

TRENDS IN THE DEVELOPMENT OF ECOTOURISM: AN ANALYSIS OF THE LITERATURE

TENDÊNCIAS NO DESENVOLVIMENTO DO ECOTURISMO: UMA ANÁLISE DA LITERATURA

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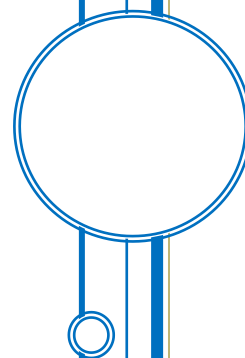
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Abstract

Ecotourism is the appropriate activity for carrying out tourism in protected places, as it is concerned with environmental conservation, contributing to the development of local communities. The potential for ecotourism is significant due to national parks, wildlife sanctuaries, conservation reserves and community reserves, many of which include animal reserves. Therefore, this study aims to conduct a systematic review of the literature on high impact research on the evolution and trends related to ecotourism in the world context, in order to understand the different perspectives through critical analyzes, identifying gaps for future research and investigating trends in this body of literature. To this end, a bibliographic search was conducted using the *Methodi Ordinatio*. To perform a bibliometric analysis, the VOSviewer software was used. The results show the main developments and trends in the referred body of literature, possible relationship of ecotourism, as well as the main magazines that carried out studies on the topic and what are their results.

Keywords: Ecotourism. Sustainable Tourism. Natural Resources. Protected Areas.

Resumo

O ecoturismo é a atividade adequada para a realização do turismo em locais protegidos, pois se preocupa com a preservação do meio ambiente, contribuindo para o desenvolvimento das comunidades locais. O potencial do ecoturismo é significativo devido aos parques nacionais, santuários da vida selvagem, reservas de conservação e reservas comunitárias, muitas das quais incluem reservas de animais. Portanto, este estudo tem como objetivo realizar uma revisão sistemática da literatura sobre pesquisas de alto impacto sobre a evolução e tendências relacionadas ao ecoturismo no contexto mundial, a fim de compreender as diferentes perspectivas por meio de análises críticas, identificando lacunas para pesquisas futuras e investigando tendências neste corpo de literatura. Para tanto, foi realizada uma pesquisa bibliográfica por meio da *Methodi Ordinatio*. Para realizar a análise bibliométrica, foi utilizado o software VOSviewer. Os resultados mostram os principais desdobramentos e tendências no referido corpo bibliográfico, possíveis relações do ecoturismo, bem como as principais revistas que realizam estudos sobre o tema e quais são seus resultados.

Palavras-chave: Ecoturismo. Turismo Sustentável. Recursos Naturais. Áreas Protegidas.

1 INTRODUCTION

Sustainability issues contribute to the preservation of the environment and influence various sectors of the economy (Ioannides, Gyimóthy & James, 2021). Economic growth to serve the population and the local community increases the awareness process regarding sustainability in the economy. With a comprehensive conceptual framework for sustainability, a concept widely recognized in the report of the World Commission on Environment and Development sustainable development must ensure that it responds without influencing future generations (Khanra, Dhir, Kaur, & Mäntymäki, 2021).

The travel and tourism sector are significantly important in the world economy because of its ability to generate jobs and to act as a driver of economic development. The tourism sector in the world registered a growth rate of 4%, through the arrival of tourists during the year 2019 and is expected to register a growth rate of around 6% in the year 2020. Tourism contributes about one in ten jobs generated worldwide, which is equivalent to the creation of 109 million jobs (World Tourism Organization, 2021). On the other hand, tourist activities have grown rapidly compared to other economic sectors, and thus, the sector helps with 8.84% of the total emissions of polluting gases in the world (Carter, Rourke, Thok, & Pearce, 2015). Due to the growing public demand to reduce pollution and for tourism capacity to support social dimensions, such as poverty reduction and interaction processes, therefore, in 2017 the United Nations said it was the international year for the development of ecotourism. In this sense, it is essential that the tourism sector intensifies its sustainable development to reduce its dangerous impact on the environment (World Tourism Organization, 2021).

Tourism has become a more accessible activity and has developed over the years becoming an explored activity. In the 1930s, this activity was a threat to the environment, as it represented pressure in relation to the reception capacity of the environment. In addition, the use of natural resources without concern for sustainability. In the 1960s, behaviors began to change with the concern of negative impacts on ecosystems and how this could negatively affect animals and nature reserves (Ioannides, et al., 2021; De Limar, & Weiler, 2015).

Ecotourism is a part of sustainable tourism, with the potential to become an essential segment in the tourist area in general (Hua, & Wondirad, 2021). However, the lack of understanding of ecotourism initiated an ambiguity among professionals in the sector and researchers (Lee, & Jan 2018). The concept of ecotourism is organized trips with responsibilities to natural areas in order to conserve the environment and preserve the well-being of the local community (Mozumder, Uddin, Schneider, Islam, & Shamsuzzaman, 2018).

Ecotourism involves two factors, the first being care for sustainable development and the second the benefits for the local population. The fundamental themes of ecotourism are classified into environmental preservation, community interaction, cultural aspects and economic advantages (Smulders, O'Shea, & Christianen, 2021).

The development of tourism includes two topics, sustainable tourism and ecotourism, together with the development of marketing. Ecotourism is a theme that coincides with the awareness of sustainability as a result of these factors, even if there are projects in a phase of exploration of the tourist product (Roseta, Sousa, & Roseta, 2020). The evolution of ecotourism is beneficial and causes the cultural, economic and social development of ecotourism in isolated communities (Hosseini, & Paydar, 2021). Studies on ecotourism have gained attention in recent decades with increased awareness of environmental protection and sustainable development. However, the evolution and formation of ecotourism in ecologically fragile areas, however, results in conflicts involving interest among stakeholders, usually negatively affects the effectiveness in the construction of ecotourism (Wang, Feng, Zheng, & Liu, 2021).

Hence, this study tries to explore important aspects of ecotourism research. The general objective is to conduct a systematic review of the literature on high impact research on the evolution and trends related to ecotourism in the world context, in order to understand the different perspectives through critical analyzes, identifying gaps for future research and investigating trends in this body of literature.

This study carries out a systematic review on the evolution and the world trend on ecotourism and the implications for future research. The study is structured as follows. This section presented the initial considerations, the objective of the study and its originality. The next section of the article presents the literature review on Tourism and Ecotourism. The next section of this article presents the methods adopted for the development of this study. Following, the main trends and discussions on the topic are presented. Finally, the final considerations of this study are presented.

2 LITERATURE REVIEW

2.1 Tourism

The development of Tourism is related to the world evolution. Customs and habits among peoples, historical knowledge and language are factors in a modern management and planning paradigm based on culture, heritage and people (Wang, Feng, Zheng, & Liu, 2021).

Tourism is one of the main economic sectors in developed countries. Tourism has evolved, allowing for the possibility of economic gains for local communities. Tourism gains a new commercial dimension, stimulating new definitions and destinations, resulting in employment and income (Hosseini, & Paydar, 2021). Tourism is recognized as one of the essential stimuli of the economy worldwide. The result of the expansion of tourism comes economic growth, social progress, improvement employment levels and the preservation of natural resources when used sparingly (Roseta, Sousa, & Roseta, 2020).

The tourism sector is made up of several activities, which show great representativeness in the economic development in the countries and increasing steadily over the years (Mecca, Eckert, De Marchi, Menegat, 2017). Tourism has grown in recent years, showing a relationship between service provision and local municipal taxes. The municipal taxation process generates services and goods for the population (Mecca, Eckert, & Menegat, 2018).

The accelerated increase in tourism occurs in several countries, resulting in a degradation of ecosystems and also in protected areas, negatively influencing natural resources (Hua, & Wondirad, 2021). Non-governmental organizations and government systems are working to increasingly consider tourism as a means of reducing poverty and as a way to encourage the development of the business environment, in places where opportunities for the expansion of the economy are limited (Ioannides et al., 2021).

In this context, tourism contributes to the reduction of poverty due to the growth prospects and provides direct advantages for the local communities where workers with low qualifications are found in these remote areas (Khanra et al., 2021). Tourism provides short-term economic advantages for poor people, but tourism alone is unlikely to make sustainable long-term contributions to poverty alleviation possible (Mozumder et al., 2018).

Among the main difficulties identified in tourism for poverty reduction, include, inadequate support for local communities, lack of participation in public policies for the development of tourism, dominance of tourist activities by wealthy elites, little awareness of people residing in the areas considered tourist and little training of the local community to receive tourists (Smulders et al., 2021).

The negative socio-economic results and environmental impacts of activities for the development of tourism include: displacement of local communities, an increase in the imbalance in socio-economic conditions, a decrease in traditional sources of income and environmental degradation (De Limar, & Weiler, 2015). Even with these difficulties, non-governmental organizations and the government system encourage the potential that tourism

offers in improving environmental, social and economic conditions, referring to tourism as sustainable tourism (Orgaz-Aguera, 2018; Romano, Texeira, Filho, & Helleno, 2015).

In several areas with tourist attractions, sustainability is part of tourism, not just for companies and tourism agencies, but for government systems, community organizations and tourists (De Lorenzo, & Techera, 2019). Therefore, sustainable tourism is not about labeling certain types of tourism as sustainable, but rather identifying tourism in a sustainable way (Choi, & Sirakaya, 2006).

2.2 Ecotourism

The worldwide growth of tourism has expanded rapidly, mainly in areas of natural preservation. Ecotourism is one of the main activities in the development of the economy, while sustainability in tourism represents a worldwide problem (Khanra et al., 2021).

The definition of the term “Ecotourism” is not easy to conceptualize or to implement. Ecotourism is a complex term, as it impacts specialized niche markets with characteristics and motivations that can vary for the same reasons (Roseta, Sousa, & Roseta, 2020).

Ecotourism involves a wide range of definitions, it involves reconciling social, economic and environmental issues (De Limar, & Weiler, 2015). All of them are based on responsible production and consumption through effective use in reducing waste (Choi, & Sirakaya, 2006).

Ecotourism or also known as ecological tourism is a type of tourism that seeks a sustainable and economical option for the use of cultural and natural heritage. Ecotourism seeks sustainable environmental awareness and the preservation of natural resources (Hosseini, & Paydar, 2021).

The relationship between sustainability and ecotourism is important according to the role of ecotourism in the economy in several countries (Orgaz-Aguera, 2018). The effectiveness of income generated in employment is explained in the literature as one of the good effects of ecotourism (Lee, & Jan, 2018).

The existence of Ecotourism impacts the local community and individuals in knowing the limits for the realization of tourism. Therefore, ecotourism induces preservation and seeks to bring small groups of people to nature (Wang, Feng, Zheng, & Liu, 2021).

However, ecotourism can also have long-term negative impacts on the environment, such as damage to biodiversity, degradation of the destination, pollution, etc. (Pravdic, 2003; Walter, & Sen, 2003), in addition to impacting local communities (Ioannides et al., 2021, De Lorenzo, & Techera, 2019; Horng, Hu, Teng, & Lin, 2012). Therefore, this can prevent the

development of the economy in several tourist destinations (Hua, & Wondirad, 2021; Perkumiene, Pransuniene, Vienazindiene, & Grigienė, 2020; Piasecki, Glabinski, Francour, Koper, Saba, Garcia, Unal, Karachle, Lepetit, Tservenis, Kizilkaya, & Stergiou, 2016).

In summary ecotourism needs to be organized, designed and planned to achieve an evolution proposal in accordance with sustainability standards in local communities (Smulders et al., 2021; Carter et al., 2015). The development of tourism can impact the evolution of tourist regions due to a difference between the growth of economic resources and finite natural resources (Qian, Wei, & Law, 2018; Haaland, & Aas, 2010; Font, 2002).

The ecotourism is seen as a synonymous with sustainable tourism (Hora, 2017; Haaland, & Aas, 2010). The ecotourism is not sustainable, socio-culturally and environmentally appropriate, acceptable to be considered sustainable (Laubscher, Ndakidemi, Bayat, & Slabbert, 2009). In general, most of the ecotourism literature focused on sustainable issues refers to the tourism concept which involves socially environmental sustainability, personal growth and responsible travel (Ninerola, Sanchez-Rebull, & Hernandez-Lara, 2019).

The ecotourism should satisfy attractions should be nature-based, visitor with those attractions should be focused on education and product management should follow principles and practices associated with economic sustainability, socio-cultural and ecological (Carter et al., 2015). Ecotourism is recurrent keyword for tourism development and sustainable tourism.

Ecotourism is a sustainable tourism and a vital segment in the overall tourism industry because of its crucial role in generating income through monitoring of trends (De Limar, & Weiler, 2015). The themes of ecotourism can be categorized as empowerment of vulnerable groups, environmental conservation, community participation and cultural preservation (Hua, & Wondirad, 2021; Mozumder et al., 2018; Romano et al., 2015).

Therefore, the concept of ecotourism is vital because it will act as an incentive coupled with environmental needs and satisfying social (Horng, et al., 2012). The development of ecotourism has not gained much attention as compared to that of developed nations (Choi, & Sirakaya, 2006). Culture plays a significant role in ecotourism and knowledge of stakeholders in ecotourism activities (Pawson, D'Arcy, & Richardson, 2016).

2.3 Evolution of Ecotourism

The beginning of ecotourism occurred when the first ecotourists in the 20th century arrived in American parks like Yellowstone, climbed the Himalayas and other mountains. In addition, researchers at the time began to use the environment as a scenario for carrying out

activities and were also concerned with nature conservation. However, at the beginning they were activities with no defined objectives aimed at environmental preservation. These eventual adventurers, too, did not have a socioeconomic impact with ecotourism as currently occurs (Romano et al., 2015; Moreira, 2014).

The hunting safaris carried out in the 20th century to capture animals such as lions or elephants, reduced the populations of these animals annually. Over the decades, photographic safaris, commonly used in the 1960s, have been suggested. Therefore, this was essential for ecotourism to reach the current proportion of the work carried out by Non-Governmental Organizations - NGOs. many years depredating natural habitats and degrading nature (Hosseini, & Paydar, 2021; Horng, et al., 2012; Diamantis, 2010).

Currently, behavior is being modified and tourists are more aware of the ecological damage they can cause (Orgaz-Aguera, 2018). Based on the structure and complexity of the tourism offer, ecotourism is fundamental for the composition of economic, social and environmental activities. During its evolution process, the objective of ecotourism is to offer tourists a living experience with ecosystems (Hosseini, & Paydar, 2021; Haaland, & Aas, 2010). In addition, ecotourism provides conditions of comfort and incentives for nature conservation practices, improving infrastructure services, transportation and technologies that harm the environment less (Franco, Doliveira, & Franco, 2020).

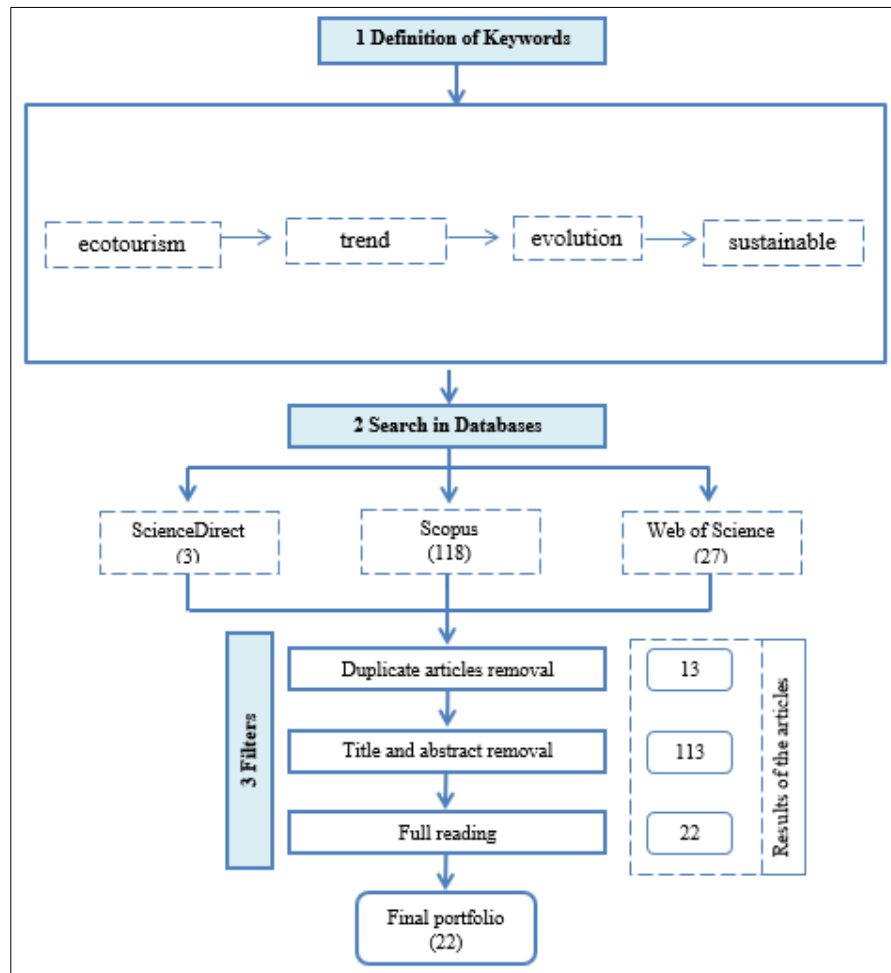
From the context observed in this evolutionary process, Brazil is a favorable country for the development of ecotourism. There is a cultural diversity and wide territorial extension that can generate diverse tourist offers and make the country seen as an ecotourism attraction even for Brazilians, making it possible to practice ecological tourism modalities (Romano et al., 2015). Despite centuries of exploitation of natural resources in a scenario of environmental depredation, ecosystems in Brazil are favorable from the point of view of ecotourism, many of which remain unexplored. However, with public policies and private incentives, it is possible to protect and conserve ecosystems, in addition to generating employment, income and market growth for new businesses (Mecca et al., 2018).

3 METHODOLOGY

To conduct a systematic review based on high impact articles, was used to build the present study's portfolio, as presented in Figure 1. This study used the ScienceDirect, Scopus and Web of Science databases to search articles and review articles, within no time limit. The set of keywords used in the search was defined using truncation symbols and Boolean operators,

as follows: (‘ecotourism” AND ‘trend” AND “evolution” AND “sustainable tourism”). After searching the databases, 148 articles were found (as observed in Figure 1).

Figure 1: Summary of literature review steps



Source: Own Authorship

In the adopted methodology, a systematic review was chosen, therefore, Methodi Ordinatio was used to select the articles to be analyzed in this research (Pagani; Kovaleski; Resende, 2015). The Methodi Ordinatio allows the use of more scientifically relevant articles according to the criteria established by the methodology, with three specific articles on the same and accepted in journals with a high impact factor, thus validating the assumptions of the same (Pagani et al., 2015; Pagani, Kovaleski, & Resende, 2017; De Campos, Pagani, Resende, & Pontes, 2018).

Thereafter, a series of filters and ranking techniques were applied in order to find the relevant and most impacting studies to be fully analyzed, since the assessment of all the documents encountered would be impractical time wise. Therefore 148 articles remained. In

summary, duplicate articles were excluded from the final portfolio. From the 148 articles, 135 remained for analysis. After the title and abstract filter, since there were studies that did not fit in this research, there were 22 left.

Table 1 details the exclusion criteria for articles and the corresponding quantity, since the detailing of the methodology allows the research to be reapplied at a future date for the monitoring of updated literature and, therefore, validating the methodology applied in this study.

Table1: Article exclusion criteria

Criterion	Description of criteria	Quantity of articles
Duplicates	Repeated articles in the databases were excluded.	13
Study object	Articles that do not address ecotourism	32
Applicability	Articles that do not address ecotourism in sustainable development applications (environmental, social and / or economic)	58
Field of Study	Articles that are exclusively related to the generation of profit through tourism, without the purpose of nature conservation.	23
Total		126

Source: Own Authorship

Thereafter, the number of citations (using Google Scholar) and the IF (using the Journal Citation Reports, JCR) were obtained in February, 2021.

The application of such method helped identify high impact research conducted on this study's theme within no time limit. At last, after full reading of the remaining articles, the ones found not tied to this review's topics were excluded from the portfolio.

Final portfolio of articles used in the study between 2002 to 2020, as by Table 2.

Table 1: Final portfolio

Nº	Author	Title	Year	Journal	Citation	Journal Citation Reports
1	Perkumiene, D., Pranskuniene, R., Vienazindiene, M. & Grigienė, J.	The Right to A Clean Environment: Considering Green Logistics and Sustainable Tourism	2020	International Journal of Environmental Research and Public Health	0	2,849
2	De Lorenzo, J. & Techera, E.J.	Ensuring good governance of marine wildlife tourism: a case study of ray-based tourism at Hamelin Bay, Western Australia	2019	Journal of Tourism Research	1	2,585

3	Yoopetch, C. & Nimsai, S.	Science Mapping the Knowledge Base on Sustainable Tourism Development	2019	Sustainability	16	2,576
4	Ninerola, A., Sanchez-Rebull, M. V. & Hernandez-Lara, A. B.	Tourism Research on Sustainability: A Bibliometric Analysis	2019	Sustainability	53	2,576
5	Haaland, H. & Aas, O.	Eco-tourism Certification - Does it Make a Difference? A Comparison of Systems from Australia, Costa Rica and Sweden	2018	Scandinavian Journal of Hospitality and Tourism	64	3, 037
6	Hora, B.	Do large private protected areas contribute to sustainable development? A case study from the Huilo Huilo Biological Reserve in Neltume, Chile	2018	Eco Mont-journal on Protected Mountain Areas Research	5	0,333
7	Lee, T.H. & Jan, F. H.	Development and validation of the ecotourism behavior scale	2018	International Journal of Tourism Research	8	2,585
8	de Limar, I.B. & Weiler, B.	Indigenous Protagonism in Tourism Operations and Management in Australia, Brazil, and New Zealand	2018	Journal of Social Sciences and Humanities	5	0,000
9	Mozumder, M. M. H., Uddin, M. M., Schneider, P., Islam, M. M. & Shamsuzzaman, M. M.	Fisheries-Based Ecotourism in Bangladesh: Potentials and Challenges	2018	Resources-Basel	0	0,000
10	Qian, J., Wei, J. & Law, R.	Review of critical discourse analysis in tourism studies	2018	International Journal of Tourism Research	13	2,585
11	Piasecki, W., Glabinski, Z., Francour, P., Koper, P., Saba, & G., Garcia, A.M., Unal, V., Karachle, P.K., Lepetit, A., Tservenis, R., Kizilkaya, Z. & Stergiou, K.I.	Pescatourism a european review and perspective	2016	Acta Ichthyologica et Piscatoria	13	0,000
12	Pawson, S., D'Arcy, P. & Richardson, S.	The value of community-based tourism in Banteay Chhmar, Cambodia	2016	Tourism Geographies	25	3,159

13	Carter, R. W. B., Thok, S., O'Rourke, V. & Pearce, T.	Sustainable tourism and its use as a development strategy in Cambodia: a systematic literature review	2015	Journal of Sustainable Tourism	61	3,86
14	Orgaz-Aguera, F.	Model to Establish Strategies that Foster Social Economy of Rural Communities in Natural Areas Protected in the Dominican Republic	2015	Rosa dos Ventos- Turismo e Hospitalidade	0	0
15	Horng, J. S., Hu, M. L. M., & Teng, C. C	Energy saving and carbon reduction management indicators for natural attractions: a case study in Taiwan	2012	Journal of Sustainable Tourism	18	3,986
16	Laubscher, C.P., Ndakidemi, P.A., Bayat, M.S. & Slabbert, A.	Conservation and propagation of endangered Proteaceae on the Agulhas plain for sustainable ecotourism development	2009	Scientific Research and Essays	11	0,000
17	Pravdic, V.	Sustainable development: Its meaning, perception, and implementation. The case of ecotourism in Croatia	2006	Drustvena Istrazivanja	21	0
18	Choi, H.C. & Sirakaya, E.	Sustainability indicators for managing community tourism	2006	Tourism Management	1260	7,432
19	Neto, F.	A new approach to sustainable tourism development: Moving beyond environmental protection	2003	Natural Resources Forum	521	1,436
20	Walter, P. & Sen, V.	A geography of ecotourism in Cambodia: regions, patterns, and potentials	2003	International Journal of Tourism Research	6	2,585
21	Font, X.	Environmental certification in tourism and hospitality: progress, process and prospects	2002	Tourism Management	564	7,432

Source: Own Authorship

Monitoring the development and trends of each source, showed in Table 1, allows us to see that recently the Journal of Sustainable Tourism (2020), Tourism Management (2019), Journal of Tourism Research (2019) and Scandinavian Journal of Hospitality and Tourism are taking the lead in terms of JCR 2019, but this novelty did not contribute to reaching a notable number.

Eco Mont-journal on Protected Mountain Areas Research, Tourism Management, Scandinavian Journal of Hospitality and Tourism, Journal of Tourism Research, Resources and Journal of Sustainable Tourism publish a very stable number of articles on the theme of sustainability, with an impact on their citations. These journals occupy the first, second, third, fourth, fifth and sixth positions in the management category ranking at JCR 2019. Therefore, Table 1 reveals that 18 years ago a number of journals had published articles on ecotourism. In summary, their articles report concerns between the environment, the evolution of the scale of behavior of ecotourism, community tourism, fishing, geography of ecotourism and the evolution of tourism, growing year after year.

The VOSViewer® software was used to construct visual maps (Van Eck, & Waltman, 2010). A visual map based on text data was made considering titles and abstracts, using VOSviewer's full counting method with a minimum number of occurrences of five, thus 708 terms out of a total of 122 met the criteria. Ecotourism is the most frequent keyword for sustainable tourism articles, followed by tourism development.

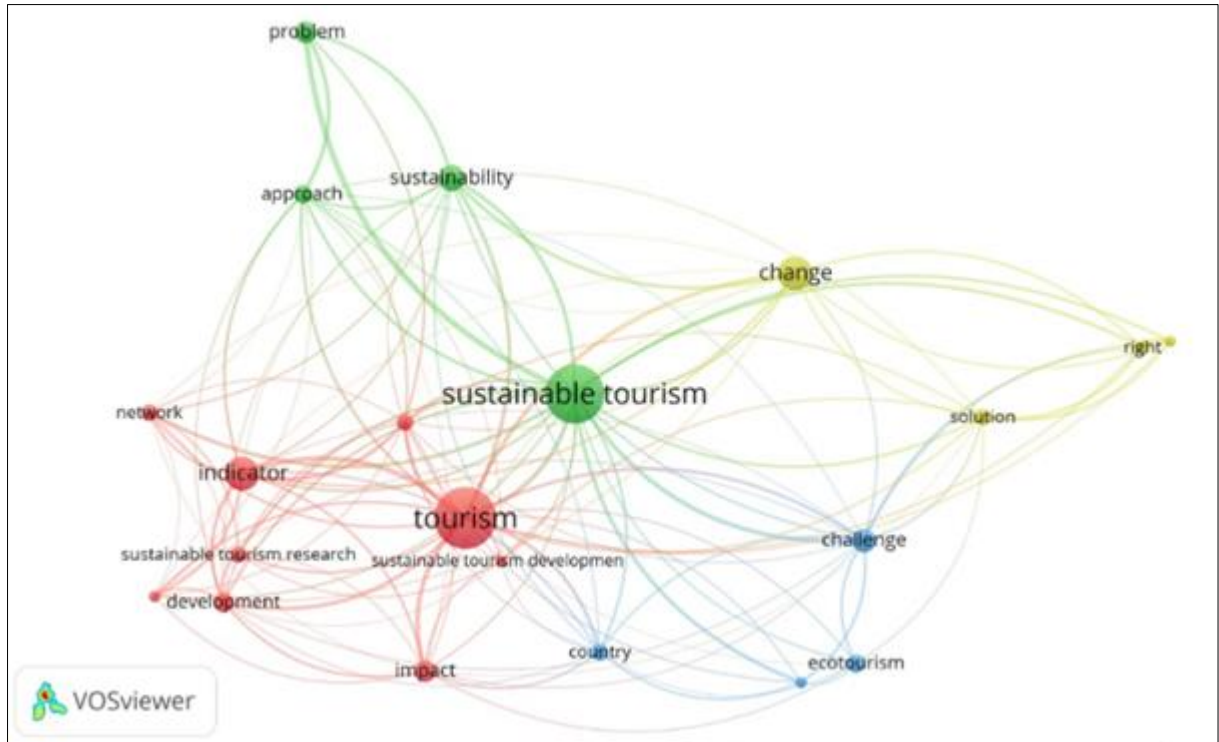
Finally, to perform the full analysis of the final portfolio, some characteristics were taken into consideration, even though not all the articles covered all the topics analyzed. Besides the year of publication, authors, journal, impact factor of the journal and the number of citations, which were already mentioned, the remaining observed and assessed characteristics were: article's subject (what it was about), main topics (sustainable tourism, ecotourism, natural resources, etc.), country, continent, main recommendations, conclusions, and any other observations made by the authors.

Therefore, this section sought to show some of the main characteristics of the final portfolio of documents found in the literature. In the next section, a discussion seeking to present the highlights on the theme is presented.

4 RESULTS AND DISCUSSION OF THE CHARACTERISTICS FOUND IN THE STUDIES

The final portfolio comprised 22 articles relating the evolution and trends related to ecotourism in the world context to understand the various perspectives. Term-co-occurrence visual maps were constructed assisted by the VOSviewer, as by Figure 2.

Figure 2: Co-occurrence of terms Final portfolio



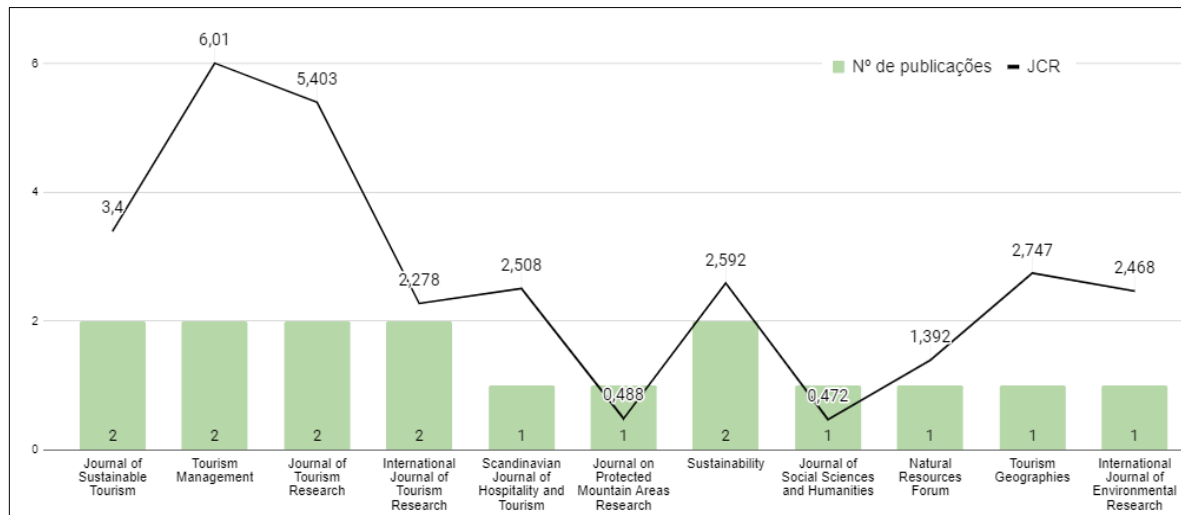
Source: Own Authorship

The median years of appearance, it is possible to conclude that the terms in dark blue (country, ecotourism, challenge), the terms in red and green (sustainable tourism, sustainability, tourism, indicator, sustainable tourism research, sustainable tourism development) are subject to high impact articles, according to the filters applied in this study, as by Figure 2. In addition, green and red terms comprise more recent approaches (2019 and 2020), as they appear only in recent years. Therefore, it is clear that high-impact research has been carried out on the environmental impacts of tourism (Carter et al., 2015); sustainability indicators for community tourism management (Choi, & Sirakaya, 2006); fishing-based ecotourism (Mozumder et al., 2018); tourism for environmental conservation (Neto, 2003); sustainable tourism (Ninerola et al., 2019); the value of community tourism (Pawson, D'arcy, & Richardson, 2016); clean tourism with green logistics (Perkumiene et al., 2020); the use of fishing-tourism as a new perspective (Piasecki et al., 2016); sustainable development for the perception of ecotourism (Pravdic, 2003); the challenges of tourism (Qian, Wei, & Law, 2018); the promotion of sustainable tourism (Yoopetch, & Nimsai, 2019).

Regarding the number of publications, periodical and the impact factor of the articles on the evolutions and trends of ecotourism in the world over time, main recommendations,

conclusions and any other observations made by the authors, found through the classification method of this study. The classification of the journals of the 22 selected final articles, as presented in Figure 3.

Figure 3: Number of publications per journal



Source: Own Authorship

In the literature, the top eight journals have published 148 articles, representing 100% of the papers in the sample on ecotourism development and trends.

The Tourism Management, Sustainability, Tourism Geographies, Scandinavian Journal of Hospitality and Tourism, Journal of Sustainable Tourism, Scientific Research and Essays, Journal of Tourism Research and International Journal of Tourism Research are the leader on both indicators (JCR 2019). They are journals that perfectly fit the theme of the study, since, since 2002 to 2020, they are the only periodical for research in ecotourism trends (Carter et al., 2015; Choi, & Sirakaya, 2006; Neto, 2003). Previous reviews in the survey also highlighted their relevance in the field of ecotourism (Perkumiene et al., 2020; Ninerola et al., 2019; Yoopetch, & Nimsai, 2019; Hora, 2017).

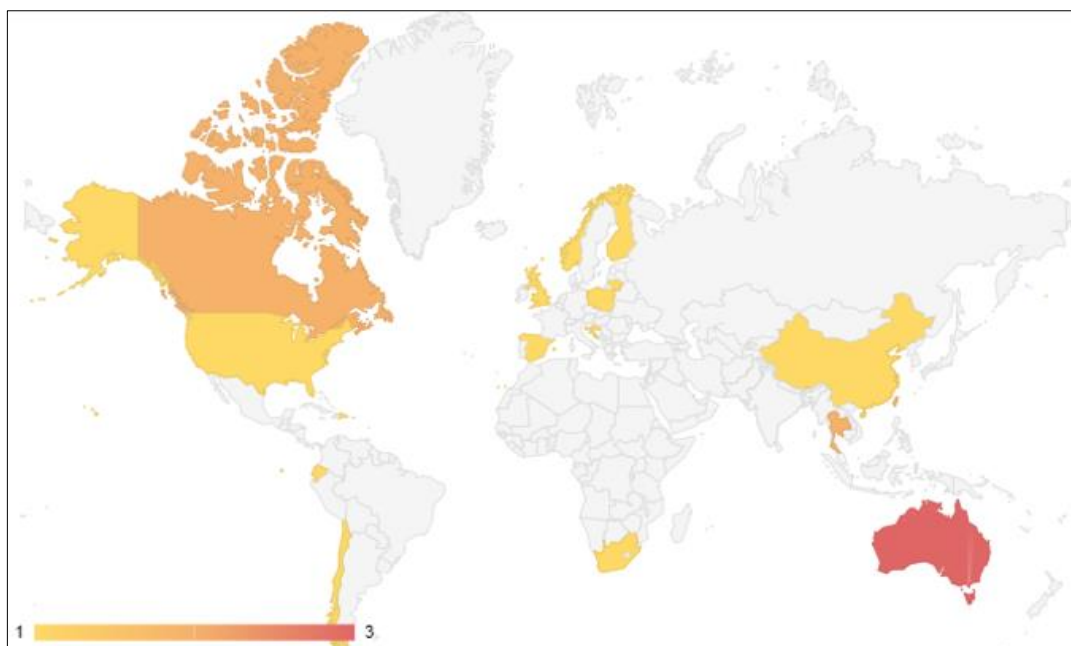
The journals that have received studies on ecotourism and sustainable tourism have changed over time, as presented in Figure 2. It is observed that the journals that most published high impact articles on the research topic were: Journal of Sustainable Tourism, Tourism Management, Journal of Tourism Research, International Journal of Tourism Research, Journal Protected Mountain Areas Research, Sustainability, Tourism Geographies and International Journal of Environmental Research.

In the literature, it is observed that sustainable tourism is responding to the need for more responsible policies and forms of corporate governance in the sector, adding the

involvement of stakeholders in the processes (Font, 2002; Haaland, & Aas, 2010). Tourism favors the avoided impact through carbon emissions related to tourist transport and waste generation (De Limar, & Weiler, 2015; Neto, 2003). Therefore, there are studies that assess the optimization of these effects (De Lorenzo, & Techera, 2019). Other research investigates the changes in tourism demand stimulated by damage to climate change (Orgaz-Aguera, 2018; Pravdic, 2003).

In the geographic analysis, the number of publications by country, since the first high impact article found through the classification method of this study, as presented in Figure 4. There seems to have been an increase in the number of publications on the topic over time, however, it is still too early to reach conclusions on trends, since there is still no extensive history.

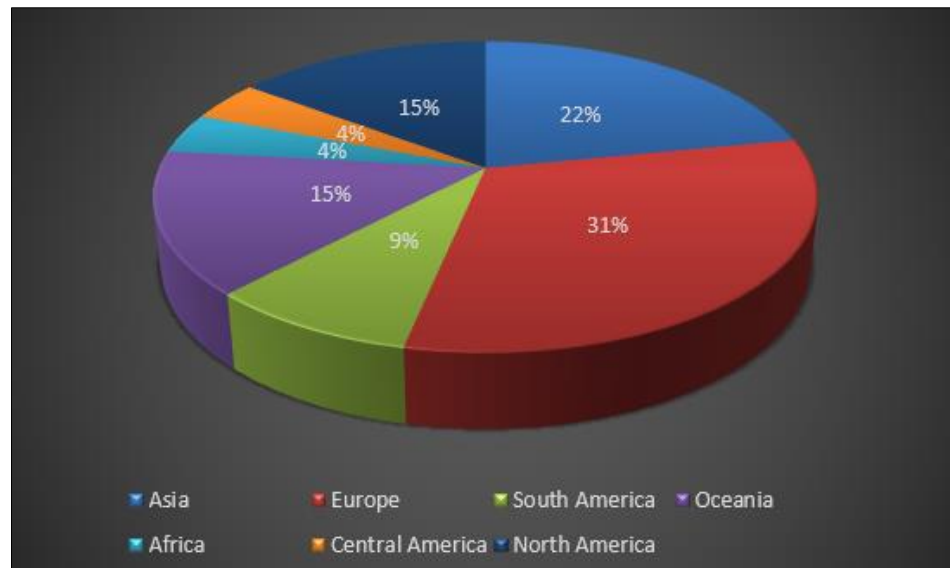
Figure 4: Number of publications per country



Source: Own Authorship

Figure 4 shows the countries with the largest academic output on the development and trends of global ecotourism. Therefore, according to the data, Australia, the United States, Canada and Taiwan are the countries where most documents were recorded, followed by Thailand, respectively. The division of studies by continent, as presented in Figure 5.

Figure 5: Number of publications per continent



Source: Own Authorship

Figure 5 shows the concern with studies on development and trends with ecotourism, Europe stands out with 31% of the studies, followed by Asia with 22%, Africa and Central America with only 4% of the studies, North America and Oceania with 15% and South America with 9%.

The process for the formation of knowledge between tourist companies and the local population contributes to the identification of fundamental aspects for the local process development on environmental and social factors. Local communities are unaware of most activities carried out by the government or entities related to the environment, the development of local tourism and on sustainable development (Piasecki et al., 2016; Carter et al., 2015; Choi, & Sirakaya, 2006).

Studies have shown that the community participates in group activities and it ends up manifesting itself, but direct action is essential for the formulation of laws that seek environmental preservation. The authorities' lack of awareness of the excess of tourist activities directly within the preservation areas close to the communities, impacts on their tradition, history, nature and local culture. The localities with natural attractions, affection of the local population and a direct contact with the environment encourage the access and dissemination of tourist points, and thus, showing an unmeasured tourist potential for ecotourism.

The main developments and trends related to ecotourism and sustainable tourism in the selected literature, as presented in Table 2.

Table 2: Development and trends in ecotourism

Year	Authors	Development	Trend
2020	Perkumiene, Pransuniene, Vienazindiene, & Grigienė.	Economic gains for communities and tourist locations.	Broad environmental protection initiatives. Economic security, preservation of local traditions and cultures.
2019	Yoopetch, & Nimsai.	Tourism impacts differ in several ways regions of the world.	Natural tourism with marine species attracts public interest worldwide.
2018	Lee, & Jan.	Encouragement and support for the development of certification systems for ecotourism.	Ecotourism is focused on aspects of sustainability and the green economy.
2017	Hora	Relationship between fishing and tourism meets the need as an innovative tourism.	Infrastructure development for tourist facilities.
2016	Pawson, D'Arcy, & Richardson.	Ecotourism expansion must be controlled due to environmental and socio-cultural impacts.	Ecotourism is an important source of income in job creation.
2015	Carter, Rourke, Thok, & Pearce.	Integration of different dimensions for the development of sustainability in decision making to mitigate the potential consequences of economic development.	Sustainability is a strategic approach for companies and tourist destinations.
2012	Mecca, Eckert, Menegat.	Community tourism is in evidence.	Investment in programs to raise awareness among tourists and the local community.
2010	Haaland, & Aas.	Tourism helps to preserve cultural and natural heritage.	Rethink the concept of sustainable logistics solutions in the tourism sector.
2009	Laubscher, Ndakidemi, Bayat, & Slabbert.	Fishing tourism should be considered an activity different from fishing tourism or recreational fishing.	Contribution to the education of society and the problems in the marine sector.
2006	Choi, & Sirakaya.	Sustainable tourism is a local development activity.	Sustainable tourism contributes to the economic advancement of the region.
2003	Neto.	Local sustainable tourism encourages preservation.	Ecotourism in local communities promises an alternative to mass tourism.
2002	Font.	Need to increase ecotourism research.	Attention to climate change.

Source: Own Authorship

Concepts on the development and trends on ecotourism that have changed over the 18 years analyzed. In the literature, it was identified that natural sites and communities that are economically benefited through broad environmental protection initiatives (see Table 2). It is essential to increase investments in raising the awareness of tourists and local communities in the development of value for local products and services through tourism. The benefits of ecotourism for communities and places are economic security and the preservation of local cultural traditions (Carter et al., 2015; Font, 2002).

The development of tourism products is a form of income for local residents. Providing adequate infrastructure to tourists and residents are important characteristics in the spread of tourism (De Lorenzo, & Techera, 2019; Ninerola, Sanchez-Rebull, & Hernandez-Lara, 2019). People's understanding of the regional context is essential to achieve the expectations of sustainable tourism, as it must be offered as a viable alternative to current tourism practices (Qian, Wei, & Law, 2018; Haaland, & Aas, 2010).

The impacts of tourism differ in several regions of the world, but the main conclusion is the continuity of research on the preservation of natural environments. Governance needs to ensure the protection of marine species and areas, as nature-based tourism, including experiences involving interaction with marine species, continues to attract considerable public interest worldwide. The increase in uncontrolled tourist activities portrays negative environmental effects (Orgaz-Aguera, 2018; Piasecki, et al., 2016).

Tourist authorities should encourage the development of certification systems for ecotourism (Perkumiene et al., 2020; Yoopetch, & Nimsai, 2019). The relationship between fishing and tourism is a solution to the need to create innovative tourism and a way to find new sources of income for fishing, in order to make them more profitable and sustainable (Mozumder et al., 2018). The development of sustainable tourism is a trend of change and contribution to climate change (Neto, 2003; Walter, & Sen, 2003).

The study identified that there have been publications on ecotourism research all over the world since 2002. The result of this review shows the development and recognition of the importance of the potential of ecotourism mainly in social, economic aspects for communities and the preservation of biodiversity. There are some articles on trends in the development of ecotourism that are directed to national parks. Countries that have realized the potential and advantages of ecotourism, especially developing countries, adopt ecotourism as a policy paradigm for sustainable development.

Ecotourism encourages the solution of important issues such as poverty and environmental degradation. Several international destinations have achieved the desired results with ecotourism, as is the example of National Parks in Ecuador, Brazil and India. This result was achieved with awareness measures with training and information about the possible environmental damage to tourists, local communities and local traders.

In contrast, other ecotourism destinations such as the southern region of the African continent, South America and countries in Eastern Europe identified in the systematic literature review face many challenges due to the slow progression of ecotourism. Therefore, it is essential to understand the problems with ecotourism initiatives among countries with

difficulties and to understand how these situations should be resolved in the future. These difficulties involve cultural and social impacts of tourism, essentially when not structured with the parameters of sustainability. The degradation of the environment, changes in the values of local communities and in the social process among local residents, as the excess of tourism encourages the abandonment of traditional cultures, resulting in the growth of violence. The cultural traditions of communities need to manifest themselves spontaneously with incentives from government systems and without necessarily becoming a tourist activity.

In this sense, the study examines the positive impacts of ecotourism for tourists, local communities and traders, the challenges and the solutions to correct these obstacles. Finally, the research implications proposed in this study provide concepts for academics to initiate new research.

Ecotourism is a new tourist activity that has been developing in recent years. Among the investigated studies, the main destinations in this segment are located in developed countries, but their development has led to an increase in destinations in more isolated areas.

The trend in the analyzed portfolio showed that Ecotourism has grown every year. This growth is superior in relation to the traditional tourism industry. The investment in Ecotourism with the objective of turning it into a green tourism results in the reduction of water and energy costs. Therefore, improving the value of biodiversity, ecosystems and cultural heritage.

Several authors point out that tourists understand Ecotourism, as an industry in the tourism segment as sustainable for the future. Ecotourism identified as services of companies that follow correct practices with the environment.

Ecotourism favors the involvement of the local community through its basic principles, such as trade in local products and cultural exchange between residents and tourists. Community participation is considered by stakeholders as an approach to the evolution of Ecotourism. Ecotourism promotes numerous advantages, such as: preserving natural and cultural resources, economic activities for communities and improving their socioeconomic well-being.

Studies highlight that tourists show a tendency in close experiences with nature. The concept of sustainability is directly related to Ecotourism. Ecotourism consists of responsible environmental trips to natural areas, with the aim of admiring and enjoying the identified nature. Ecotourism promotes conservation due to the low impact of visitors and contributes positively to the social and economic involvement of local populations.

5 FINAL CONSIDERATIONS

This article presented a systematic review of the literature on high impact research on the evolution and trends related to ecotourism in the world context, in order to understand the different perspectives through critical analyzes, identifying gaps for future research and investigating trends in this body of literature. From this study's final portfolio a few conclusions could be drawn. Studies on ecotourism is noted to be in its infant stage, yet to be further developed and defined. This form of literature review has contributed to expand the existing knowledge on the subject and future studies.

Furthermore, most high impact research has been conducted in Europe and Asia, with a small participation of developing countries, being Australia and United States the developing countries of highlight. Yet, most studies address sustainable tourism and its use as a development strategy, regions, patterns, potentials, managing, social entrepreneurship, community tourism and validation of the ecotourism behavior scale.

Research on ecotourism and sustainable tourism has not been distributed equally in the world, even though several countries have published at least one article. Most of the studies identified are concentrated on the continents of Oceania and North America. Australia is the leader in studies on this subject, but in recent years, some countries, such as Canada, Taiwan and Thailand have come close in number of publications. On the other hand, the recent emergence of countries like Chile, Ecuador, the United Kingdom, Poland, among others, are noticeable.

As future research, it is suggested to analyze the challenges that prevent the expansion of ecotourism in attractive destinations and the economic, social and environmental implications for sustainable development. The present study shows trends that can be addressed in future research. For future studies, it is considered important to investigate other impacts that influence Ecotourism, such as political, technological and legal. The study provides perspectives on ecotourism around the world in encouraging research.

Furthermore, approaches that are world can unite practitioners, researchers and government in more strong and focused actions developing worldwide networks to assist knowledge about the development and trends of ecotourism.

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