expected one, it must be said that both science and education on tourism are still mainly embedded in business and management (Laws and Scott, 2015). Both disciplines are parts of social sciences. However, Xiao *et al.* (2011) have suggested that tourism research conducted in the field of geography and environmental studies is characterised by the largest potential for multidisciplinary, and includes the achievements of not only geography and environmental studies, but also such disciplines as psychology, sociology, political science, behavioural science, economics, econometrics, statistics, business, marketing, management, methodology, humanities, etc.

Interestingly, the influence of the expected changes triggered by the contribution of non-Anglo-American traditions were evidenced only in the increasing volatility of the case study areas in empirical studies (decreasing percentage of studies in Anglo-American territories). This is in line with the postulates from

Higgins-Desbiolles (2022) who suggested increasing the differentiation of geographical contexts and research areas towards more sustainable tourism studies facing the issues of imperialism and supremacy of the Anglo-American tradition. The situation of grant-financed research on sustainable tourism and methodological approach did not significantly change over time, or under the influence of non-Anglo-American traditions.

Table 3. Expected and evidenced changes of sustainable tourism studies in the years 2012–2021

Dependent variable	Changes over time		Impact of non-Anglo-American traditions	
	Expected	Evidenced	Expected	Evidenced
The percentage of articles presenting financially supported research	+	N/s	+	N/s
The percentage of publications in open access	+	+	+	N/s
Relative standard deviation of the distribution of scientific fields	–	–	–	N/s
Relative standard deviation of the distribution of methods applied	–	N/s	–	N/s
The percentage of studies in Anglo-American territories	–	N/s	–	–
Relative standard deviation of the distribution of spatial scale of research	–	–	–	N/s

Source: own work based on data retrieved from the *Journal of Sustainable Tourism*. Codes: ‘+’ for directly proportional change; ‘–’ for inversely proportional change; ‘N/s’ for statistically non-significant change.

It must be emphasised that the concepts of ‘sustainability’ in general and ‘sustainable tourism’ in particular are mainly rooted in the Western Anglo-American tradition (Bao *et al.*, 2019). This should relate to the limited access of non-Anglo-American traditions to the most prestigious journals like the *Journal of Sustainable Tourism* confirmed by this research (54.1% of the first authors represented Anglo-American institutions within the investigated period of the last decade). In addition, a potential conflict of interests between the commercial publisher, whose values are rooted in neoliberal capitalism, and researchers affiliated to non-commercial universities representing non-Anglo-American traditions should be mentioned. Moreover, contribution to the most prestigious tourism journals is facilitated by the cooperation with Anglo-American authors rather than exclusive cooperation between other traditions, especially the cooperation of researchers from various developing countries (Hasana *et al.*, 2022).

As a consequence, the chance for any substantial change is seen as very limited. Non-Anglo-American authors, when submitting papers to journals like the *Journal of Sustainable Tourism*, are somehow expected (or they feel expected) to match their research concepts with the Anglo-American tradition. The consequences of this were confirmed by this research, as no significant expected change of discourse on sustainable tourism was evidenced by the contribution of non-Anglo-American traditions.

6. CONCLUSIONS

The present study was based on the bibliometric analysis on data extracted from the *Journal of Sustainable Tourism*. Six linear models were estimated to identify whether the expected epistemological and sociocultural changes in sustainable tourism studies occur over time and are triggered by the contributions from non-Anglo-American research traditions. The scale of the investigated changes over time, although statistically significant, is small, and refers only to an increase in open access, more equal interest of various scientific disciplines in sustainable tourism, and a more equal distribution of the spatial scale of research. The impact of non-Anglo-American traditions resulted only in an increasing volatility of case study areas in empirical studies. We recommend that future research should be conducted using multiple journal data sets and include a qualitative analysis as well, in order to compliment and further expand the research findings. The results should be considered by both authors and readers of scientific papers presenting the achievements of sustainable tourism studies. However, the real change towards the sustainability of sustainable tourism studies depends on the policy of the agents influencing the research strategies of authors (research-financing institutions) and responsible directly for publishing (the managements and publishers of journals).

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