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TECHNICAL INFORMATION

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AIMS & SCOPE

The **Journal of Tourism, Sustainability and Well-being (JTSW)** is an international open-access academic journal in the tourism field that publishes high-quality, refereed articles that advance science widely available so that tourism can serve the society, enhance a sustainable development of the destinations, and positively impact the well-being of stakeholders.

JTSW offers itself a multidisciplinary and all-inclusive bridge between theoretical and practical aspects of tourism and the emerging interdisciplinary aspects that can revolutionise the tourism and hospitality industries. While the JTSW maintains its traditional focus on original research, both conceptual and empirical, that clearly contributes to the theoretical development of the tourism field, it also has a far more inclusive and broadened scope to keep up with the new problems that challenge academics and practitioners working in private, public and non-profit organisations globally. JTSW encourages research based on a variety of methods, qualitative and/or quantitative, based on rigorous theoretical reasoning and supported by a strong methodology. Criteria for evaluation include significance in contributing new knowledge, conceptual quality, appropriate methodology, technical competence (of theoretical argument and/or data analysis), and clarity of exposition.

JTSW promotes research on a broad range of topics that explore major trends in the study of relationships between tourism, sustainable development of destinations and well-being of tourism-related stakeholders. Contributions can be from all disciplinary perspectives, with interdisciplinary approaches especially welcomed as far as they apply to the tourism research field. All policy, planning and management aspects of tourism are also encouraged.

The journal is published as a quarterly international review in open access, mainly composed of thematic special issues. The publishing schedule is the last working day of March, June, September and December. Any interested scholar can submit a proposal for the guest-edition of a special issue to the Editor-in-Chief. The proposal should follow the guidelines provided in the Guide for Guest Editors. Each article must follow the publication rules as in the Author Guidelines. The Guest-Editors and the Editor-in-Chief are responsible for the implementation of a double-blind review process. This method ensures that the author(s) and the reviewers remain anonymous to guarantee a fair and impartial review of the submitted manuscripts.

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The Editorial Board gathers world-renowned experts in different scientific areas, with a striving balance in geographic and gender diversity.

EDITORIAL

The collection of articles presented at the end of 2023 in the JTSW sheds light on crucial aspects of the relationship between tourism, wellbeing, and sustainability. Article 1 is a bibliometric analysis of spiritual tourism. By pinpointing the current state of research in this area, it provides a comprehensive overview of how far spirituality-based studies have progressed within the broader context of tourism. Article 2 delves into wellness tourism, a subset of health tourism, emphasizing its role in stress reduction and the promotion of positive emotions among tourists. Through a bibliometric analysis, this article offers insights into the evolving landscape of wellness tourism research. Article 3 presents a quantitative study exploring the correlation between tourists' connectedness to nature and their landscape preferences. The findings of this research offer valuable insights for destination planners, helping them manage landscapes effectively and utilize resources sustainably to enhance the overall tourist experience. Article 4 takes a qualitative approach to investigate the role of ecological hotels as agents of change toward a regenerative tourism system. This article contributes to our understanding of how the hospitality industry can play a pivotal role in fostering sustainability and environmental consciousness. Article 5 adopts a quantitative approach to demonstrate how soundscape influences tourist mood and the overall destination experience. By utilizing a theme park as a research setting, this study provides valuable insights into the sensory aspects of tourism, offering practical implications for destination managers seeking to enhance visitor experiences through soundscaping strategies. At last, Article 6 explores how the adaptive reuse of historical buildings can be stimulated by visitors' knowledge of the historical and cultural background of the structure. This quantitative study investigates the impact of visitor awareness on actual visitation rates and contributes to the formulation of urban regeneration strategies for sustainable tourism development.

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A View on Research Panorama of Spiritual Tourism: A Bibliometric Analysis

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ABSTRACT

Spiritual tourism infuses mindfulness and spirituality into the fabric of travel. The main objective of this research is to pinpoint the status quo on the research panorama of spiritual tourism. Furthermore, this study assesses how far spirituality-based research has progressed in tourism. This study employs a bibliometric approach to analyze 174 research papers extracted from the Scopus database from the year 2005 to 2022. The research molded the obtained informational structure in the form of publication years, publication sources, prolific authors and their locations, the main keywords, and most cited research papers. Additionally, co-authorship, inter-country co-authorship, and keywords co-occurrences network maps in the field of research on spiritual tourism were created with the aid of VOSviewer software. It has been found that spiritual tourism is an attracting and growing topic for researchers working in the tourism sector. The most cited paper is "Spiritual journey to Hajj: Australian and Pakistani experience and expectations" (Haq & Jackson, 2009) with 66 citations. The most productive author is Farooq Haq from Canadian University Dubai. Canadian University, Dubai, and Central Queensland University, Australia, generated the most papers. The "International Journal of Religious Tourism and Pilgrimage" (n=20) published the most spiritual tourism-themed research papers.

KEYWORDS

ARTICLE HISTORY

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1. Introduction

Spiritual tourism is an experiential travel that entrails soul-searching and offers a peaceful time for contemplation. It has evolved into a method for achieving mental, physical, emotional, and spiritual harmony (Smith et al., 2010). According to Vukonic (1992), spiritual tourism is a "physical voyage in pursuit of truth, in search to understand what is sacred or divine". Visits to various holy places are also considered to be a part of spiritual tourism (Timothy & Iverson, 2006). Many authors argue that spiritual tourism has no religious connection. For instance, spiritual tourism, as defined by Norman (2012), is a leisure travel trend that is characterized by a self-aware search for spiritual development. This is also supported by Wilson et al. (2013), description of spiritual tourism as a person's quest for life's meaning whilst traveling. Traveling domestically or abroad to visit spiritual places such as mosques, cathedrals, and temples is known as spiritual tourism, according to Haq & Medhekar (2019). They additionally resort to nature like woods, lakes, seas, parks for wildlife, botanical gardens, caverns, and rocks as a way to satisfy their urge to express thanks to the almighty and find forgiveness and inner peace. Spiritual tourism has various magnitudes, purposes, and perspectives among individuals of diverse cultural backgrounds. A person may undertake the spiritual journey for various reasons such as well-being, spiritual reconstruction, personal enrichment, encouragement, restorative surroundings, self-exploration, and many other phenomena examples of spiritual dimensions (Halim et al., 2021).

The paper accentuates the advent of spiritual tourism as fundamental academic research is scarce and it is crucial to pinpoint the status quo on the research panorama of spiritual tourism. The current research will aid in assessing the research trends about spiritual tourism based on various bibliometric indicators. Consequently, the current research aims to establish the baseline data for future comparisons as well as determine the research trend on this issue. To further research and investigation into the subject, the study employed a bibliometric approach. In this assessment, the research paper's specific elements are identified like the publication year, authors, research area, journals, organizations and countries, keywords and citations, etc. By extensive review of the available literature, it is quite evident that bibliometric analysis on "Spiritual tourism" was never tried before. This limit justifies the need for the present research.

The remainder of this paper is structured as follows: The research methodology integrating the bibliometric methods is discussed in section 2. Section 3 throws light on the results and findings of the analysis based on research objectives. Similarly, section 4 covers discussion, and conclusions, and lastly section 5 encompasses suggestions and the study's limitations.

2. Methodology

This study aims to discover answers to the following questions:

Q1. What is the annual publication research trend from the year 2005 to 2022?
Q2. Which journals published the most articles on spiritual tourism during the years of 2005 and 2022?
Q3. Who are the most prolific authors?
Q4. Which research papers have the maximum number of citations?
Q5. Which nations and institutions are the most productive?
Q6. What is the most prominent research area?
Q7. Which keywords show up the most often?
Q8. What is the other structure of information like the co-author, country, and keywords co-occurrence analysis in this research field?

To find key papers on spiritual tourism, the researcher examined the research paper's titles and abstracts. Because of its larger coverage of quality publications, the veracity of the research information, thorough indexing, and significant numbers of citations. This study looked at research articles on spiritual tourism that were included in Scopus-indexed journals (Bergman, 2012). PRISMA stands for Preferred Reporting Items for Systematic Reviews and Meta-Analyses was used to obtain data for the bibliometric

review is stated in figure 1. PRISMA principles outlined by the researchers Moher, Liberati, Tetzl, and Altman was followed. There are four steps to obtaining and extracting data for a bibliometric review utilizing the PRISMA approach.

Figure 1. PRISMA Technique for the Bibliometric Review
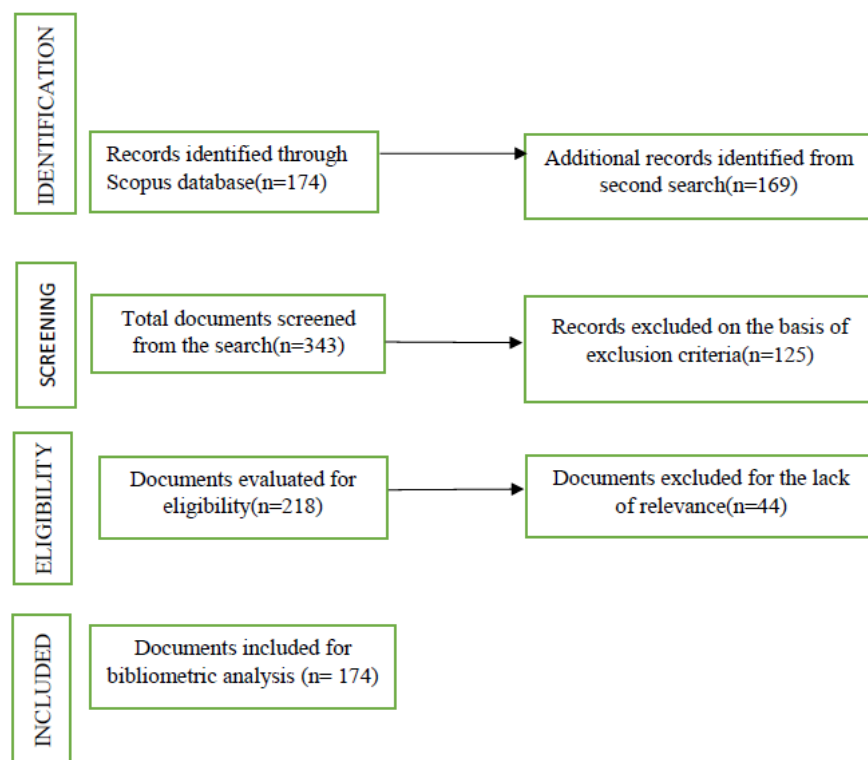
Source: Own Elaboration

The identification of the articles linked to spiritual tourism is the first stage in the PRISMA technique. Only one keyword "spiritual tourism" was employed to screen the Scopus database in this phase. The term was enclosed in quotation marks as the majority of the articles discovered did not address the subject searched when investigated separately. "Article title, abstract, and keywords" was used for the field of research. 174 articles were found. Using the same criteria, a second Scopus database search was conducted. Another 169 important papers were achieved as a result of this investigation, which we incorporated into our sample database. In the second screening phase, the content of 343 articles was tabulated and then analyzed by reading the titles and summaries of each one. Following this study, 125 documents were eliminated based on the following exclusion criteria: publications that did not have the theme of spiritual tourism as their primary content and duplicate articles. As a result, in the final stage also known as included, the database contains 174 items after 44 papers were removed due to their lack of relevancy. The researchers looked at a total of 174 documents, including 109 articles, 8 review papers, 38 book chapters, 11 conference papers, 5 books, 2 editorials, and 1 conference review.

The research publications confined to the Scopus database from 2005 to 2022 using bibliometric methodology and literature were thoroughly examined. A bibliometric analysis is a statistical tool used to understand the distribution dynamics of research publications over time and across topics by employing empirical and quantitative data (Almind & Ingwersen, 1997; Persson et al., 2009). During the past two decades, bibliometric techniques have proliferated as a procedure adopted in science and research policy. Pilkington & Meredith (2009) quantified that bibliometric techniques are used in many fields of research for three reasons: to broaden their scope of operation, to analyze the influence of a research group, and to determine the effectiveness of a particular study.

As a result, it has become one of the few truly multidisciplinary researches fields that can be extended to practically all branches of science (Glänzel, 2003). The bibliometric approach enables the compilation of methods for analyzing literature statistically. It employs citation analysis and material analysis as tools. It is an instrument used in the development of scientific literature that allows researchers to examine the amount of scientific literature and technical advancement at a certain level (Srivastava & Saxena, 2023). It facilitates a nation to be located in the world, the location of an organization within a community, and even individual scholars to be positioned within its society (Okubo, 1997).

Furthermore, using the Vosviewer application enables the visualization of all dynamics and structures related to the information. It was used to conduct co-authors, inter-country, and keyword co-occurrence analysis to methodically understand the logical networks of the research domain as per Vallaster et al., (2019). The application was carefully chosen to generate a more comprehensive and graphic representation of the data obtained (Van Eck & Waltman, 2010). The software is used to integrate the most disparate bibliometric data, arranging them on network maps that aid in the depiction of the contents under investigation as stated by Laengle et al. (2018).

3. Results and Findings

3.1 Journals with Maximum Publications

Information about the journals that have published research papers on "spiritual tourism" helps researchers to figure out which publications to refer to for a literature review and which journals are addressing spirituality in tourism. Figure 2 shows some of the most well-known core journals with the maximum number of publications. All 128 (109 articles, 8 review papers, and 11 conference papers) documents were published in 76 journals. The most research articles were published in the International Journal of Religious Travel and Pilgrimage (n=20). The journal is a top-notch, global, open-access, online publication with double-blind reviews that encompasses all facets of religious travel and pilgrimage and is published by the Technological University Dublin, Dublin, Ireland. The second most important source where 9 research papers were published in Tourism Management Perspectives. Journals like the African Journal of Hospitality Tourism and Leisure, Fieldwork in Religion, and Journal of Islamic Marketing have published 5 each research studies. While the Annals of Tourism Research published 4 research papers. Wit Transactions on Ecology and The Environment has published 3 articles on the topic.

Figure 2. Top Journals with Maximum Publications
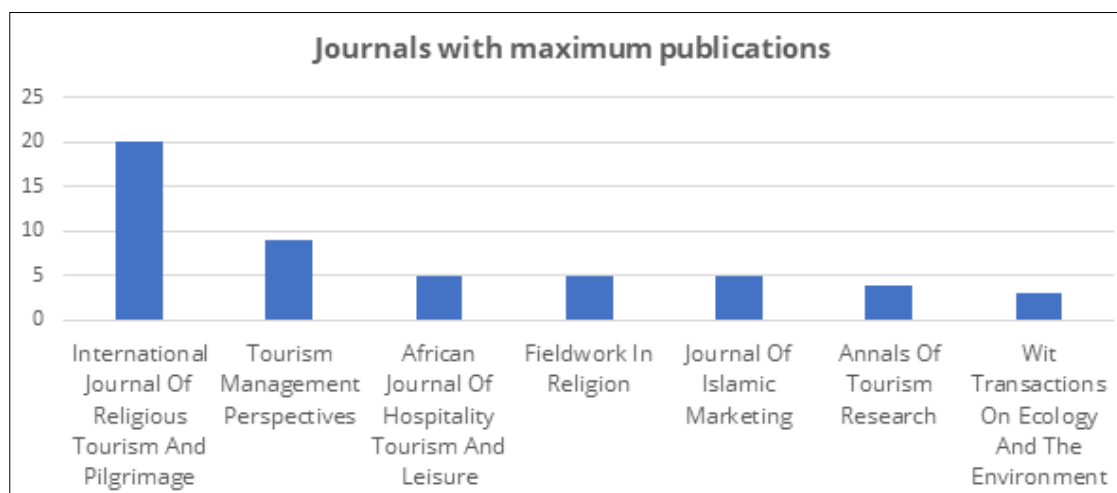
Source: Own Elaboration

3.2 Year-wise Publication

From 2005 through 2022, Figure 3 shows the year-by-year publications on spiritual tourism. From 2005 to 2016, the number of articles published was quite low, but since 2017, a substantial number of papers have been published on a regular basis. In 2021, there was a significant increase in research on spiritual tourism, with 43 articles.

Figure 3. The Year-By-Year Publications
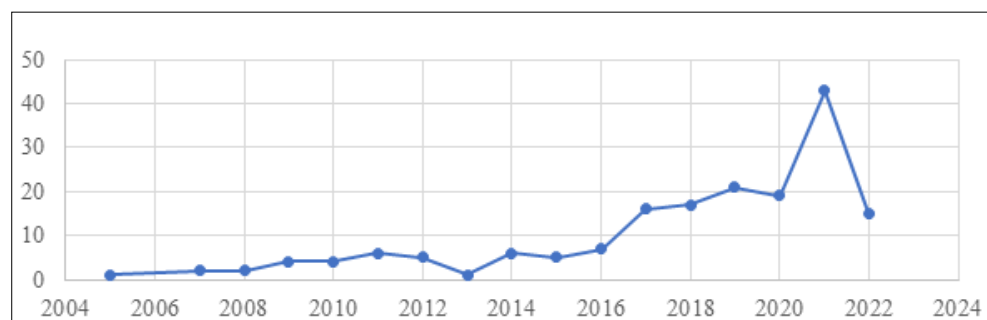
Source: Own Elaboration

3.3 Most Productive Authors

Figure 4 displays the most convincing researchers with more than two papers on "spiritual tourism" after a thorough analysis of the Scopus database. The convincing word here symbolizes that the authors are working on this domain majorly thus contributing to spiritual tourism. Authors having more than 2 research papers are considered in this section. Furthermore, the study discovered that Farooq Haq, with ten articles, is the most productive author on this subject. Currently, the author is a coordinator for Faculty of Management, Canadian University Dubai. Anita Medhekar, who has six research articles, is the second contributor with the most appealing proficiency level. The researcher is presently employed at College of Business & Law at Central Queensland University, Rockhampton, Australia as Senior Lecturer. She is having a total of 29 publications so far. The following authors have 3 research papers in this area: Joseph M. Cheer, Professor of Sustainable Tourism and also Co Editor-in-Chief of Tourism Geographies; Nimit Chowdhary who is a Professor of Tourism, Jamia Millia Islamia, New Delhi; Joanna Kujawa who is academic Head of Management Studies at Kaplan Business School, located in Melbourne, Australia; Almas Kuralbayev, Academy of Public Administration under the President of the Republic of Kazakhstan: Astana, Astana, KZ and Daniel Howard Olsen, associate professor at Department of Geography Brigham Young University Provo, Utah.

Figure 4. The Most Prolific Authors with more than Two Papers

Source: Own Elaboration

3.4 Most Cited Papers

Table 1 lists the top research papers on spiritual tourism that have been highly cited in other journals. With 66 citations, Haq F. & Jackson J. (2009) having publication on "Spiritual journey to Hajj: Australian and Pakistani experience and expectations" is the most cited. The second most popular work, "Is spiritual tourism a new strategy for marketing Islam?", has 63 citations. "The search for spirituality in tourism: Toward a conceptual framework for spiritual tourism" by Cheer J. M. et al.,1991, is the third most referenced piece of research (60). The fourth most cited paper, "Religious-spiritual tourism and promotional campaigning: A church-state partnership for St. James and Spain" by Tilson D. J., was published in 2005 and has 53 citations. Likewise, Bowers H., Cheer J. M. fifth most cited paper, "Yoga tourism: Commodification and western embracement of eastern spiritual practice" has 52 citations. "Transformational tourism as a hero's journey" was developed by Robledo M. A., Batle J. in 2017. This study is the sixth most cited paper (45 citations each). Then "Theoretical linkages between well-being and tourism: The case of self-determination theory and spiritual tourism", Spiritual tourism on the way of Saint James the current situation, 43. "Meditation retreats: Spiritual tourism well-being interventions", "Spirituality, Wellness tourism and quality of life", "Halal tourism de facto: A case from Fez" have 40 each.

Table 1. The Top most Cited Research Papers

Authors	Source title	Year	Title	Cited by
Haq F. & Jackson J.	Journal of Management, Spirituality and Religion	2009	Spiritual journey to Hajj: Australian and Pakistani experience and expectations	66
Haq F. & Wong H.Y.	Journal of Islamic Marketing	2010	Is spiritual tourism a new strategy for marketing Islam?	63
Cheer J.M. et al.	Tourism Management Perspectives	2017	The search for spirituality in tourism: Toward a conceptual framework for spiritual tourism	60
Tilson D.J.	Journal of Hospitality and Leisure Marketing	2005	Religious-spiritual tourism and promotional campaigning: A church-state partnership for St. James and Spain	53
Bowers H. & Cheer J.M.	Tourism Management Perspectives	2017	Yoga tourism: Commodification and western embracement of eastern spiritual practice	52
Robledo M.A. & Batle J.	Current Issues in Tourism	2017	Transformational tourism as a hero's journey	45
Buzinde C.N.	Annals of Tourism Research	2020	Theoretical linkages between well-being and tourism: The case of self-determination theory and spiritual tourism	43
Lopez L. et al.	Tourism Management Perspectives	2017	Spiritual tourism on the way of Saint James the current situation	43
Norman A. & Pokorny J.J.	Tourism Management Perspectives	2017	Meditation retreats: Spiritual tourism well-being interventions	40
Nicolaides A. & Grobler A.	African Journal of Hospitality, Tourism and Leisure	2017	Spirituality, Wellness tourism and quality of life	40
Carboni M. & Idrissi Janati M.	Tourism Management Perspectives	2016	Halal tourism de facto: A case from Fez	40

Source: Own Elaboration

3.5 Most Productive Countries and Academic Institutions

The study highlighted nations creating the most prolific countries based on relationships with the researcher. There are 46 different nations represented among the authors of this study. The nations with more than 4 papers are shown in Figure 5. With a maximum research paper score of 26, India is rated first. Australia has been noted as being second on the list of nations with 25 papers. The United States ranked third with 19 publications. Spain, Indonesia, United Arab Emirates, and the United Kingdom are the next top countries with 13, 9, 8, and 8 respectively. It is followed by Thailand, Canada, Italy, and Japan based on the number of publications.

The prolific institutes with the highest publications on spiritual tourism are included in Figure 6. Only institutions that have published three or more articles have been considered. With eight articles, Central Queensland University, Australia, and Canadian University, Dubai are the most productive institution. With four papers, Western Sydney University, Australia; Monash University, Australia; Jamia Millia Islamia, India, and Lovely Professional University, India are ranked second on the list. Following that, six additional institutions, including Arizona State University, US; Brigham Young University located in Provo, Utah; University of Girona, Spain; University of Tehran, Iran; Amity University, India and Khoja Akhmet Yassawi International Kazakh-Turkish University, Kazakhstan each account for three publications.

Figure 5. The most Prolific Countries based on Relationships with the Researcher
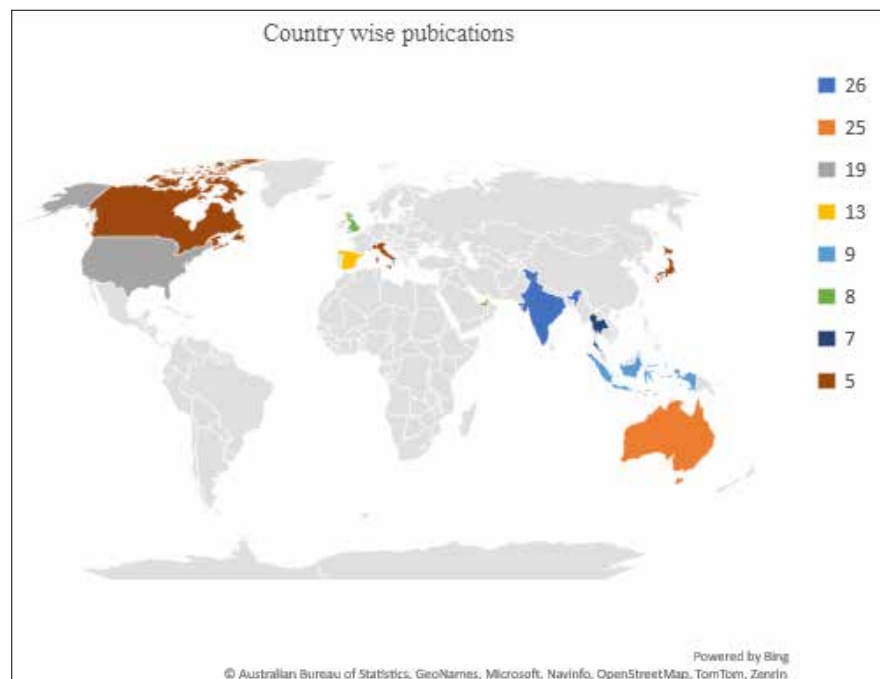
Source: Created with the help of software

Figure 6. The Prolific Institutes with the Highest Number of Publications
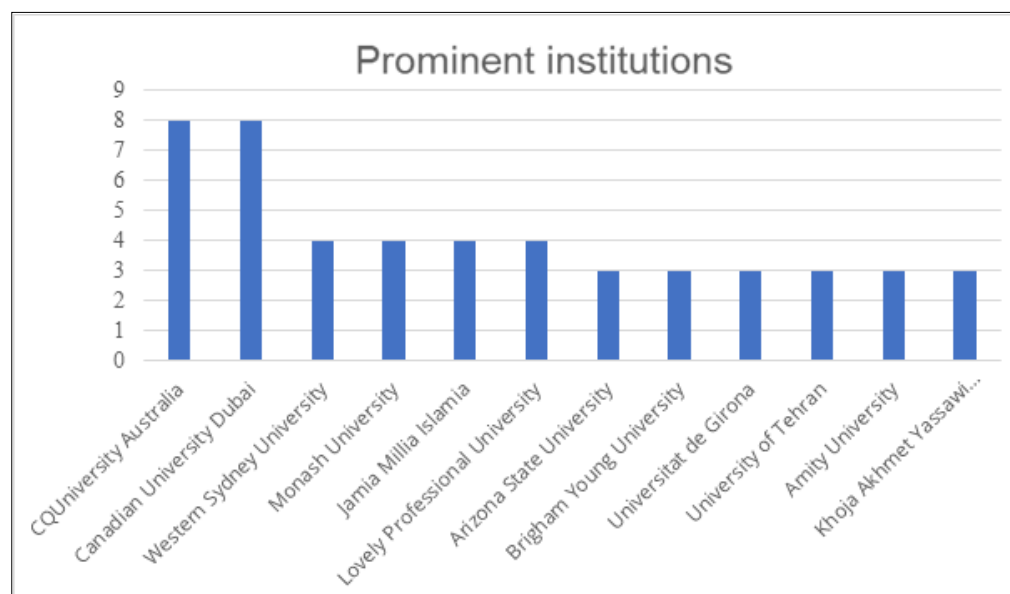
Source: Own Elaboration

3.6 Most Prominent Research Area

In the study of spiritual tourism, figure 7 demonstrates different knowledge areas and the percentage of documents published. As a result, the SCOPUS database in Business, Management, and Accounting has 101 documents. It is followed by Social Science (67), Arts and Humanities (53), Economics, Econometrics & Finance (27), Environmental Science (18), Engineering (11) and Medicine (10).

Figure 7. Prominent Research Areas and their Percentage of Documents Published
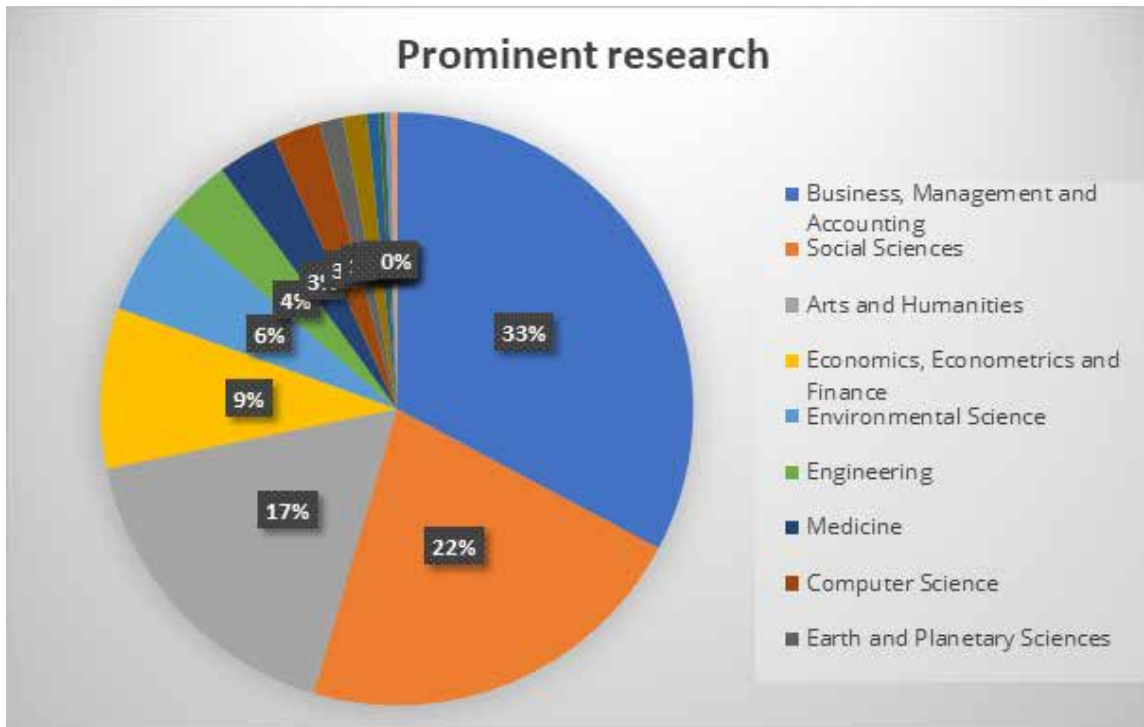
Source: Own Elaboration

3.7 Keyword Occurrence Analysis

Many keywords were used often in the various publications in this analysis. The occurrence analysis of keywords gives a sense of the study subjects and themes that the researchers are most interested in. Table 2 lists terms that appeared in the data set more than four times. In the data collection, the term "Spiritual Tourism" occurred 65 times. Similarly, the frequency of occurrence of "Tourism" and "Pilgrimage" is 25 and 20, respectively. A total of 161 keywords were discovered, with a total of 399 occurrences.

Keyword occurrence network analysis has been used for further investigation. The VOSviewer analysis approach displayed a text mining-based map, where the distance between distinct terms is employed to determine the relationship between keywords as per Laudano et al. (2018). There is a stronger connection when there is less gap between two or more words (Dolhey, 2019). Figure 8 exhibits the keyword co-occurrence network map based on the keywords in the documents. For the network map, only 25 words that had a frequency of more than 3 in the given dataset were preferred. The map illustrates the many lines that connect the various keywords. These terms appeared together in many publications in the data set, as shown by the lines. The VOSviewer tool was investigated further, and it was discovered that almost all the keywords had co-occurred with "spiritual tourism" and had total link strength of 159. The terms that have occurred the most often indicate that more study has been done in these areas.

Table 2. Keywords that Appeared in the Data Set more than Three Times

Keywords	Frequency
Spiritual Tourism	65
Tourism	25
Pilgrimage	20
Religion	16
Spirituality	15
Religious Tourism	14
India	13
Tourism Management	7
COVID 19`	6
Heritage Tourism	6
Tourist Behavior	5
Cultural Tourism	4
Islam	4
Marketing	4
New Age	4
Sustainability	4
Tourism Development	4
Tourist Attraction	4
Tourist Destination	4
Well-being	4

Source: Own Elaboration

Figure 8. Keyword Co-occurrence Network Map
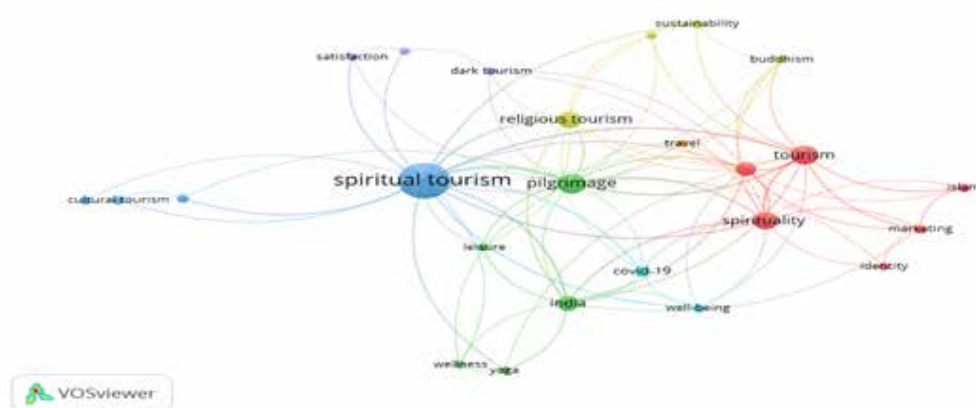
Source: Created with the help of VOSviewer

3.8 Co-authorship Network Analysis

Researchers are motivated to work with other professionals to uncover new information and good research work. This type of collaboration broadens the scope of a research effort while also encouraging creativity (Sampaio et al., 2016). The co-authorship network analysis visualizes scientific and research relationships, and its patterns reveal the authors co-authored with the other authors (Dolhey, 2019). Thus, this co-

authorship network analysis identifies researchers who are inclined to collaborate with other members of the network. Co-authorship network analysis was carried out using the VOSviewer software 1.6.18. The total number of authors in the data set under consideration was 296. To build this network diagram, the software selected the authors who had co-authored with at least two other authors in the data set under consideration. As a result, the software found 23 authors. Figure 9 illustrates the VOSviewer software's representation of the co-authorship density visualization diagram.

The technological implementation of density visualization is discussed by Van Eck and Waltman (2010). Items in the item density visualization are denoted by their labels in the same manner that they are in the network and overlay visualizations. The density of items is displayed by colour at that point. By default, colors range from blue to green and then to yellow. The appearance of higher number of items near to a point along with the higher the weights of the nearby items, the colour of the point is closer to yellow. Similarly, when there is smaller number of items near to a point with the lower the weights of the nearby items then the color of the point is near to blue.

Overall link strength characteristic represents the total strength of an author's co-authorship connect with other authors. The software classifies the authors into several clusters. The appearance of authors in the same cluster specifies that they are closely linked with respect to co-authorship. There are 16 clusters in total with a total of 8 links and a total link strength of 18. Cluster 1, cluster 2, and cluster 3 have three authors each. The clustering approach in VOSviewer is discussed in great depth by Waltman et al., 2010.

Figure 9. Represented Co-authorship Density Visualization Diagram
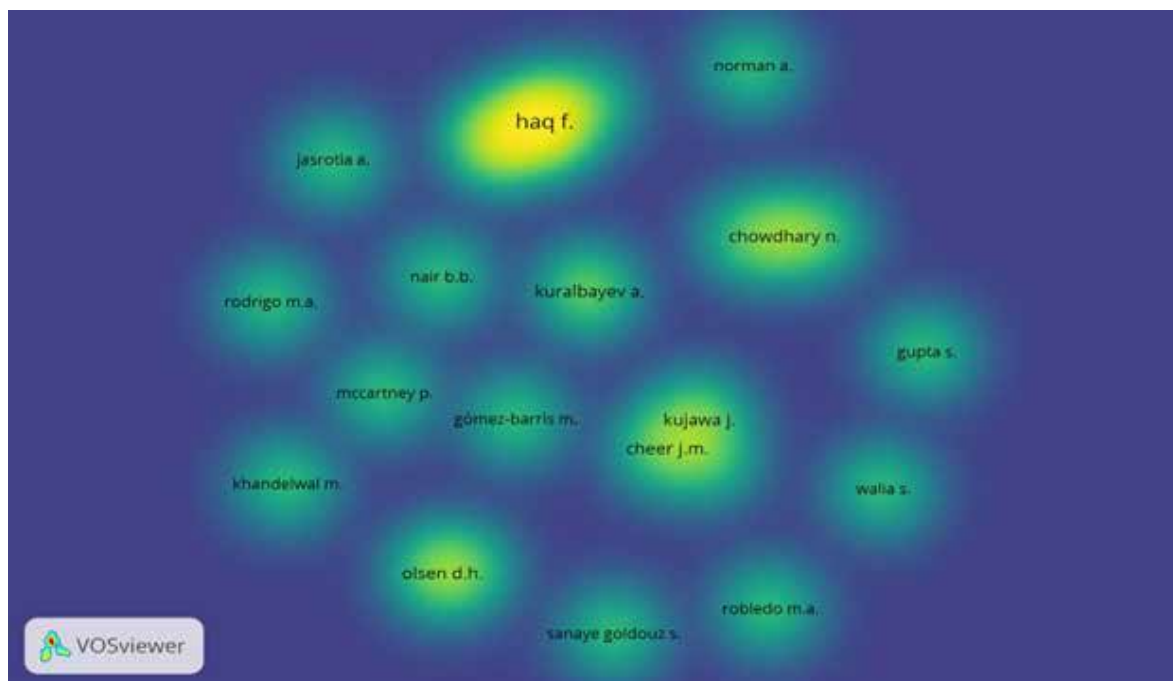
Source: Created with the help of VOSviewer

3.9 Intercountry Co-authorship Network Analysis

This section addresses the inter-country-based co-authorship network analysis. It determines the author's collaborations with other country's authors. The intercountry co-authorship network map is portrayed in Figure 10. The data set included a total of 48 nations. The VOSviewer tool discovered that 14 of these numerous nations have co-authorship relationships with one another keeping 4 as the minimum number of documents of a country. The largest set of connected items consists of 7 nations. Three clusters were created after the inter-country co-authorship network analysis: cluster-1 (Canada, India, and the United States); cluster-2 (Australia, Indonesia, and Japan); and cluster-3 (United Arab Emirates). The total link strength is 12.

Figure 10. The Intercountry Co-authorship Network Map

Source: Created with the help of VOSviewer

4. Conclusion

It has been noted that the definition of tourism in the twenty-first century has evolved since, contrary to earlier associations with religious pursuits, it now refers to the investigation of one's own identity and the fulfillment of one's life (Cheer et al., 2017). There has been an apparent development and rise in the popularity of spiritual tourism destinations (Buzinde, 2020). After the pandemic, spiritual tourism, particularly wellness tourism, seems to have been a growing trend worldwide and has become a special interest tourism segment fuelling global travel resurgence. The spiritual potential has once again been identified in several worldwide sites where there is a certain "spiritual magnetism" owing to the effect of attractions connected to historical, geographical, and social features, in addition to moral behavior (Buzinde, 2020). At the moment, tourist sites all around the world are progressively utilizing innovative tourist business models to generate revenue (Robledo, 2015). The identification of key characteristics that influence individuals' inclinations to visit spiritual locations will enable practitioners to develop more advanced techniques for rehabilitation and positioning of such destinations in the future (Garg et al., 2021). The tourism sector may engage in niche marketing by concentrating on spiritual tourists across the world. The paradigm shift in tourism is a chance for the nation to draw visitors from across the world who want to learn more about themselves and improve their lives by experiencing the essence of spirituality (Azevedo, 2020). Here also tourist satisfaction is important as it is a measure of destination loyalty intention (Valle et al., 2006).

As there is a paucity of essential academic study on the topic and it is crucial to do more research and analysis. The objective of this paper was to examine both research trends and academic production using a bibliometric approach. This research gives a bibliometric analysis of several studies on spiritual tourism published between 2005 and 2022. From the Scopus database, a total of 174 documents were chosen. This analysis guides researchers on the righteous trajectory by offering insights on notable publications, authors, institutions, and nations in the field, as well as keywords often used in spiritual tourism research. According to the findings, the number of research articles published on spiritual tourism has steadily increased significantly in the past six years, the highest in 2021. It implies that it is a growing topic, and the lines continue to progress. With 66 citations, publication on "Spiritual journey to Hajj: Australian and Pakistani experience and expectations" is the most cited paper in the literature (Haq & Jackson, 2009). Farooq Haq from Canadian University Dubai (n=10), is the most productive author on this topic. Furthermore, when compared to other universities and institutes with eight articles, Central Queensland

University, Australia, and Canadian University, Dubai are the most productive institution. The journal named "International Journal of Religious Tourism and Pilgrimage" (n=20) published the most publications on spiritual tourism. Further, this investigation splits the inter-country-based co-authorship network into three clusters, with India being the most dominant and lies in cluster 1. This study also includes a keyword occurrence analysis, which revealed that the keywords "Spiritual Tourism", "Tourism" and "Pilgrimage" occurred 65, 25, and 20 times respectively.

4.1 Theoretical Implication

This analysis has several clear implications. For instance, the outcomes of the year-by-year publishing, as well as the most cited publications, have kindled interest in this domain. Second, research scholars might uncover studies and new research avenues by reviewing author-wise publications and journals that published numerous studies on the topic. Similarly, publication analysis by prominent country and institutions suggest a global interest in the topic. This study's results support research in terms of authorship, journal publication, and institutional connections. Third, keyword occurrence analysis allows future scholars to pinpoint hotspots in the study. The primary objective of an article may be represented by its keyword, as well as the frequency with which it appears, revealing the framework and evolution of research themes. Research is considered to be more cogent when it encompasses a large geographic region and offers global results. Similarly, co-authorship and intercountry co-authorship network analysis allow researchers to cooperate with other professionals both within and outside a country's borders. These findings can help in exploring research, publications, and other relevant topics in the field of this segment of tourism study overtime periods. This study has demonstrated that research on spiritual tourism is fast evolving through bibliometric analysis and visualization of the included literature.

4.2 Managerial Implications

The research paper emphasizes the emergence of spiritual tourism-oriented research activities and proposes their implications in the tourism industry. As spirituality is a term with numerous facets, identifying a country as spiritual involves much more than only looking at those with a significant religious population. Spirituality is strengthened through tourism. It is one of the fast-growing segments in tourism. It has multiple effects on several sectors, and its growth will result in greater employment prospects, tourist and traveller experiences, respect for local communities, preservation of the environment, and many other advantages (Halim et al., 2021). When a destination is commercialized in the best possible way, it will contribute to and support the promotion of economic growth.

The United Nations World Tourist Organization (UNWTO) classified spiritual tourism as one of the travel categories with the quickest growth, businesses in the tourism industry must attract tourists who are interested in spiritualism. The findings are of particular importance to researchers, academics, decision-makers in government and research institutions, as well as scientists. The bibliometric research on spiritual tourism has the potential to equip managers and other stakeholders in the tourist sector with invaluable insights into the research landscape, emerging trends, and potential prospects. The use of this information can provide useful acumen for making strategic decisions, fostering competitiveness, and promoting sustainable growth within this dynamic industry. The utilisation of bibliometric analysis has the potential to unveil emerging patterns and areas of interest within the realm of spiritual tourism. This information may be utilised by managers to discern novel prospects and cultivate inventive products and services that align with the dynamic demands and preferences of spiritual tourists. This practise can facilitate the strategic allocation of research endeavours and financial resources towards currently underexplored domains that possess the substantial potential for the spiritual tourism sector. The assessment of the effectiveness of spiritual tourism efforts and campaigns may be conducted by examining the citations and engagement metrics of relevant publications. This can aid in assessing the efficacy of marketing campaigns, promotional initiatives, and destination development endeavours. The identification of crucial research domains and potential obstacles might provide valuable insights for policymakers in promoting responsible tourism practises. Gaining knowledge about the prominent authors and institutions within the arena of spiritual tourism may assist managers in recognising significant players and possible partners for collaborations,

marketing alliances, and initiatives related to the development of destinations. Through an examination of the expansion in scholarly papers and citations pertaining to spiritual tourism, managers may engage in informed prognostication regarding the forthcoming demand for such experiential endeavours. The utilisation of bibliometric analysis enables the evaluation of the calibre and pertinence of extant research within the given subject. The use of rigorous research may effectively bolster decision-making processes and provide evidentiary basis for the justification of funding allocations or investment decisions.

Management should carefully develop their marketing tactics to draw in foreign visitors by providing them with the opportunity to experience spirituality. By transforming their areas into attractions using the appropriate branding and marketing strategies, governments must encourage spiritual tourism. Branding helps to disseminate through word-of-mouth and generate the ideal views about certain locations and travel destinations (Suban, 2022). An effective branding process moves from the product to the brand and from the place to the destination. To strengthen its brand image, the destination must stand out from the competition. It is suggested to determine if the sites are good for a shorter or longer amount of time and must emphasize distinctive qualities. The goods and services must be presented to the intended market in the form of a distinctive catchphrase that will be remembered by travelers all across the world. To draw in a wide range of guests, it is recommended to provide both pre-packaged excursions and custom trips. The representatives of other nations must be contacted. Tourists should have access to basic infrastructure and facilities. There should be a match between visitor expectations and actual spiritual experiences in order to get trust and recognition on a global scale. The tourist department and the local tour providers are properly coordinated. Use of digital technologies may improve the experience and ease the travel (Kaur, 2016; Roziqin, 2023). To create a strategy for branding and marketing spiritual tourism, academics, practitioners, and researchers must work together. Nevertheless, it is anticipated that this study will make a significant contribution to the subject of tourism and spirituality, with positive implications for all stakeholders, both directly and indirectly engaged.

4.3 Limitations and Scope for Future Research

Despite its numerous virtues, our study has certain limitations that might be seen in future research directions. To begin, this study searched the Scopus database for spiritual tourism publications. As a result, publications that were not indexed in Scopus were excluded. Researchers may use more databases in the future, like Web of Science and Google Scholar, amongst many others. Second, a significant limitation of this study is the approach used in bibliometric analysis which emphasizes more on numbers and investigating the relationship between authors, associations, and ideas. Third, the study employed only the VOSviewer for analysis. Future studies can also make use of Gephi, CiteSpace II, Bibexcel, and Tableau in addition to the VOSviewer. Fourth, Several Criteria (annual publication research trend, journals that published the most articles on spiritual tourism during 2005-2022), most prolific authors, research papers having the maximum number of citations, nations, institutions, prominent research area and keywords were considered in the bibliometric approach. Similarly, future research might concentrate on more network diagrams for a more thorough study. Future studies in this area could look for keywords that are more relevant to the theme of spiritual tourism research to acquire a better understanding of that domain. This study can be repeated with bibliometric studies from different research fields.

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Wellness Tourism: A Bibliometric Analysis Approach

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ABSTRACT

An emerging field, wellness tourism can reduce stress levels and foster positive emotions, leading to a healthy balance of body, mind, and spirit and satisfying consumer experiences that enhance personal well-being. As a distinct subcategory of health tourism, it is often erroneously interchanged with medical tourism in the literature. Moreover, up to this point, no comprehensive review has assessed the effects of the COVID-19 pandemic on wellness tourism research. A bibliometric review was conducted to fill this gap. Data was collected in June 2023 through the Web of Science (WoS) database. The selection process encompassed articles published from January 2013 to June 2023. A total of 143 relevant peer-reviewed articles published in English-language journals were selected. Data were analyzed through evaluation techniques based on productivity and impact measures and relational techniques via mapping the results through VOSviewer software. Based on these findings, potential directions and suggestions for future research were proposed.

KEYWORDS

ARTICLE HISTORY

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1. Introduction

According to the Global Wellness Institute (GWI), wellness tourism is a fast-growing tourism segment that results from the intersection of two large and growing industries: tourism and the wellness industry (Global Wellness Institute [GWI], 2018b). The GWI estimated that in 2017 and 2019, wellness tourism generated US$617.0bn and US$720.4bn, respectively, representing an average annual growth rate of 8.1% between 2017 and 2019 (GWI, 2018a). Tourism is an important economic segment that benefits individual and social development in many regions across the globe (Mishra & Panda, 2022). It increases incomes, job development, and living standards (Romão et al., 2022). However, the sociocultural changes during the COVID-19 pandemic, particularly regarding travel restrictions, have directly affected the international travel and tourism industry (Wang et al., 2022). In 2020, the wellness tourism segment only generated US$435.7bn, which reveals a decrease of 39.5% when compared with the previous year (GWI, 2021). Nevertheless, GWI (2021) predicts that wellness tourism will return to its robust growth in the next five years with a projected average annual growth rate of 20.9%.

Health and wellness are intricately related to overall satisfaction and quality of life, contributing to the high demand for specialized wellness services at most tourist destinations (Garjan et al., 2023; Liu et al., 2023). Wellness vacations can reduce stress levels and foster positive emotions, leading to a healthy balance of body, mind, and spirit and satisfying consumer experiences that enhance personal well-being (Backman et al., 2023). In the post-COVID-19 era, the demand for wellness and healthier lifestyles is expected to intensify (Sthapit et al., 2023). As a result, individuals will increasingly seek holistic alternatives to preserve and improve their health (Tiwari & Hashmi, 2022), and wellness tourist destinations must create a differentiated service offering (Chen et al., 2023).

The worldwide wellness sector has emerged in response to people's increasing need to have experiences that bring relaxation and rejuvenation, particularly during the pandemic and post-pandemic period (Mishra & Panda, 2022; Bočkus et al., 2023). Likewise, research in this field has also been growing, with a few studies attempting to understand the mechanisms behind the demand for wellness tourism (Kemppainen et al., 2021).

Recent theoretical studies (e.g., Kemppainen et al., 2021; Zhong et al., 2021; Suban, 2022) have sought to collect data characterizing the evolution of wellness tourism and suggest guidelines for future research. For example, there is the study of Zhong et al. (2021), where through a review of the literature on medical, health, and wellness tourism between 1970 and 2020, they verified that the scientific community interest in these tourism segments increased between 2013 and 2017. In the same line of research, Kemppainen et al. (2021) conducted a literature review on health, medical, and wellness tourism in research published between 2010 and 2018. The authors concluded that studies in this field emerged during the past decade, mainly between 2017 and 2018. Suban (2022) has developed a bibliometric study based on wellness tourism research published between 1998 and 2021. The investigation attempted to identify the main contributors to wellness tourism, publication patterns, most cited documents, productive countries, authors' affiliation, popular keywords, and its co-occurrence.

Despite their valuable insights, none of these studies considered the distinction between wellness and medical tourism during the article selection process for review (Kemppainen et al., 2021; Zhong et al., 2021; Suban, 2022). Nevertheless, it is essential to consider this distinction to define and characterize wellness tourism publications accurately (Mueller & Kauffmann, 2001; Koncul, 2012; Huang et al., 2022; Lee & Kim, 2023). While wellness and medical tourism contribute to health and well-being, they serve distinct purposes and cater to travel needs and preferences (He et al., 2022; Phuthong et al., 2022). In addition, the impact of the pandemic on publications in this field has yet to be found in previous investigations (Kemppainen et al., 2021; Zhong et al., 2021; Suban, 2022). To address these gaps, conducting a bibliometric review on wellness tourism was considered pertinent.

2. Literature Review

Tourism has been strongly linked to health and wellness studies and is seen as a pursuit of mental, physical, and spiritual health (Patterson & Balderas-Cejudo, 2022). Previous studies have shown that

interest in wellness tourism research has emerged in the last decade (Kemppainen et al., 2021; Zhong et al., 2021; Suban, 2022), and academics have postulated that the pandemic will positively influence consumer behavior toward wellness tourism in the medium term (Kongtaveesawas et al., 2022).

Wellness tourism has been growing faster than the whole tourism industry since new healthcare trends emphasize holistic methods of prevention and well-being rather than specialized medical procedures to treat illness (Phuthong et al., 2022). Wellness tourism concerns a healthy lifestyle and involves individual or group travel to specialized destinations (Sthapit et al., 2023). Tourism scholars state that it is universally challenging to define wellness tourism because of cultural and linguistic differences (He et al., 2022). Nevertheless, the Global Wellness Institute (2018b) defines wellness tourism as travel associated with maintaining or enhancing one's personal well-being, where people seek to prevent diseases, reduce stress levels, or increase their well-being. It is a proactive process, without associated pathology, focused on prevention where tourists actively engage in wellness activities, leading to a holistic health state encompassing spiritual, emotional, mental, physical, social, and environmental dimensions (GWI, 2018b).

Despite the nuances, contradictions, and contrasts in defining the concept of wellness tourism (Lee & Kim, 2023), it has been considered a type of health tourism, an umbrella concept for another related tourism, medical tourism (He et al., 2022). Contrary to wellness tourism, medical tourism is a reactive process focused on the healing and treatment of an associated pathology, which involves traveling to access specialized medical treatment (GWI 2018b; Kazakov & Oyner, 2020; Pessot et al., 2021).

Wellness tourism is a recent line of research and presents in several publications some inaccuracies in its definition and consequent distinction from other types of tourism (Mueller & Kauffmann, 2001; Koncul, 2012; Huang et al., 2022; Lee & Kim, 2023). In addition, the impact of the pandemic on publications in this field has yet to be found in previous studies (Kemppainen et al., 2021; Zhong et al., 2021; Suban, 2022). One of the most critical indicators for evaluating the quality of scientific production is the analysis of bibliographic data through bibliometric methods (Santos-Rojo et al., 2023). Bibliometric analysis is widely used to highlight trends and evolutions in publications, which allows both evaluation and prediction of potential future areas of study (Hanaa & Abdul, 2023).

To address these gaps, conducting a bibliometric review on wellness tourism was considered pertinent, excluding publications related to medical tourism once past research did not reach this distinction. The study has addressed the following research questions:

RQ1. Which are the most-cited articles and the most contributing authors, journals, and countries in wellness tourism research?

RQ2. What is the relationship among topics in terms of the co-occurrence of keywords?

RQ3. What was the impact of the pandemic on the number of publications in wellness tourism, and which topics were the most investigated?

3. Methodology

3.1 Data Collection

Data was collected in June 2023 through the Web of Science (WoS) database, as it is one of the most widely used databases in the tourism field; the WOS core collection covers literature data that has passed quality inspection in this database (Mihalic et al., 2021; Chen et al., 2022; Pahrudin et al., 2022; Coll-Ramis et al., 2023; Santos-Rojo et al., 2023). Articles published between January 2013 and June 2023 were selected once the number of publications in wellness tourism has grown in the last decade (Kemppainen et al., 2021). The keywords "wellness tourism," "tourist," "visitor," "travel," and "medical tourism" were combined with the Boolean operators "OR," "AND," and "NOT." The authors selected only peer-reviewed articles published in English-language journals to refine the results. A total of 330 relevant records were retrieved. The authors screened the remaining records' titles, keywords, and abstracts for thematic relevance. The screening process generated 143 papers, and the full texts were further reviewed.

3.2 Data Analysis

Bibliometric is a form of quantitative analysis through mathematical and statistical methods to measure the value and impact of research publications in a given field (Santos-Rojo et al., 2023). The most common methods encompass evaluation techniques based on productivity and impact measures, focused on the total number of citations and publications (Coll-Ramis et al., 2023), and relational techniques via mapping the results (Van Eck & Waltman, 2010). The VOSviewer version 1.6.19 (Van Eck & Waltman, 2010) has mapped the results through co-authorship and co-occurrence analysis. VOSviewer is a software tool for generating, visualizing, and analyzing bibliometric networks. Maps created using VOSviewer include publications, authors, keywords, journals, or countries (Rocio et al., 2023). In a map display, items with a higher weight are shown more prominently than items with a lower weight. Between items, there is a connection or a relationship named link. Each link has a strength that can, for example, indicate the number of publications in which two researchers were co-authors (co-authorship links) or the number of publications in which two terms occurred together (co-occurrence links) (Santos-Rojo et al., 2023).

4. Results

4.1 Sample Characteristics

The analysis in this paper focuses on articles published in journals indexed in the WoS database from January 2013 to June 2023. The sample covers 143 articles produced by 75 journals and written by 372 authors from 45 different countries. There are only 14 single-authored articles, while 358 authors wrote in collaboration.

4.2 Performance Analysis

4.2.1 Publication Trends

The number of publications per year (Figure 1) shows a generally increasing trend from 2013 to 2023. There are some fluctuations in the number of publications from year to year, but overall, the trend is upward. From 2015 to 2023, there was a consistent growth in the number of publications, with some years showing more significant increases than others. The largest increase in the number of publications occurred between 2020 and 2021, with an increase from 12 to 22 publications. The number of publications in 2020 was 12, compared to the previous year's 16 in 2019, indicating a slight decrease in research output. This decrease can be attributed to the challenges and disruptions caused by the pandemic, including the publication process. The data for 2023 represents the number of publications in the first six months only, providing a snapshot of the research activity during that period. In the first half of 2023, there were 26 publications on wellness tourism, indicating a robust level of research output. If the trend observed in previous years continues, it is reasonable to anticipate continued publication growth throughout 2023.

4.2.2 Top Authors and Countries

The most influential authors and the top countries with the highest cited documents in wellness tourism research are shown in Table 1, obtained through citation metrics. Chun-Chu Chen and James F. Petrick are the most highly cited authors, with 315 and 280 citations, respectively, which means that their research contributions have garnered significant attention and recognition within the field. Based on the total number of publications, the most influential author is Heesup Han, who has five publications and 214 citations. Among 45 countries with at least one document published in wellness tourism research, the USA emerges as the leading country, with 26 documents and 739 citations. The high number of citations reflects the significant impact and recognition of research conducted by scholars from the USA. Conversely, China has the highest number of published documents, boasting 32 papers and 356 citations.

Figure 1. Number of Publications from 2013 to 2023
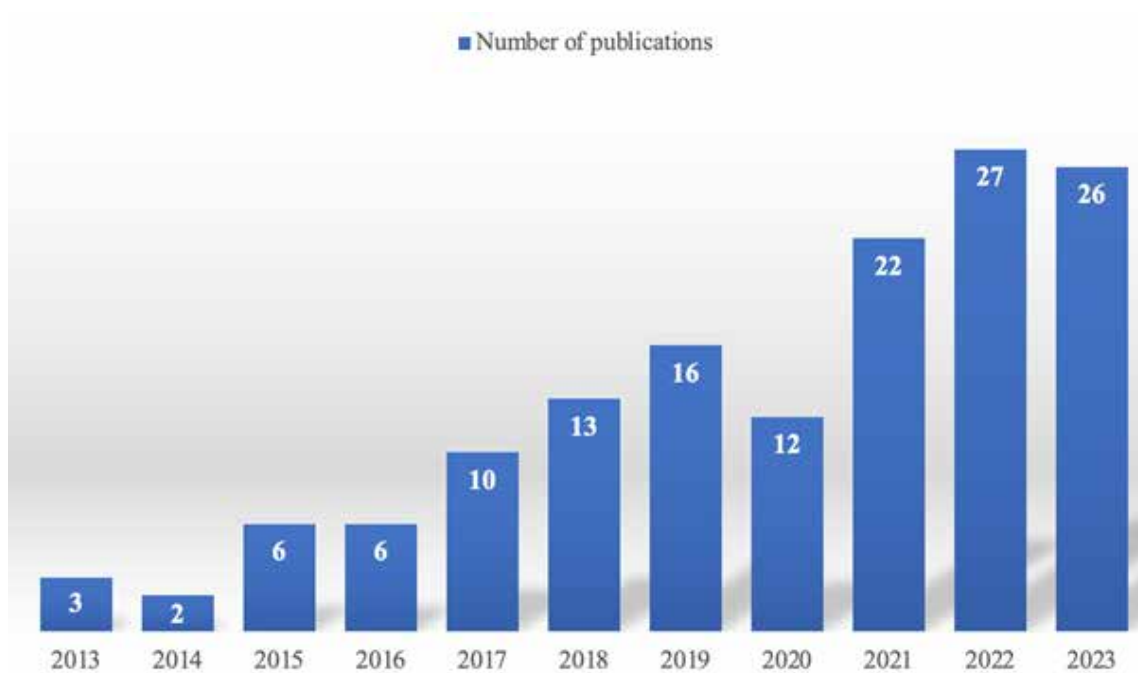
Source: Own Elaboration

Table 1. Top Authors and Countries on Wellness Tourism Research

Authors	TC	TP	Countries	TC	TP
Chen, Chun-Chu	315	4	USA	739	26
Petrick, James F.	280	3	Australia	568	10
Han, Heesup	214	5	South Korea	395	15
Kiatkawsin, Kiattipoom	210	4	China	389	32
Kim, Wansoo	210	4	Taiwan	269	14

Note(s): TC = total citations, TP = total publications
Source: Own Elaboration

4.2.3 Most-cited Articles

The top five cited articles on wellness tourism research are ranked in Table 2 based on the total number of citations. Of the 143 selected articles, the research paper titled "Health and wellness benefits of travel experiences: A literature review," authored by Chen, C.C., and Petrick (2013), emerged as the most cited, accumulating a substantial number of 166 citations. In their study, they attempt to comprehensively review the literature concerning travel's health and wellness benefits. The findings indicated that numerous studies had substantiated the favourable impact of travel experiences on individuals' perceived health and well-being. Nevertheless, these benefits tend to diminish gradually after the vacation period.

Table 2. Top Articles on Wellness Tourism Research

Authors	Title	Journal	TC
Chen, C.C. & Petrick (2013)	Health and wellness benefits of travel experiences: A literature review	Journal of Travel Research	166
Han et al., (2018)	The role of wellness spa tourism performance in building destination loyalty: The case of Thailand	Journal of Travel & Tourism Marketing	145
Chen, K.H. et al., (2013)	Essential customer service factors and the segmentation of older visitors within wellness tourism based on hot springs hotels	International Journal of Hospitality Management	103
Loureiro et al., (2013)	The effect of atmospheric cues and involvement on pleasure and relaxation: the spa hotel context	International Journal of Hospitality Management	90
Han et al., (2017)	Investigating customer loyalty formation for wellness spa: Individualism vs. collectivism	International Journal of Hospitality Management	53

Note(s): TC = total citations
Source: Own Elaboration

4.2.4 Key Journals

Table 3 provides a compilation of the leading journals in wellness tourism research. Tourism Review and Journal of Travel & Tourism Marketing stand out with notable citation counts of 420 and 266, respectively. However, considering the number of published articles, Sustainability is the most prolific journal, with 15 publications. Analyzing the data from Table 3, it becomes evident that most of the top five journals specializing in wellness tourism research are specifically focused on tourism, emphasizing the significance of tourism-oriented publications in this domain.

Table 3. Top Journals on Wellness Tourism Research

Journal	TC	TP	Tourism
Tourism Review	420	6	X
Journal of Travel & Tourism Marketing	266	7	X
Tourism Management Perspectives	200	5	X
Asia Pacific Journal of Tourism Research	167	7	X
Sustainability	67	15	

Note(s): TC = total citations, TP = total publications
Source: Own Elaboration

4.2.5 Co-authorship by Country

Co-authorship analysis examines the collaboration networks among authors, organizations, or countries in advancing knowledge within a specific scientific domain (Rocio et al., 2023). The observable and well-established technique of co-authorship analysis offers valuable insights into scientific collaboration. Rather than working in isolation, researchers now engage in teamwork, leveraging diverse perspectives and complementary skills to achieve shared goals. Therefore, co-authorship analysis effectively assesses collaboration trends and identifies significant contributors (Hanna & Abdul, 2023). Consequently, this study aims to explore co-authorship research by country, recognizing the importance of understanding collaborative patterns and contributions within specific geographic contexts. Among the 45 countries, 33 engage in international co-authorship collaborations.

Figure 2 illustrates these countries using labelled circles, where the size of each circle corresponds to the number of papers written by authors from that nation. The thickness of the connections between countries indicates the strength of their collaborative efforts, as measured by the number of jointly

authored documents. Based on these connections, seven distinct clusters emerge. Clusters 1 and 2 consist of seven items each, while clusters 3 and 4 comprise five. Cluster 5 includes four items, cluster 6 has three, and cluster 7 has two. With a link strength of 22, the USA boasts the highest number of links, collaborating with 15 countries. Notably, the USA maintains robust ties with South Korea and Taiwan, reflecting its strong social presence. Australia ranks second with the most links, while China secures third, with 12 and 10 links, respectively. Interestingly, 12 countries operate in isolation, signifying a need for collaborative work between their authors and those from other nations.

Figure 2. Co-authorship Analysis Based on Countries
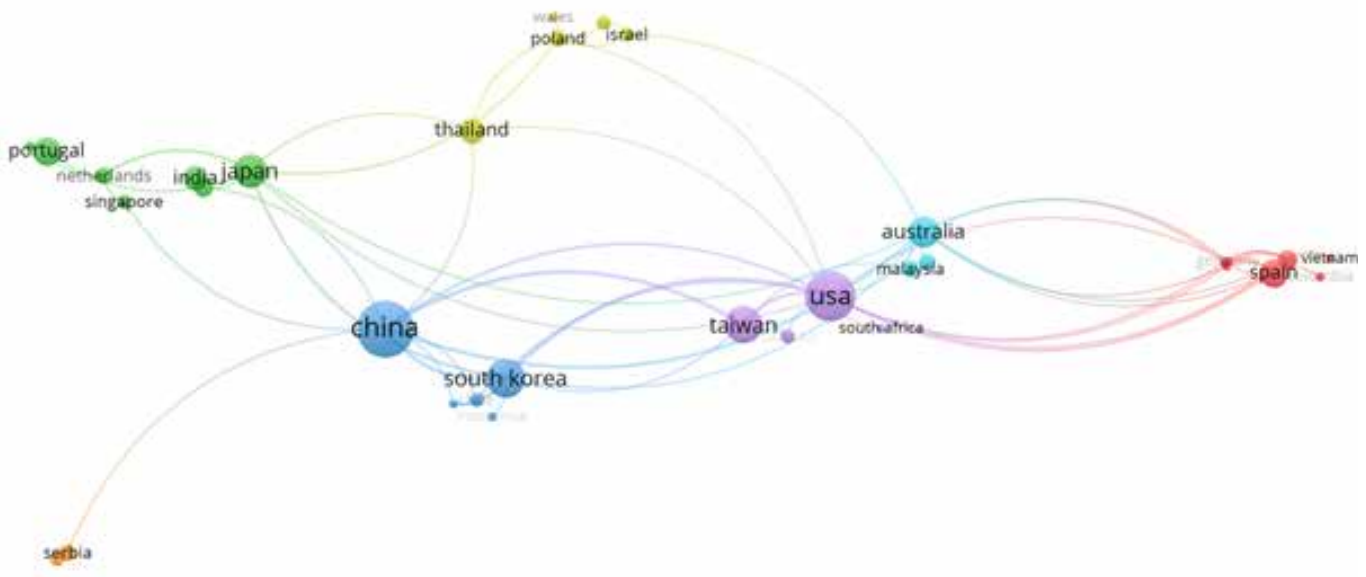
Source: Own Elaboration

4.2.6 Co-occurrence Analysis

Co-occurrence analysis is a tool that maps the research area and creates a knowledge map based on words and their relationships. The purpose is to understand the current themes and future roadmap of scientific research (Toker & Emir, 2023). Among the 874 keywords used in the 143 selected articles on wellness tourism research, 30 meet the threshold of being occurred for a minimum of 5 times. Specific keywords, such as "model" or "analysis," were irrelevant and removed. The 30 items were distributed in 4 clusters. Cluster 1 has nine keywords, clusters 2 and 3 have eight keywords each, and cluster 4 has five items. The network map illustrated in Figure 3 shows that the clusters are closely related and provide a network of interconnected clusters.

Keyword analysis shows two pairs of keywords with the strongest connection: "wellness tourism-health" and "wellness tourism-tourist experience," justifying the central theme of the study. In cluster 1 (red), keywords such as authenticity, motivations, and destination image suggest the similarity of studies with this theme. Cluster 2 (green) focuses on customer experience and behavioural intentions. Cluster 3 (blue) shows well-being, sustainability, and word-of-mouth investigations. Cluster 4 (yellow) focused on the overall tourism experience. The most common keywords are customer satisfaction, service quality, behavioural intentions, motivations, and loyalty, suggesting that most research focuses on these themes. Conversely, keywords such as well-being, destination image, perceived value, authenticity, and sustainability, which appeared less frequently, suggest emerging themes.

5. Conclusion

Wellness tourism refers to a specialized segment of the tourism industry that focuses on promoting and enhancing the well-being of individuals through diverse activities, experiences, and services (GWI, 2018b; Sthapit et al., 2023). It involves travel to destinations to maintain or improve personal well-being (Guerra et al., 2022; Liu et al., 2023), fostering a holistic balance of body, mind, and spirit (Patterson & Balderas-Cejudo, 2022; Chen et al., 2023). Being a relatively recent area of research, with a more evident growth in the last ten years (Kemppainen et al., 2021; Zhong et al., 2021; Suban, 2022), there still needs to be some clarification in its distinction with medical tourism (Mueller & Kauffmann, 2001; Koncul, 2012; Huang et al., 2022; Lee & Kim, 2023). This was one of the reasons it was considered pertinent to carry out a bibliometric review on wellness tourism as a subcategory of health tourism distinct from medical tourism (He et al., 2022). Additionally, no previous investigations have analyzed the pandemic's impact on wellness tourism research. In this regard, 143 articles published between January 2013 and June 2023 were extracted from the WoS database and analyzed. Data were analyzed through evaluation techniques based on productivity and impact measures, focused on the total number of citations and publications, and relational techniques via mapping the results through VOSviewer software version 1.6.19 (Van Eck & Waltman, 2010).

Figure 3. Keywords Co-occurrence Analysis (VOSviewer Network Visualization)
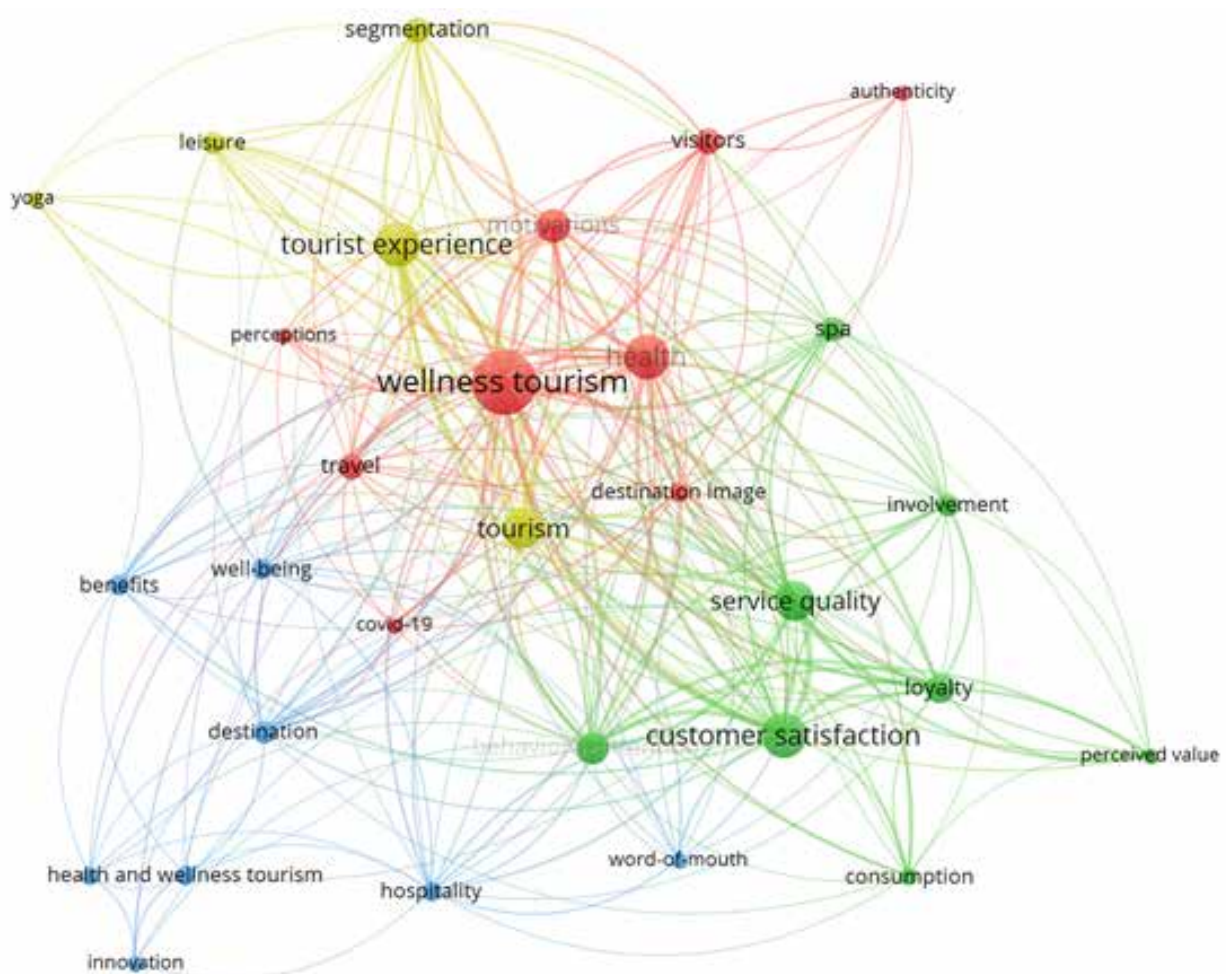
Source: Own Elaboration

RQ1. Which are the most-cited articles and the most contributing authors, journals, and countries in wellness tourism research?

Based on a performance analysis, the most contributing authors, countries, and journals and the most-cited articles were identified. Chun-Chu Chen and James F. Petrick were the most-cited authors, with 315 and 280 total citations each. Among 45 countries with at least one document published in wellness tourism research, the USA emerges as the leading country, followed by Australia and South Korea. No nation from Europe entered the top five most influential countries, suggesting that wellness tourism research could be a potential research area in this continent. The research paper titled "COVID-19: Potential Effects on Chinese Citizens' Lifestyle and Travel" by Wen et al. (2021) was the most-cited article, accumulating 363 total citations. This result demonstrates scholars' interest in the potential impact that the COVID-19 pandemic has had on wellness tourism research, as the most cited article focused on investigating the effects of COVID-19 on Chinese tourists' lifestyle choices, travel behavior, and preferences. Tourism Review and Journal of Travel & Tourism Marketing were the most influential journals, with 420 and 266 citations, respectively. Most top-five journals specializing in wellness tourism research focus on tourism, emphasizing the significance of tourism-oriented publications in this domain. Concerning mapping analysis through VOSviewer software, data were analyzed based on co-authorship. Co-authorship analysis examines the collaboration networks among authors, organizations, or countries. In the present study, the co-authorship by countries was selected. Among 45 countries, 33 engage in international co-authorship collaborations. The USA boasts the highest number of links, collaborating with 15 countries. The strong social presence of the USA is evident in its robust relationships with South Korea and Taiwan.

RQ2. What is the relationship among topics in terms of the co-occurrence of keywords?

Regarding co-occurrence, among the 874 keywords from the 143 selected articles, 30 meet the threshold of being occurred for a minimum of 5 times. The most common keywords were customer satisfaction, service quality, behavioural intentions, motivations, and loyalty, suggesting that most research focuses on these themes. Conversely, keywords such as well-being, destination image, perceived value, authenticity, and sustainability, which appeared less frequently, suggest emerging themes. Based on keyword analysis, Table 4 outlines recommendations for future research and provides a comprehensive list of potential sources that researchers can utilize as references for conducting their studies.

Table 4. Future Research Suggestions

Thematic	Contextualization	Keywords	Future Research	Potential Sources
Destination attractiveness and competitiveness	Destination attractiveness corresponds to the destination´s ability to attract and satisfy potential tourists through their attributes that lead tourists to select one destination over another (Medina-Muñoz & Medina-Muñoz, 2012).	Motivations; destination image; risk perception; sustainability	• Investigate the evolving motivations of wellness traveler's post-pandemic • Explore how risk perception influences wellness travelers' decision-making and travel behavior • Examine the impact of destination image on perceptions of safety among wellness travelers • Investigate the role of sustainability in destination attractiveness for wellness travelers • Identify and analyze the rise of new and emerging wellness tourism destinations • Investigate the crisis management and recovery strategies implemented by wellness tourism destinations during and after the pandemic	Pramod & Nayak (2018); Brandão et al., (2021); Bhatt et al., (2022); Bhatta et al., (2022); Li & Huang (2022); Xue & Shen (2022); Handler & Kawaminami (2023); Lee & Kim (2023); Toker & Emir (2023)

Tourist experience	A positive and satisfactory experience have a significant effect on tourists' satisfaction, promotes well-being, and consequently increasing destination loyalty (Liberato et al., 2021)	Involvement; authenticity; perceived value; service quality; customer satisfaction; well-being	• Investigate the impact of personalized wellness programs on tourist involvement • Examine how the authenticity of wellness experiences enhances cultural immersion for tourists • Assess the relationship between perceived value and wellness offerings • Analyze the link between service quality in wellness tourism services and customer satisfaction • Conduct longitudinal studies to measure the long-term well-being outcomes of wellness tourism experiences • Investigate the stress-reducing effects of wellness tourism experiences	Choi et al., (2015); Chen et al., (2016); Trihas & Konstantarou (2016); Hudson et al., (2017); Pesonen & Tuohino (2017); He et al., (2021); Xie et al., (2021); Chen et al., (2023); Liu et al., (2023); Lee & Kim (2023)
Behavioral Intentions	Consumer behavior refers to the consuming actions of products/services by individuals and involves an intention based on previous experiences or ideas (Hudson et al., 2017)	Loyalty; word-of-mouth	• Investigate the factors that influence loyalty among wellness tourists and its impact on repurchase intentions • Assess the effectiveness of loyalty programs in wellness tourism and their influence on behavioral intentions • Examine the relationship between positive word-of-mouth and intentions to recommend wellness tourism experiences to others • Study the role of crisis management in building customer loyalty and positive word-of-mouth during challenging times • Explore the influence of social media on word-of-mouth in wellness tourism • Segment wellness tourists based on their loyalty levels and word-of-mouth	Loureiro et al., (2013); Han et al., (2017); Han et al., (2018); Han et al., (2020)

Source: Own Elaboration

RQ3. What was the impact of the pandemic on the number of publications in wellness tourism, and which topics were the most investigated?

The COVID-19 pandemic significantly impacted the tourism industry (Bhatta et al., 2022; Wang et al., 2022). Several countries imposed travel restrictions and lockdown measures to control the spread of the virus (Wang et al., 2022). This drastically reduced international and domestic travel, including wellness tourism (GWI, 2021). People hesitated to travel due to safety concerns, affecting the demand for wellness-related trips (Li & Huang, 2022; Wang et al., 2022). Nevertheless, the pandemic raised awareness of health and well-being, leading to a greater interest in wellness-related activities (Tiwari & Hashmi, 2022; Sthapit et al., 2023). Likewise, research in this field has also been growing, with a few studies attempting to understand the mechanisms behind the demand for wellness tourism.

Based on the sample of 143 selected articles, there was a noticeable upward trend in the number of publications per year from 2013 to 2023. During the onset of the pandemic in 2020, there was a slight decrease in research output, with 12 publications compared to 16 publications in 2019. However, the number of publications experienced a significant upswing between 2020 and 2021, reaching 22 articles. In 2022, this growth was maintained with a total of 27 publications. In the first half of 2023, 26 publications

on wellness tourism were recorded, indicating a robust level of research output. If the trend observed in previous years persists, it is reasonable to expect further growth in publications throughout 2023. These findings prompt an interesting inquiry into whether the COVID-19 pandemic has contributed to an increased interest of scholars in wellness tourism research, a topic that warrants examination in future studies (Mishra & Panda, 2022; Tiwari & Hashmi, 2022; Bočkus et al., 2023; Chen et al., 2023; Sthapit et al., 2023).

Since 2020, the most investigated topics have been those related to the destination image (e.g., Tiwari & Hashmi, 2022), service experience (e.g., Chen et al., 2013), and loyalty (e.g., Han et al., 2018). Concerning tourist experience, the most studied variables are those related to authenticity (e.g., Loureiro et al., 2013), involvement (e.g., Loureiro et al., 2013), and well-being (e.g., Liu et al., 2023). These data provide valuable insights into how the global health crisis has influenced interest in wellness tourism research. The pandemic may have altered travellers' perceptions of destinations and the services they offer (Wen et al., 2021; Bhatta et al., 2022), leading researchers to explore how destinations have adapted to ensure safety, meet travellers' needs, and build loyalty during uncertain times (Handler, 2022; Li & Huang, 2022). The pandemic´s disruptions have likely influenced the demand for authentic and meaningful travel experiences (Liu et al., 2023). With health concerns in mind, travellers may have shifted their focus towards more mindful and immersive experiences (Chen et al., 2016), which could explain the continued investigation of authenticity, involvement, and well-being variables in wellness tourism (Loureiro et al., 2013). Understanding how travellers seek genuine connections, engage actively, and prioritize their well-being amid the pandemic could help tourism stakeholders cater to evolving preferences (He et al., 2021; Xie et al., 2021). Overall, the prominence of these topics in wellness tourism research since 2020 showcases the resilience of the industry and its adaptability to the challenges posed by the pandemic. Scholars and practitioners recognize the importance of addressing travellers' changing needs and expectations during times of uncertainty (Mishra & Panda, 2022; Bočkus et al., 2023).

6. Implications and Limitations

This bibliometric review on wellness tourism allows researchers, practitioners, and industry stakeholders to identify the current research trends. It helps pinpoint the most studied topics, emerging areas of interest, and potential gaps in the existing literature. The analysis of co-authorship and co-citation networks in the review offers insights into the collaborations and influence among researchers (Hanna & Abdul, 2023). This can foster future collaborations and encourage knowledge exchange within the academic community (Rocio et al., 2023). Moreover, this investigation contributes to understanding how the COVID-19 pandemic has affected wellness tourism research. It provides insights into the emergence of new topics, the shift in research focus, and the most studied areas during the pandemic. Industry stakeholders in wellness tourism can use the review's findings to adapt their offers, marketing strategies, and services to cater to changing traveller needs and demands.

While the paper makes valuable contributions, it is essential to acknowledge and address certain limitations. One notable limitation is relying on a single database, WoS, for data retrieval rather than multiple sources. Although the authors believed that WoS provided a substantial representation of relevant papers (Chen et al., 2021; Mihalic et al., 2021; Pahrudin et al., 2022; Coll-Ramis et al., 2023; Santos-Rojo et al., 2023), operating several databases would have ensured broader coverage of the topic. Furthermore, the inclusion criteria excluded unpublished working papers, book reviews, conference proceedings, and doctoral theses, potentially omitting relevant research. Additionally, the study's focus only on publications in English led to the oversight of valuable research conducted in other languages. The study's data analysis was restricted to VOSviewer software (Van Eck & Waltman, 2010). However, incorporating tools like R-Package can provide an alternative and complementary data perspective. Addressing these limitations in future research would provide a more comprehensive and diverse view of the subject matter.

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Examining the Relationships between Tourists' Connectedness to Nature and Landscape Preferences

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ABSTRACT

The main purpose of the present research is to examine the relationships between the level of tourists' connectedness to nature (CTN) and their landscape preferences (LP). For this purpose, the study first measures the construct validity and reliability of the CTN scale developed by Mayer and Frantz (2004) to confirm its appropriateness for different cultures and the originally one-dimensional structure of the scale is tested. Second, the LPs of domestic and foreign tourists are determined from six different landscape pictures and a relationship is sought between the tourists' CTN levels and LP. The primary data were gathered through surveys of foreign and domestic tourists staying in Antalya. The relationships between the CTN and LP were determined by multinomial logistic regression analysis (MLRA). According to the findings, as the level of tourists' CTN increases, their preference levels for shopping malls and historical places also increase. It has also been determined that as the CTN increases, preferences for beaches increases, too. Women who prefer shopping malls and historical sites are less likely than men to prefer wildlife. Also, as the preference for historical sites increases, the CTN level increases, too. The results of the study will be beneficial for planners to manage the landscape in destinations and to use the resources effectively.

KEYWORDS

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1. Introduction

Nature is an indispensable element for the continuity of human life. This statement is based on Wilson's (1984) biophilia hypothesis and asserts that humans have an intrinsic bond with nature, and the human relationship with the natural world is crucial for our well-being and survival. The hypothesis also argues that humans have an instinctive compulsion to seek out and engage with nature and non-human organisms, and this connection has a significant impact on physical, mental, and emotional health (Wilson, 1984; Kellert & Wilson, 1993). With this in mind, environmental protection and sustainability have been the main themes of many studies since the 1980s (e.g., Butler, 1991; Westley & Vredenburg, 1996; Levett, 1998). Studies aimed at making sense of the complex linkages between humans and nature, identifying barriers to environmental behaviors, and filling the gaps about how environmental awareness and knowledge evolve into environmental attitudes and behaviors have made significant contributions to the field of environmental psychology (Kollmuss & Agyeman, 2002).

A number of related aspects of these concepts are of critical importance. These include evaluating environmental psychology; providing environmental sustainability and protection of nature; personal characteristics, such as connectedness to nature (CTN); nature-oriented experiences, such as spending time in nature; relationship and interaction with nature; accumulating knowledge and awareness about nature; esteeming nature; and pro-environmental attitudes and behaviors (Richardson et al., 2020). In this regard, CTN provides an idea about how people define themselves in terms of their environmental orientation, how they identify themselves with nature, whether they see themselves as a part of nature and their position in the environment as a living organism and how they make sense of their relationship with nature (Restall & Conrad, 2015). Similarly, Zylstra et al. (2014) define CTN as a sustainable relationship between human beings and nature, including cognitive, emotional and experiential awareness, behaviors, and attitudes. The fact that individuals with a high level of connectedness to nature have a more protective tendency towards the environment and the existence of relations between individuals' sustainable behaviors and their state of connectedness to nature (Barrera-Hernández et al., 2020) demonstrates the importance of the study subject, both in the literature and in practice.

The CTN, which makes a significant contribution to environmental psychology, also creates an important framework in terms of tourism's close relationship with nature. First of all, many tourism activities require the existence of a natural environment and resources in every aspect, from transportation, entertainment, travel, food and beverage services to accommodation (Buckley, 2011). Furthermore, as natural areas are an important source of attraction for tourists (Buhalis, 2000), they create a great tourism demand. The uncontrolled development of tourism demand, especially in virgin lands, and the burdens of mass tourism on natural resources and ecosystems result in environmental degradation, erosion of the soil and pollution of air, land and water, and especially of beaches (Das & Chatterjee, 2015). Moreover, the excessive consumption behaviors of tourists in popular destinations do immeasurable damage to natural habitats and historical heritage sites (Neto, 2003). At destinations with limited resources, the increasing presence of tourists leads to environmental concerns about preserving and conserving the natural environment (Øian et al., 2018).

Consequently, destination managers and relevant stakeholders who want to benefit from the positive aspects of tourism want to determine the acceptable level of visitor usage that does not exceed the ecological carrying capacity and the level of environmental impact of use by tourists. In this respect, it is important to evaluate the pro-environmental behaviors of visitors at an individual level, according to the type of activity (hunting, fishing, etc.) (Wolf et al., 2019) so as to minimize the environmental impact. With this in mind, this study aims to examine the connectedness to nature and landscape preferences of visitors to one of Turkey's most visited cities, Antalya. In aiming to examine this subject, the focus has been on monitoring the state of the art in terms of one of the most important subjects in tourism, namely sustainability, and clarifying preferences relating to sustainable behaviors.

It is known that the development of tourism affects landscape planning and arrangements in the areas where tourism is carried out, along with the negative effects that it has on the natural environment. Bastian et al. (2015) emphasize that an alluring landscape and experience in nature are the most essential factors for tourists to visit a place. From this point of view, the landscape is a symbolic indicator of the

meaning that people attribute to nature and the environment, and also refers to the visual, cultural and ecological output that emerges as a result of the interaction between people and nature (Jiménez-García et al., 2020). Sandell (2016), on the other hand, states that landscape is a heterogeneous structure in which people live which they are a part of, unlike land, field or nature. In this regard, landscape plays an important role in developing products in tourism, creating touristic attractions, making recreational areas functional, and highlighting visual aesthetics, harmony and authenticity in destinations (Skowronek et al., 2018). For this reason, the present study aims to examine landscape preferences as a symbol of touristic behavior antecedents and match it up with tourists' CTN level to make a contribution to more accurate landscape planning.

Environment-oriented behavior of tourists, which is important for the sustainability of tourism, has been frequently discussed and studied together with the concepts of pro-environmental behavior (Dolnicar et al., 2017; Han & Hyun, 2017; Han et al., 2018; Olya & Akhshik, 2019; Yan & Jia, 2021; Tang et al., 2021; Loureiro et al., 2022); responsible behavior (Han et al., 2016; Xu et al., 2018; Dias et al., 2021; Fenitra et al., 2021); green tourist attitude and behavior (Leonidou et al., 2015); and environmental knowledge (Najjarzadeh et al., 2018). Nonetheless, research examining the relationship between CTN and tourism is relatively limited (e.g., Moriki et al., 2018; Cheung et al., 2019; Liu et al., 2019; Çınar & Duran, 2021).

Another aspect of the landscape that is examined in tourism studies is tourists' landscape preferences and perceptions (e.g., Siegrist et al., 2008; Fyhri et al., 2009). Studies reveal that individuals' attitudes, values and beliefs towards nature affect their landscape preferences (Yılmaz et al., 2016). However, studies examining the relationships between connectedness to nature and landscape preferences have focused on education (e.g., Tang et al., 2014; Yılmaz et al., 2016; Taylor, 2018; Van Heezik et al., 2021) and are relatively new and still in the development stage (Davis & Gatersleben, 2013; Bastian et al., 2015). It is important for tourism planners, marketers, and tourist product providers to consider whether tourists/visitors really tend to prefer nature-based tourism landscapes for vacations, if they are characteristically connected to nature, or whether they should be offered an integrated tourism experience.

Therefore, the study aims to fill the gap about CTN and landscape preferences in tourism literature and aims to contribute to more sustainable alternatives in public or private sector landscape planning. It tries to make sense of the tourists' CTN through their landscape preferences, and thus, tries to determine whether a linear relationship can be established between landscape preferences and CTN, by considering possible scenarios for areas where tourism can be concentrated, based on preferences, and in which cases and under which conditions such concentration will not harm the environment. In the absence of such a relationship, another aim of the study is to reveal which variables may be related to landscape preferences; it is thought that there is a linear relationship between landscape preferences and CTN and landscape preferences contain clues about tourists' CTN. Thus, it may be possible to formulate an opinion about CTN based on landscape preferences.

This study focuses on contributing to this development and consists of two steps. First, the construct validity of the scale for measuring CTN devised by Mayer and Frantz (2004) was examined with exploratory factor analysis (EFA) to demonstrate its one-dimensional structure and confirmatory factor analysis (CFA) was conducted to determine its conformity with the CTN scale's original factor structure. The reliability of the measurement scale was also analyzed. Second, the relationships between the level of CTN and landscape preferences (LP) of domestic and foreign tourists visiting Antalya were examined by a quantitative research method. Findings related to tourists' landscape preferences obtained in this research are expected to contribute to tourism planning and policy development.

2. Literature Review

2.1 Connectedness to Nature

The connectedness to nature trait influences both how a person thinks about oneself to how one conceptualizes one's relationship with others. Spending time in nature helps a person feel connected to nature. At the end of this process, an individual is more likely to care about and protect nature (Beery & Wolf-Watz, 2014; Häyrinen & Pynnönen, 2020). In a study, Tam (2013) analyzed CTN as a fundamental concept for environmentalism. CTN describes the degree to which a person feels they are a part of nature. Theoretically, CTN serves as a basis for pro-environmental integrity, attitudes, and behaviors. It has also been argued that if people recognized themselves as a part of nature, they would not harm nature (Mayer & Frantz, 2004; Frantz et al., 2005; Arendt & Matthes, 2014). Since nature can be interpreted as a collective community to which people belong, it is suggested that collective identity also plays a decisive role in connectedness to nature (Restall & Conrad, 2015). As a consequence, in terms of personal benefits, CTN is related to happiness, well-being, awareness, innovative thinking and other positive indicators (Lankenau, 2016; Fretwell & Greig, 2019; Flynn et al., 2022).

In the study of Thompson and Barton (1994), the relationship between two motives underlying attitudes towards nature was examined: ecocentrism and anthropocentrism. Anthropocentrists see the physical environment as a tool to be used to achieve goals, not as having its own values. Ecocentrists, on the other hand, perceive the environment as a context that enriches the human spirit, independent of its contribution to one's material goals. Anthropocentrists are utilitarian; nature is valuable because it can contribute to the satisfaction of human desires. For ecocentric individuals, nature has an independent value and must be morally evaluated on its own.

Moreover, according to the study of Riechers et al. (2020), the stimulation of senses and motoric development, and especially the individual's own childhood experiences, have been accepted as components of experiential nature connectivity. Experiential connectedness has been associated with emotional connectedness. Self-identification with the landscape, knowledge about environmental practices, and especially knowledge of certain historical events have emerged as the key components of cognitive connectedness to nature. In addition, general environmental education affects cognitive connectedness. Affective commitment has also been associated with philosophical connectedness. Philosophical connections have emerged from discussions of different concepts of sustainability or the need to fit the future; a critical view of consumerism increases philosophical connectedness to nature.

There has been a shift from cognitive explanations (Reid et al., 2010) to more emotional or empathy-based explanations (Chen et al., 2015) about the reasons for environmental friendliness. These explanations emphasize the linkages and emotions between person and nature. This human-nature linkage is defined as a natural human need and it is argued that having a suitable bond keeps people healthier (Wyles et al., 2019). Environmental identity, unity with nature and commitment to nature are conceptually similar and are measured in similar ways (Ojala, 2009).

There is appreciable documentation in the literature that individuals make great efforts to exist socially, and they have a universal need for belonging. Exclusion has catastrophic psychological outcomes, because in the absence of recognition, peering, and appreciation in affiliate relationships, human life loses a great deal of its meaning. People who believe that their social ties are insufficient feel lonely. Close relations that prevent loneliness need a sense of trust in the sensitivity of the other. Therefore, close relationships have more continual, varied and lasting effects on the thinking, feelings and behaviors of the other person (Gössling et al., 2016; Slatcher & Selcuk, 2017). On the other hand, egoistic concerns are based on seeing oneself superior to other people and other living things. Although egocentric values are generally accepted as opposed to environmentalism, it is possible to expect environmentalist behaviors from people with high egoism when they recognize a hazard arising from environmental destruction. According to the social-altruistic approach, one becomes interested in environmental problems when one evaluates such problems in terms of costs or benefits based on individuals, a social organization, a country, or the whole of humanity.

Alternatively, according to the biospheric approach, environmental concerns stem from the fact that all living things are based on a common value (Schultz, 2000). Spirituality is also one of the most important factors that define commitment (Willson et al., 2013). According to Chawla (1998), sensitivity to nature appears to be linked to certain forms of meaningful life experiences.

In the study conducted by Rosa et al. (2019), it was revealed that CTN has an indirect effect on leisure time satisfaction. This effect was influenced by nature connectedness behavior in childhood. Also, in the study of Wheaton et al. (2015), it was found that the CTN levels of the visitors increased during a three-hour tour but returned to their pre-visit levels after three months. As reported in the study by Shen and Saijo (2008), high household income, older ages and high education levels increase environmental concerns. Furthermore, in Taylor's (2018) study, it was detected that students of African origin prefer natural landscapes rather than urbanized surroundings, and their perceptions of nature and landscapes are the same as those of students from other ethnic groups.

According to the research of Liu et al. (2019), both genders have the same implicit or explicit attitudes towards the woman-nature relationship. Furthermore, the woman-nature relationship is effective on positive environmental intentions, and people can develop protective environmental behaviors under the influence of CTN. In addition, Davis and Gatersleben (2013) found that high levels of CTN presume transcendent and impressive experiences as positive, especially in the wild, whereas low levels of CTN predict more disturbing experiences. In their study on tourists, Derek et al. (2017) asserted that there was no consistency between expressed preferences and the natural features present around the tourists' accommodation. In addition, tourists were not interested in activities with a high nature criticality index. In the study of Hinds and Sparks (2008), it was revealed that emotional connection significantly affects the intention to relate to the natural environment, and environmental identity is a significant predictor in the absence of emotional connection. Moreover, in the study of Dietz et al. (2002), no significant differences were found between the genders in the nature- oriented value factor structure, but differences were found in the value priorities, where women ranked altruism as more important than men.

Social organization structures have been changing in recent times. For instance, in the USA, transformation in social structure in the last twenty-five years has been analyzed and it has been found that memberships of voluntary associations have decreased continuously and significantly. In the early 2000s, it has been argued that the conventional form of society (e.g., place-based) was eroded and resolved by the spread of technology, modernity, urbanization and globalization. In this regard, there is a transformation from place-based societies to more individual-centered ones. Individuals can be a part of special interest groups by engaging in various activities and commitment to anything is seen as one of the basic elements of belonging (Gössling et al., 2016).

According to Ernst and Theimer (2011), although environmental sensitivity itself is accepted as an emotional variable, its development depends on the interaction of outdoor experiences, positive human interactions, and information about the natural environment. Regarding the human-nature relationship, an emotional bond which develops between people and their environment can also be affected by the human-place bond. Place identity suggests that there is an emotional bond between people and particular places, and the degree to which particular environments meet a person's needs for a desirable activity will lead to place identity and place bonds.

Lastly, in several studies, the elements used for representing the natural environment have mostly positive connotations (e.g., forest, dolphins). The elements handled for symbolizing the built environment, on the other hand, have mostly negative connotations (e.g., firms, street). However, both natural and built environments have dangerous aspects. Therefore, according to Verges and Duffy (2010), it cannot be determined whether attachment to these surroundings changes as a function of positive and negative interpretations related to the concepts used.

2.2 Connectedness to Nature in Tourism

In the tourism literature, CTN has mostly been handled within the scope of environmentally responsible behavior (ERB). There are many studies on such behavior. A study conducted in South Korea revealed that the emotional value given to the experience in tourism has an impact on ERB (Kim & Thapa, 2018). A study conducted in China provided evidence that satisfaction from experience leads to ERB intention

(Cheng et al., 2022). While another study conducted in China found that memorable tourism experiences lead to ERB (Chen et al., 2023), a different study conducted in Australia found that personal characteristics were associated with ERB (Dolnicar & Leisch, 2008). While a study conducted in Taiwan found that aesthetic experience, ease of experience, and learning experience affect the biospheric value and the biospheric value affects the ERB within the scope of smart tourism (Lee & Jan, 2023), another study conducted in Taiwan revealed that ERB was affected by place attachment, recreational involvement and commitment to conservation (Lee, 2011). A study conducted in Malaysia similarly found that commitment to conservation has an effect on ERB (Patwary, 2023). In another study conducted in Korea, it was revealed that the perception of the climate crisis and tourist experiences have an impact on ERB (Han et al., 2016). Moreover, in a study conducted in national parks, it was revealed that place attachment has an effect on ERB (Sthapit et al., 2022). In addition, altruism has been found to be effective on ERB (Park et al., 2022). Overall, it turns out that ERB is related to the tourism experience, place attachment and perceptions and attitudes towards environmental problems.

ERB is also a subject within the scope of planned behavior theory. In a study conducted on ecotourism behavior - which indicates an area where ERB can be addressed in tourism - it was found that environmental attitudes, subjective norms and perceived behavioral control have an effect on ecotourism intention. In addition, the perceived usefulness of ecotourism, biospheric value and ecotourism self- identity have been found to be influential on environmental attitudes (Lee & Jan, 2017). In a study conducted in China, it was revealed that place attachment and place identity are influential in the formation of ERB intention (Chow et al., 2019). In a study conducted in Thailand, it was found that destination attachment and nature-based tourism experience are influential in the formation of pro-environmental attitudes. On the other hand, a vacation mindset and different social norms had a negative effect on pro-environmental attitudes (Chubchuwong et al., 2015). In another study conducted in the Canary Islands, it was determined that environmental concerns, environmental knowledge and eco-guilt had an indirect effect on the intention to revisit the destination (Bahja & Hancer, 2021).

One of the few studies on CTN in tourism was carried out in China. CTN indirectly affects pro-environmental behavior through the perceived value of cultural ecosystem services, place attachment, and event attachment (Zhang et al., 2023). In another study conducted in Western Australia, it was found that personal norms and CTN affect pro-environmental behavior, while social norms did not (Pearce et al., 2022). In another study carried out in China, it was revealed that individuals who support the view that growth should be more limited and who are more worried about the climate crisis have a desire to be in close contact with nature, and wish more strongly to escape from routine and urban phenomena, while individuals whose motivations are for new abilities and skills and who seek to develop new experiences and social contacts rather support the view that humans have priority over nature (Luo & Deng, 2008).

In more related studies, Ojala (2009) found that while leisure activities in nature predicted the ecological worldview of people with a high level of emotional CTN, the same prediction was not realized in people with low CTN. In the study by Wang et al. (2020), it was revealed that internal and external religiosity has a direct impact on pro-environmental behaviors in hotels through simple consciousness and CTN. In the studies of Qiu et al. (2018), which investigated the sensory dimensions of place and its effect on sustainable tourism, it was found that CTN does not have a direct effect on pro- environmental behavior but has an indirect effect through place attachment. In a study examining the demand structure of nature-based tourism with reindeer visits in Norway (Lindberg et al., 2019), it was found that avoiding negative impacts on wildlife habitat was a priority among tourists and this was more dominant among non-Norwegians. CTN predicted their preference for visiting the reindeer facility, while intrinsic values implicitly predicted these preferences through the level of CTN.

In a study conducted with 82 Chinese tourists who visited Antarctica, it was determined that the reasons for visiting pure nature are in a low percentage. However, most of the visitors commented on the importance of protecting and preserving the environment and appreciating wild nature. It turns out that visitors have a reasonably close relationship with nature, though their environmentalist scores are not high (Cheung et al., 2019). In another study (Wheaton, Ardoin, Hunt, Schuh, Kresse, Menke & Durham, 2016) on visitors who participated in a tour to watch elephant seals in national parks, it was found that the visitors' CTN increased in the first 3 hours of the tour but returned to pre-visit levels after 3 months.

In the study of Beery and Wolf-Watz (2014) on outdoor recreation and nature-based tourism, it was revealed that there is a minimal relationship between CTN measures and self-reported environmental behavior. It has been argued that there is a material and objective perspective in the measurement of CTN and this perspective ignores perception, value and expression.

In the study of Moriki et al. (2018) on nature-based tourism and CTN, it was showed that links exist between CTN, or the feeling of being related, and appreciation of the body. However, though this feeling of connection is associated with appreciation of the body, it is not associated with self-esteem. In addition, it has been mentioned that the direct relationship developed with nature through nature-based tourism also has an effect on CTN. In another study (Rosa et al., 2019), it was determined that taking part in nature-based leisure activities as a child positively affects CTN, encourages life satisfaction and participation in nature-based leisure activities in adulthood.

In another study, conducted in Poland to determine the attitudes of local people towards nature-based rural tourism activities and their level of CTN (Strzelecka et al., 2023), it was found that psychological and social empowerment had a significant and positive effect when the attitude towards nature-based tourism is explained by CTN. It was also determined that it had a direct and positive effect on tourism support. As seen in many studies conducted to measure CTN, CTN is closely related to feeling a relationship with nature and this relationship also supports pro-environmental behavior.

2.3 Landscape Preferences

Participants who consider the psychological and biological characteristics of the landscape, rather than its functional features, are more environmentally centered; Van den Berg et al. also concluded that the perceived beauty of a landscape was not affected by group differences in any way (Van den Berg et al., 2006). A different study revealed that demographic factors are important in landscape preferences, but less decisive than the selected landscape indicators (Ode et al., 2009). So, perception in landscape preferences causes a preference behavior together with the individual's psychological mechanism. A study on landscape preferences by Lyons (1983) found demographic factors affect landscape preferences and this is a cumulative process.

Although some academics object to the assumptions that leisure time behaviors and landscape preferences are a function of human genetics, and evolutionary adaptation, the biophobia thesis persists in the literature (Taylor, 2018). On the other hand, repetitive patterns, rhythms, and sharp forms are often seen as important visual features in people's reactions to landscapes and shape their preferences, unlike random, scattered, fuzzy or dispersed forms. Thus, legibility factors play an important role in environmental preferences (Abello & Bernaldez, 1986).

In the study of Hagerhall et al. (2004), the connections between landscape preference and fractal (complex geometric shapes) features were researched, and it was concluded that many natural forms motivate the preference for fractals. The literature on landscape aesthetics has identified nine key concepts that define visual character. These concepts refer to measurable features of the landscapes (Ode et al., 2009) but were not used in the present study.

Like environmental determinism, the early discipline of cultural geography had a materialistic understanding and was concerned with visible transformations of the landscape and human culture through population and settlements, with natural resources as physical forms of production. With more recent cultural trends, the environment has begun to be treated not as a clearly definable objective reality, but as a conceptual structure related to the social one and including values and norms that differ in various social contexts (Beery & Wolf-Watz, 2014). For this reason, the artificial environment and the natural environment assume different representations as structures corresponding to different phenomena in the social context.

The importance that an individual attaches to an object is related to what place this object finds in the person. In choosing different landscapes to be part of, it is thought that genders will differ in their relationship with nature and the importance they give to it. Indeed, it is understood from the expression "mother nature" (Liu et al., 2019) that nature evokes the female sensibility more. In the study by Liu et al. (2019), with the implicit association test on women and men, it was revealed that both genders agree

that women are more related to nature and likening nature to a woman encourages more CTN and pro-environmental behavior. CTN partially mediated the anthropomorphic effect on environmental behavior. It is seen that the analogy of nature to women is common among women and men and, since nature is associated with women, CTN is felt and protective behavior is encouraged. In addition, CTN has an indirect, if not direct, effect on pro-environmental behavior.

According to the literature, the following hyphotheses are proposed in this study:

H1. If the CTN level of the tourists increases, their preference level for natural landscapes will also increase.

H2. Tourists who prefer artifical landscapes are less likely to prefer natural landscapes.

H3. There are differences in landscape preferences between women and men.

3. Method

The primary purpose of the research is to predict the relationships between tourists' connectedness to nature and their landscape preferences (see also the section on landscape preferences of tourists). In accordance with the primary aim of the research, the construct validity and dimensions of the CTN scale developed by Mayer and Frantz (2004) were analyzed and the level of CTN of tourists was assessed. Secondly, the relationships between tourists' landscape preferences and CTN levels were analyzed by multinomial logistic regression analysis.

To determine the preferences, participants were asked to choose from six pictures of different landscapes (beach, forest, historical site, shopping mall, city and a wildlife area). The landscapes were catoegorized according to their dominant characterics. Therefore, forest, beach and wildlife were classified as natural landscapes, while historical sites, shopping centers and cities were categorized as cultural or, in other words, artificial landscapes (Skowronek et al., 2018; Terkenli, 2021). The analysis results were assessed according to this bipolar scale, aiming to give an idea of tourists' behaviors to tourism policymakers and planners.

For this purpose, a quantitative research design and a survey technique were implemented. Surveys were carried out by a four-person team in June-July 2021 among domestic and foreign tourists who visited Antalya. The population of the study was all the tourists who visited Antalya during June-July 2021. Because the exact size of the population was unknown, with a simple random sampling method, maximum variability is assumed to be 0.5. The confidence level is 95%, confidence interval +/-5 and standard deviation is 1.96 (Sarmah et al., 2013). The sample size was 384. 384 surveys were collected and, after eliminating incomplete surveys, 352 surveys remained for analysis.

3.1 Measurement Scale

The validity and the relability of the scale were examined to determine the one-dimensional structure of the CTN scale developed by Mayer and Frantz (2004). The scale construct validity was scrutinized with exploratory factor analysis (EFA) and reliability analysis (RA) was performed. In the study, the CTN analysis performed by Mayer and Frantz (2004) was used to quantify the experience of an emotional individual connection with nature. The CTN scale consists of 14 items and has a five-point Likert-type structure ranging from "strongly disagree" to "strongly agree". Three statements (4, 12 and 14) of the scale are reverse scored. The Cronbach Alpha value of the one-dimensional scale is 0.84. The scale was translated into Turkish using a two-way interpretation procedure (also known as 'back-translation'). This method involves a native Turkish speaker with excellent English proficiency translating the scale into Turkish, and the resulting Turkish form being translated back into English by an independent English-speaking expert with excellent Turkish proficiency (Vallerand, 1989).

Before the survey, the participants were informed about the scale, its contents and purpose, and their informed approval was received for their participation. It was observed that the participants completed the scale survey within 10 minutes. EFA was performed with SPSS 23 to determine the dimensionality of the scale (Embretson & Reise, 2000). Mean, standard deviation, skewness-kurtosis, asymmetry index (descriptive analysis) and reliability analysis (Cronbach's Alpha) were also applied.

3.2 Tourists' Connectedness to Nature and Landscape Preferences

To determine the relationship between tourists' CTN and LP, the CTN scale, whose construct validity and reliability had been previously verified, was used in Turkish sample. After it was approved by a sample group of 20 participants that the scale expressions were understandable, validity and reliability of the scale were tested with 210 participants. After testing the scale, the study was conducted over 352 participants from the remaindes 384 questionnaries. In addition, six pictures were presented to the participants, and they were asked to specify their holiday preferences (beach, forest, shopping mall, historical site, city, wildlife area). At this stage, sample selections were selected by both researchers in which the most prominent elements of the landscape are seen. After their consent for participation was obtained, the completion of the survey took approximately 12 minutes.

In the study, the data were collected by survey using the quantitative research method. For data analysis, multinominal logistic regression analysis was executed to figure out the relationship between the participants' level of CTN by gender and their landscape preferences. In social sciences, logistic analysis and multinomial logistic regression analysis are the appropriate techniques when the dependent variable is categorical (Cameron & Trivedi, 2010). Multinominal logistic regression analysis is a technique that allows comparisons between disparate categories in studies where the dependent variable consists of more than two unsorted categorical structures (Bayaga, 2010) and clarifies cause and effect relationships between dependent and independent variables (Hosmer et al., 2013).

4. Results

4.1 Connectedness to Nature Scale

The research group consisted of 100 women (47.6%) and 110 men (51.4%), a total of 210 volunteer participants staying in Antalya for tourism purposes. EFA was applied first to test the construct validity of the CTN Scale. Since the 4th, 12th, and 14th items were scored reversely, a conversion process was performed before the analysis. It was observed that three sub-dimensions with eigen values greater than 1.00 were formed for 14 items before rotation in the EFA. The resulting sub-dimensions explain 60.674% of the variance (first sub-dimension 41.26%, second sub-dimension 11.776%, third sub- dimension 7.637% and Cronbach's Alpha coefficient = 0.82). After the procedure to test the validity of the sample size, it was observed that the KMO value was 0.875, Bartlett's Sphericity test and the Chi- Square value were significant ($p< 0.05$), and it was determined that the research data was applicable for factor analysis and factorizable (X^2=1355.29, df=91), $p<0.001$) (Tabachnick & Fidell, 2013; Büyüköztürk, 2019).

As a result of the procedure, factor load values of the reverse coded items 4 (I usually feel disconnected from nature), 12 (When I think of my place on Earth, I consider myself the highest member in the hierarchy existing in nature), and 14 (My well-being is independent of the well-being of the natural world) were found to be below 0.40 and were extracted from the scale. The recommended factor load value for a sample between 200 and 250 participants is 0.40 and above (Hair et al., 1998). In addition, it is stated that a factor load ranging between 0.30 and 0.45 can be taken as the lower cut-off point in factor formation in scale studies (Büyüköztürk, 2019). After removing the three items, the reliability value increased significantly (Cronbach's Alpha coefficient =0.89). Varimax vertical axis rotation was performed using principal component analysis. Based on the eigen values and the scatterplot, a one- dimensional solution was determined to be the best. The eigen value of the one-dimensional structure is 5.581, which explains 50.739% of the variance. Table 1 contains information about EFA.

Table 1. Descriptive Information about CTN and Exploratory Factor Analysis

Connectedness to Nature Scale Items	Mean	Standard Deviation	Asymmetry	Kurtosis	Alpha	Factor Loadings
1. I often feel a sense of oneness with the natural world around me.	4.06	0.06	-0.820	-0.195	0.75	0.82
2. I think of the natural world as a community to which I belong.	4.13	0.06	-0.982	0.218	0.76	0.83
3. I recognize and appreciate the intelligence of other living organisms.	4.30	0.05	-0.964	0.852	0.64	0.72
5. When I think of my life, I imagine myself to be part of a larger cyclical process of living.	3.91	0.05	-0.405	-0.102	0.65	0.73
6. I often feel a kinship with animals and plants.	4.28	0.05	-1.091	1.352	0.60	0.67
7. I feel as though I belong to the Earth as equally as itbelongs to me.	4.07	0.06	-0.751	0.121	0.80	0.86
8. I have a deep understanding of how my actions affect the natural world.	4.22	0.05	-1.145	1.368	0.41	0.50
9. I often feel part of the web of life.	4.12	0.05	-0.594	-0.052	0.81	0.86
10. I feel that all inhabitants on Earth, human, and nonhuman, share a common 'life force'.	4.44	0.05	-1.186	1.443	0.61	0.68
11. Like a tree can be part of a forest, I feel embedded within the broader natural world.	3.48	0.06	0.131	-0.542	0.46	0.54
13. I often feel like I am only a small part of the natural worldaround me, and that I am not more important than the grass on the ground or the birds on trees	4.01	0.06	-0.460	-0.687	0.42	0.49

Alpha= Adjusted item-total correlation
Source: Own Elaboration

According to Table 1, factor load values of all items are positive between 0.49 and 0.86 (X^2=1223.23, df=55, p<0.001). It can therefore be said that factor load values have a moderate to high level of relationship (Büyüköztürk, 2019). Adjusted item-total correlation values ranged from 0.42 to 0.81. The correlation coefficient indicates a high level between 0.70 and 1.00; a medium level between 0.70-0.30and a low level between 0.30 and 0.00 (Büyüköztürk, 2019). Therefore, it is seen that the item-total correlation values are at high and medium levels.

To confirm the one-dimensional structure of the CTN scale, confirmatory factor analysis (CFA) was performed with the data obtained from a different data group. The research group was formed of 92 women (54.1%) and 78 men (45.9%), a total of 170 volunteers who were staying in Antalya tourist accommodation establishments. Participants were informed about the study and their approvals were received. The responses to the scale took approximately 10 minutes. The CTN is a five-point scale ranging from "strongly disagree" to "strongly agree" and consists of 11 items (items 4, 12 and 14 were deleted based on the EFA results of validity and relability of the scale). CFA was executed with LISREL 8.7 to test the one-dimensional structure of the scale. The maximum likelihood method was chosen to test the model and to assess the fit of the model: X^2, the Comparative Fit Index (CFI), the Goodness of Fit Index (GFI), the Normed Fit Index (NFI), the Non-Normed Fit Index (NNFI), the Standardized Root Mean Square Residual (SRMR), and the Root Mean Square Error of Approximation (RMSEA) were analyzed. Finally, the Cronbach Alpha reliability coefficient and composite coefficient (CR, compositereliability) of the items were examined.

Figure 1. Path Diagram of the Model

Chi-Square=109.05, df=43, P-value=0.00000, RMSEA=0.095
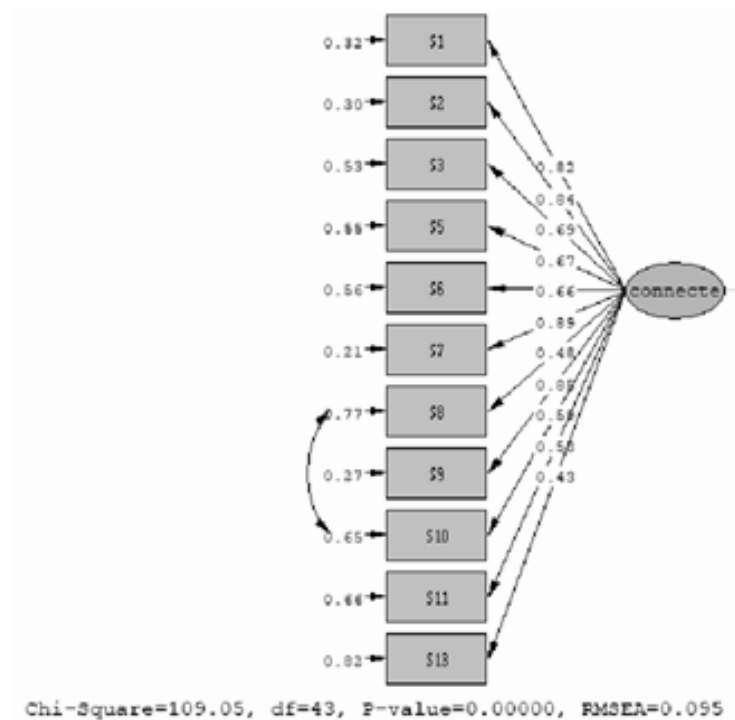
Source: Own Elaboration

Based on CFA, the path diagram of the model is presented in Figure 1. In Figure 1, it appears that factor load values for CFA are between 0.43 and 0.89; error variance values are between 0.21 and 0.82; and all of them reach a significant level. The explained variance and load values are considered sufficient asthey are at medium and higher levels (Büyüköztürk, 2019). The Cronbach Alpha reliability coefficient of the scale was calculated as 0.91, and the CR value was calculated as 0.71. It can be stated that the reliability of the scale is high (Büyüköztürk, 2019).

As seen in Figure 1, the error variance values of the 8th and 10th items were equalized to reduce the Chi-Square value. Item 8 ("*I have a deep understanding of how my actions affect the natural world.*") and item 10 *("I feel that all inhabitants of Earth, human, and nonhuman, share a common 'life force'*) are located accordingly to conform to the scale. In a one-dimensional structure, the two items are expressions that complement each other and are parallel in terms of commitment to nature. Therefore, the equalization of error variances in CFA is an appropriate operation. Goodness-of-fit values before and after CFA modification are presented in Table 2.

Table 2. Goodness-of-fit Values before and after Modification According to CFA

Goodness-of-fit	Before Modification	After Modification
X^2	160.04	109.05
Standard Deviation	44	43
c^2: x^2/sd	3.63	2.53
P	0.0	0.0
GFI	0.85	0.89
CFI	0.95	0.97
NFI	0.93	0.95

NNFI	0.94	0.96
SRMR	0.068	0.055
RMSEA	0.125	0.095
%90 C.J. RMSEA	0.10-0.15	0.073-0.12

Source: Own Elaboration

As presented in Table 2, the rate of the Chi-square value to the degrees of freedom is less than 3 (x^2/ sd=2.53), which explains that the model is accurate and shows acceptable fit (Kline, 2011). It is seen that RMSEA (0.095), SRMR (0.055), GFI (0.89), CFI (0.97), NFI (0.95), and NNFI (0.96) values are at acceptable values for perfect fit (Hu & Bentler, 1999). Among these fit indexes, RMSEA is 0.06 or less; SRMR is 0.08 or less; GFI, CFI, NFI and NNFI are 0.90 and above, an acceptable fit indicator for the model, and 0.95 and above represents a good fit index (Hu & Bentler, 1999). In addition, the RMSEA and SRMR values for the research model are less than 0.10, indicating that the model is at an acceptable level (Anderson & Gerbing, 1984; Cole, 1987). Thus, based on CFA, it was determined that the factor structure of the scale was acceptable, and the one-dimensional structure suggested by Mayerand Frantz (2004) was compatible with the study.

4.2 The Relations between Tourists' Connectedness to Nature and Landscape Preferences

The research group for this, the main part of the study, consisted of 167 women (47.4%) and 185 men (52.6%) a total of 352 volunteers who were staying in Antalya tourism accommodation establishments. According to the occupational status of the participants, 111 (31.5%) were actively working, 67 (19%) were unemployed, 96 (27.3%) were retired, 78 (82.2%) were students. Tourists who took part in the survey were asked about their landscape preferences (beach, forest, shopping mall, historical sites and wildlife photographs). According to the answers received, 103 (29.3%) of the tourists preferred beaches, 90 (25.6%) preferred forests, 43 (12.2%) preferred shopping malls, 74 (21.0%) preferred historical sites, and 42 (11.9%) preferred to travel to a nature-wildlife landscape. None of the sample group participating in the study chose the city landscape.

In this study, landscape preferences were chosen as the dependent variable for the model. Any categorical group of response variables can be selected as the criterion or reference group: the model fits equally well, achieving the same probability and fit values; only the values and interpretation of the parameters will fluctuate (Schafer, 2006). In this study, the category with the lowest frequency was used (5-wildlife landscape). The findings on the relationship between the participants' level of CTN by gender and their LP are presented in Table 3.

Table 3. Connectedness to Nature (CTN) and Landscape Preferences Model

Landscape Photograph		B	Std. Error	Wald	df	Sig.	RRR Exp (B)
Beach	Intercept	13.429	3.737	12.914	1	0.000	
	Female	-6.898	4.261	2.621	1	0.105	0.001
	Male	0b	.	.	0	.	
	CTN	-2.800	0.827	11.452	1	0.001*	0.061
	Female * CTN	1.316	0.962	1.872	1	0.171	3.729
	Male * CTN	0b	.	.	0	.	

Forest	Intercept	6.738	3.769	3.196	1	0.074	
	Female	-3.618	4.326	0.699	1	0.403	0.027
	Male	0b	.	.	0	.	
	CTN	-1.256	0.829	2.299	1	0.129	0.285
	Female* CTN	0.616	0.968	0.405	1	0.524	1.852
	Male* CTN	0b	.	.	0	.	
Shopping Mall	Intercept	13.763	4.032	11.652	1	0.001	
	Female	-13.802	4.698	8.632	1	0.003*	1.013
	Male	0b	.	.	0	.	
	CTN	-3.255	0.915	12.651	1	0.000*	0.039
	Female* CTN	3.299	1.073	9.446	1	0.002*	27.076
	Male* CTN	0b	.	.	0	.	
Historical Sites	Intercept	13.978	3.784	13.642	1	0.000	
	Female	-10.183	4.360	5.456	1	0.020*	3.781
	Male	0b	.	.	0	.	
	CTN	-3.022	0.842	12.892	1	0.000*	0.049
	Female* CTN	2.158	0.986	4.790	1	0.029*	8.658
	Male* CTN	0b	.	.	0	.	

CTN: Connectedness to Nature; Number of Observations: 352; LR $\chi 2(12)$ = 67.67; Prob >$\chi 2$ = 0.0001; Log likelihood = 456.628; Pseudo R2 = 0.183, p<0.001
Source: Own Elaboration

In the model related to the participants' level of CTN and landscape preferences, it was verified that there is a significant relationship between gender and CTN (R^2= 0.183, p<0.001). According to the findings, there is a significant relationship between the preferences of the participants for the beach and their level of CTN. The tourists' level of connectedness to nature increases the preference for the beach by 0.061 times. As the tourists' level of CTN increases, their preference for going to the beach also increases.

There is a significant relationship between female participants and their preference for shopping malls. The relative ratio for female participants relative to males would be expected to increase by a factor of 1.013 given the other variables in the model are held constant. In other words, women who prefer the shopping malls landscape are 1.013 times less likely than men to prefer the wildlife landscape.

There is a significant relationship between the preference of the participants for the shopping mall and their level of CTN. The level of CTN of the participants increases their preference to go to shopping malls 0.039. times. As the participants' level of CTN increases, their preference for going to the shopping mall also increases. A significant relationship was observed between female participants' preference for the shopping mall and their level of CTN. The relative risk for female participants relative to males would be expected to increase by a factor of 27.076 given the other variables in the model are held constant. In other words, women who prefer the shopping mall landscape are 27.076 times more connected than men to nature.

According to the model, a significant relationship is seen between female participants and their preference for historical places. The relative risk for female participants relative to males would be expected to increase by a factor of 3.781 given the other variables in the model are held constant. In other words, women who prefer the historical site landscape are 3.781 times less likely than men to prefer the wildlife landscape.

There is a significant relationship between the participants' preference for the historical site and their level of CTN. The level of CTN of the participants increases their preference for the historical place by 0.049. As the participants' level of CTN increases, their preference for historical places also increases.

There is a significant relationship between the preferences of female participants for the historical place and their level of CTN. According to the level of connectedness, the relative risk for female participants relative to males would be expected to increase by a factor of 8.658 given the other variables in the model are held constant. In other words, women who prefer historical sites landscape are 8.658 times more connected than men to nature.

As the participants' level of CTN increases, it is observed that participants prefer the beach (coefficient= 0.061, $p<0.001$) to the historical place (coefficient= 0.049, $p<0.001$), and the shopping mall (coefficient= 0.039, $p<0.001$) at a higher rate. Therefore, their preferences are ranked as beach, shopping mall, and historical place respectively. As the female participants' level of CTN increases, it is seen that they prefer the shopping mall (coefficient= 27.076, $p<0.001$) to the historical place (coefficient= 8.658, $p<0.001$) more than men. No significant relationship was found in other variables and H1 and H2 are partly accepted. H3 is accepted.

5. Conclusion

5.1 Theoretical Implication

In this study, CTN levels of domestic and foreign tourists visiting Antalya were measured with the scale developed by Mayer and Frantz (2004). The construct validity and one-dimensional structure of the scale were examined. The validity of the sample size was adequate. Research data were applicable for factor analysis. After removing three items, the scale's relaibility value increased significantly. The items' total correlation were between medium (0.30) and high (0.81) level. Based on CFA, the explained variance and load values were meaningful. The factor structure of the scale was acceptable and the one- dimensional structure of the scale was compatible with the study. The results demonstrated that the CTN scale was in a one-dimensional structure and the reliability was high (Cronbach's Alpha coefficient = 0.82).

With the relevant scale, the study tried to predict whether there was any relationship between the levels of connectedness to nature and preferences for wildlife, beach, forest, shopping mall and historical site landscapes. The results indicate that, as the level of CTN increases, tourists prefer beaches, shopping malls and historical places more. There was no relationship between the CTN of tourists and their preference for forest and wildlife in landscape preferences.

Regarding the results of the study, Rogers and Bragg (2012) state that the places where we spend our lives, especially homogenized places such as shopping malls, apartments, towers/skyscrapers, will weaken the sense of belonging and being a part of something. In this context, it can be interpreted that tourists who feel connected to nature, nevertheless, cannot stay away from shopping malls as a way of life. Remembering Verges and Duffy (2010), it may not be possible to determine whether attachment to the surroundings changes as a function of positive and negative interpretations relative to the concepts used. In reality, it may be accepted that shopping malls are a part of life. Moreover, human-place bonds could also play a role in the scene. Vining, Merrick and Price (2008) state that if individuals position themselves as having a self that is independent from the land, they will also think themselves separate from nature. Furthermore, it can be said that if the individual feels an attachment to nature in connection with their beliefs and values, they have the idea that nature is related to people or that people are an integral part of nature (Vining et al., 2008). From this perspective, values and beliefs are a meaningful part of CTN.

However, alienation remains one of the fundamental concepts in tourism research. On the one hand, MacCannell (1976) argues that alienation is in the "lifestyle", not in the life that it represents. Sparks et al. (2014) state that today people prefer a lifestyle that is disconnected from the natural environment and this separation will have dangerous consequences for future generations. Similarly, Rogers and Bragg (2012) state that human societies have been living in wild and natural areas since ancient times, but the rapid rise in urbanization has resulted in the disconnection of people from nature.

On the other hand, Baudrillard (1998) argues that leisure time as a concept is more comprehensible when compared to alienation or work. In the post-Fordist era, abstract social forces and norms have begun to influence the choices and behavior of tourists more. The branding of "most representative"

and "must- see" destinations discourages tourists from exploring a more real world. The preferences and tastes of tourists are now influenced by social media. Thus infrastructure, devices and technology can help travelers access nature (Xu & Li, 2021). For this reason, someone who prefers safer landscapes may still want to be in contact with nature. Thus, it is not inconsistent that tourists who are more connected to nature prefer shopping malls; they may prefer a safe contact with nature, somewhat removed from pure nature. The equivalence of something is perceived through social conditions and preferences are made accordingly. Hence, the lack of an intentional relationship between CTN and forest or wildlife may indicate that participants are alienated from pure nature but still may be in search of its meaning through indirect preferences (see Qiu et al., 2018; Lindberg et al., 2019).

Another result that was obtained from the study shows that as tourists' CTN increases, their preference for beaches increases. Although there is a tendency towards alternative areas in tourism, the demand for sea, sun and sand tourism has not decreased. Especially with the establishment of many hotels in coastal areas, the high price of sea view rooms compared to other rooms (Mendoza-González et al., 2018), the high demand for tourism from Europe and regions with colder climates to the Mediterranean coasts is among the most important indicators of this (see also, UNWTO, 2022). Moreover, the present study was carried out in Antalya, an important coastal destination for shopping, night life and natural tourism in Turkey and in the Mediterranean region of the country.

As the level of CTN of the participants in the study increases, the probability of choosing historical sites also increases. In the study carried out by Han and Hyun (2017), the importance of how a person defines and names themselves in the world where they expresses themselves naturally is emphasized, and it is stressed that individuals with high CTN tend towards environmentally responsible behaviors. They also concluded that visitors to museums show a high commitment to nature and environmentalist behaviors (Han & Hyun, 2017). The emotional value and experiences associated with these places may not affect their preferences for natural landscapes, even if they are sensitive to the environment. In this context, as the CTN level increases, the preference levels for the beach, historical place and shopping center all increase, showing that the values and attitudes of tourists are similar towards artificial and natural landscapes. It should be understood from this finding that a tourist who prefers to be in a shopping mall may also be connected to nature and it is clear that this would lead to misleading results if landscape preferences were typically differentiated as artificial/natural and a conventional estimation of people's CTN levels was made on this basis.

According to the results of the study, no relationship could be found between the tourists' CTN levels and their wildlife or forest preferences. It can be said that many independent variables, such as beliefs, values and living environment can be influential in making sense of the world and place. Sæþórsdóttir and Saarinen (2016) state that wildlife is a subjective concept in which the elements of culture, place and time are influential in the interpretation of wildlife by individuals. Wild environments that are commoditized for tourists who want to have authentic experiences in tourism, and that are shaped by socio-cultural mechanisms and the value attributed to them (Vidon et al., 2018) are interesting for some members of society, for other people wild environments feel untouched and do not create a feeling of being at home; they are seen as areas away from human influence (Vining et al., 2008). Wild areas can also be seen as scary and unsafe places for some people. In this context, tourists' need for safety has been the subject of many studies in tourism (e.g., Boakye, 2012; Seabra et al., 2013; Zou & Meng, 2020).

At this point, when the untouched nature of wild and protected environments encounters human influence or a venue is constructed specifically for tourism activities, it is still controversial whether they will maintain their features. The conditions in the pandemic that started in 2020 have brought up many discussions about human intervention in nature and the limit of human-nature relations. Furthermore, legibility factors play an important role in environmental preferences (Abello & Bernaldez, 1986) and forests and wildlife tours could be unsuitable for this situation. Moreover, the anthropocentric view of tourists could be prevalent and this view might restrain the tendency of their preferences. Moreover, it is thought that the fact that men prefer wildlife more than women is related to aspects of male tendencies that are different from female tendencies. This result can relate to differences in perception between males and females, as found in Yu's study (1995).

When the overall findings are assessed, it is observed that the level of CTN is high and that tourists identify themselves in this way. Also among the results obtained from this study, the preferences for shopping malls, beaches and historical sites among tourists who are connected to nature come to the fore. In particular, studies to be carried out on the commitment to nature may reveal "welfare-enhancing" results, both in terms of the individual and the society and in terms of the region where tourists are welcomed. For this reason, studies on the attitudes of tourists towards the environment are of great importance in terms of both theory and practice. In this context, it is thought that the present study will contribute to the literature.

Furthermore, testing the CTN scale in the Turkish context is another meaningful contribution of the study. The fact that the study was conducted together with the relationships between landscapes and CTN, which is also a precursor of environmentally responsible behavior, is noteworthy in terms of showing that CTN cannot directly predict landscape preferences. In this respect, it has been revealed that there are indirect relations between landscape preferences and CTN.

5.2 Practical Implication

For practical implications, in more preferred areas such as beaches, historical areas and shopping malls, reminders or signboards may be placed with little anecdotes from nature and thus, a healthy perpetual cycle can be provided from a communication perspective. Sensitivity to nature may be enhanced from an interactional perspective through interaction ritual chains and emotional energy (Goss, 2008). From the tourism management perspective, in designing historical sites, shopping malls and beaches, eco- friendly designs may be adopted. They may become symbols of environmental consciousness with eco event organizations and from the organizational and marketing perspective. On the other hand, wildlife and forest areas may be both protected and opened to tourists under regulation. For the tourists, the ideal has to be special areas for experiencing the peace of nature, but for a balanced relationship between nature and humans in cases of environmental subversion, the needs of nature should not be forgotten. In adopting environmental behaviour, tourists should be informed about the sensibility of nature and reminded of the need for a balanced relationship in both host and guest countries. Mindful learning experiences (Wang et al., 2016) will contribute to this. Host countries should promote an environment-friendly image and the guests should also sustain environmentally sensitive behaviours in the host country.

5.3 Limitations and Recommendations

There are also limitations of the study. The English language of the survey might not be well understood by the participants. In addition, some forms can both take place in nature and be cultural, like a natural museum. The study did not test this. Typical forms of the landscapes were presented to participants in the form of single-dimensional landscape preference photographs. Moreover, studies can be carried out in a variety of locations, and with a range of participants; the current study was conducted at a single location and the participants were all tourists who were staying at tourist accommodation establishments. It would also be beneficial to carry out the study in different international destinations where nature-based or wildlife tourism is dominant, such as among visitors to national parks.

In addition, although it is emphasized that the scale developed by Mayer and Frantz (2004), which was used in the current study, has experiential, affective and cognitive features, the cognitive side of the statements in the scale predominates (Sparks et al., 2014). Sparks et al. (2014) state that the concept of connectedness cannot turn into behavior or attitude in every area (it may not trigger a planned behavior), and identities will be an important element in measuring connectedness. In this regard, the validity of scales other than the scale used in the current study can be tested. In addition, the landscape preferences used in the study should be categorized and investigated in a more systematic way in different types of destinations, similar to the study of Lukoseviciute & Panagopoulos (2021). More empirical studies in the field of tourism-nature connectivity will enable the collection of more comprehensive and generalizable results and further development of theories.

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Understanding Environmental Actions in Tourism Systems: Ecological Accommodations for a Regenerative Tourism Development

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ABSTRACT

The purpose of this paper is to investigate the transformation towards a regenerative tourism system based on a mindset change, communitarian and collaborative work. The study analyses the role of ecological hotels as agents of change. A qualitative design was used to analyse the relevance of hospitality environmental actions from the supply perspective as a driver for a regenerative development of tourism. Data was collected using semi-structured interviews with a total of 12 ecological accommodations. Results show that ecological accommodations have a big potential to be agents of change for regenerative tourism through their identity, their practices and their management and marketing. The paper argues that achieving a truly regenerative tourism model requires a shift both from the demand and supply side and a transformation of the current industrial operating model.

KEYWORDS

ARTICLE HISTORY

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1. Introduction

As a consequence of the increasing awareness of a potential climate change, more concern has been placed on environmental issues during recent decades. The authorities' calls to stop the world's natural ecosystems' degradation have been in line with sustainable development measures. One of the earliest calls to place environmental concerns on national policy agendas was the Brundtland Report "Our Common Wealth" by the World Commission on Environment and Development (1987). The report's concerns were poverty, inequality, and environmental degradation. The analysis of these problematics was conducted and recommendations were given to allow economic growth within a socially and environmentally sustainable context.

The sustainable movement has gained a lot of importance in the last two decades in the tourism context. A clear example is that from 1998, the year in which the United Nations Environmental Programme published the first report on tourism ecolabels (UNEP, 1998) – which encouraged their development by governments and NGO's –, there has been a rising number of ecological certificates in tourism. In 2001, the World Tourism Organization already identified 500 ecolabels and codes of practice within the tourism field (Font, 2002).

Tourism is a fruitful tool for economic development. As the United Nations World Tourism Organization pointed out, in 2017 it accounted for 10% of the global economy and it was projected to grow 3.3% each year until 2030 (UNWTO, 2018). However, the sector has a big dependency on the natural and socio-cultural heritage of destinations. The tourism industry has tremendous environmental, cultural and economic impacts that need to be addressed. As experts point out, there is the need for a better destination management that acknowledges the invisible burden of tourism – thus considering the net economic benefit – and that preserves tourism's valuable assets (Epler Wood, Milstein & Ahamed-Broadhurst, 2019).

To date, the sustainability concept has been the most widely used term in proposing solutions to the pressure placed by tourism on the environmental and cultural resources, on which the sector depends (Hussain, 2021). Sustainable tourism is based on three different pillars: the economic, environmental, and socio-cultural dimension (UNWTO, 2004) and it plays an important role in the 2030 Agenda and in the implementation of the 17 Sustainable Development Goals. However, is sustainability enough to address the challenges that the tourism industry and the world's ecosystems are facing? Experts call attention to regenerative tourism and state that sustainability within the tourism industry will not bring the necessary systemic change. On the contrary, experts consider that regeneration within the sector can bring the needed transformation (see, for example, Pollock, 2019; McEnhill et al., 2020).

The 'regenerative' concept was used for the first time within the tourism context by Owen in 2007. She defined regenerative tourism as a holistic approach to create positive impacts to all the sector's stakeholders. Moreover, the regenerative tourism model has been directly linked to conscious travel (Pollock, 2013) and related to transformative tourism (Sheldon, 2020). The Covid-19 outbreak made us realize about the fragility of the tourism activity and made authorities and citizens reflect about the importance of ecological practices. A shift towards a different way of planning and managing tourism was initiated and calls for a truly regenerative tourism were spread among tourism stakeholders. However, there is no clear guidance on how destinations can become regenerative (see Fusté-Forné & Hussain, 2022).

Therefore, the tourism sector needs to be transformed, not modified. Otherwise, we will continue to strongly contribute to climate change and environmental degradation; but we will also end up causing the disappearance of the socio-cultural and natural values on which the tourism activity is based and thus, provoking the loss of places' essence and uniqueness (Pollock, 2019). In this sense, the first purpose of this paper is to find the essential steps to achieve the change towards a new regenerative system. Also, this study has the goal of investigating the role of hosts, concretely tourist accommodations, as agents of change for a regenerative development. The qualitative approach of this research focuses on the supply side of the tourism sector. Moreover, the focus of this research is put on tourist accommodations with environmental concerns which serves to inform the aim to understand the implementation of environmental actions in tourism systems as a driver for a regenerative development of tourism. Finally, we want to gain some insights into the impact of ecolabels on accommodations and their potential as a 'tool of change' for tourism transformation.

First of all, desk research is conducted in order to see the background in the field. In the second part of the study, a qualitative approach is taken in order to analyse the role of ecological tourist accommodations for a regenerative development. In total, 12 Catalan ecological accommodations, spread among the territory, are interviewed using a semi-structured protocol. These accommodations are part of two different samples: Sample A composed by accommodations that are environmentally certified, concretely by EU Ecolabel, and Sample B which is composed by non-certified establishments. As a consequence of the impacts of the current mass and over-tourism and its consumerist patterns, calls for a regenerative tourism model seem to be gaining importance. This paper aims to contribute to the lack of empirical knowledge on the topic and to the future development of a regenerative tourism framework.

2. Doing Tourism Regeneratively? A New Model Towards Transformative Tourism and Conscious Travel

2.1 An Approach to the Regenerative Economy

Experts question whether it is possible to 'fight' current global threats – such as climate change, rising inequality and financial crisis – through sustainable principles. It is highlighted that a deeper change, called regenerative sustainability is needed. Sustainability implies the minimization or elimination of irreversible effects on the environment – such as ecosystem degradation, soil debasement and biodiversity loss – and of unchangeable impacts on the economic and socio-cultural systems, but restorative sustainability goes one step further, restoring environmental, economic, and socio-cultural systems back to a healthy state. In addition, regenerative sustainability goes even further and it consists of "creating the conditions that enable vital social and ecological systems to evolve continuously" (Andreucci et al., 2021, p. 7). While sustainability has the goal of limiting the damage caused by human actions to economic, environmental, and socio-cultural systems, regeneration is a holistic approach that seeks to improve the whole living and economic model by "creating better conditions to support the life-enhancing qualities of ecosystems" that allow to "maintain and upgrade the conditions of ecosystems functionality" (Morseletto, 2020, pp. 768-769).

Climate change and the degradation of life-supporting functions of a healthy ecosystem are threatening the capitalism system as we know it. Capitalism promotes endless economic growth with no regard for the physical boundaries of the planet. At one point this will make it necessary for the capitalism system to evolve in order to face big challenges such as climate change and to avoid economic and social collapses (Li, 2009). Therefore, regenerative economy – called as well regenerative capitalism (Fullerton & Lovins, 2013) – is presented as the new stage of capitalism born for the necessity to stop prioritizing economic growth over the well-being of the humanity and the biosphere's health. Regenerative economy is an economic system that serves humanity and the earth's ecosystems' health, which has the aim of protecting and supporting the long-term health of the whole society (Fullerton & Lovins, 2013).

Within the capitalism system there is the belief that Gross Domestic Product (GDP) growth leads to prosperity. However, regenerative economy has a holistic understanding of wealth, understood as the well-being of the whole (Fullerton, 2015). From a regenerative economy perspective, "maximizing profits for corporate shareholders, optimizing consumer material utility and growing GDP do not automatically lead to prosperity" (Fullerton, 2015, p. 37) because "economic vigor is a product of human and societal vitality, rooted in ecological health and the inclusive development of human capabilities and potential" (*ibid*, p. 40).

2.2 The Challenges of Regenerative Tourism

Regenerative tourism is a dimension of regenerative economy. It has gained attention in recent years and the 'regenerative' concept was mentioned for the first time in the tourist sector by Owen (2007). There is a general consensus that regenerative tourism was born for the necessity of overcoming the constraints of sustainable tourism to achieve the necessary systemic change within the tourism system (see, for example, Pollock, 2019; McEnhill et al., 2020).

While sustainability in tourism is essential, it is not enough (Pollock, 2019). Given the difference between regeneration and sustainability, the divergence between sustainable and regenerative tourism can be interpreted in two ways. In the first place, it can be understood that the future sustainability of the social and environmental systems participating in the tourism industry will not be achieved without regeneration. On the other hand, regenerative tourism can be seen as an extension of sustainable tourism (McEnhill et al., 2020). Both views end up concluding that sustainability is not enough in order to address the challenges that the current tourism model is facing.

The tourism industry is an extractive activity that depends on limited natural resources and on valuable cultural and social capital (Hussain, 2021). Both sustainable and regenerative tourism acknowledged that continuing business as usual within tourist activities would lead to the degradation of natural, cultural and social resources, the basis on which tourism is performed and promoted. In order to address this challenge, while sustainable tourism aims to sustain the current state of our planet, the objective of regenerative tourism is to improve the current state of Earth. In other words, while sustainable tourism wants to do less harm (or no harm), regenerative tourism requires doing more good than harm (McEnhill et al., 2020). In this sense, sustainable tourism has received criticism by experts for its incapacity to recover the damage that has already been done by unsustainable practices (Robinson & Cole, 2015).

Therefore, sustainability addresses the symptoms of the problem while regeneration identifies its root and works for a systemic change (Pollock, 2019). Sustainable practices within the tourism industry can be understood as a first step towards the healing of our natural, cultural and social environment. However, it is of high importance to not lose sight of the need for a holistic approach to tourism which can create the conditions for the industry to reborn and continuously renew itself, thus ensuring that the whole system becomes regenerative (Hussain, 2021).

Regenerative tourism is a model in line with the eight regenerative economy's principles. As Owen (2007) stated, it is a holistic approach as it wants to create positive impacts for all participants: from the hosts, guests, community and place to its natural and socio-cultural capital. Therefore, in the regenerative tourism model humans are not considered apart from nature or as beings that have to deal with the scarcity of natural resources. Conversely, humans are part of nature and want to harness the potential of tourism as a vital force in making communities regenerative (Ajoon & Rao, 2020).

According to the regenerative tourism model, in order to make a destination regenerative, it is necessary to heal and restore it. So, when a community wants to be regenerative, the damage and degradation suffered by its social, environmental and cultural capital needs to be repaired in the first place. When the system becomes healthy, it is possible to create the conditions in order human and natural systems to flourish, thrive, adapt, self-organise and regenerate (Axinte, Mehmood, Marsden & Roep, 2019). In addition, the ultimate goal is to strengthen the adaptative capacity of the tourism systems so that it can end up renewing itself without much human intervention (Du Plessis & Brandon, 2015). In this sense, Ajoon and Rao (2020) stated that "when done properly, tourism can be a vital force to flourish regeneration of the society in all aspects- financially, mentally, physically and emotionally" (p. 3).

Through literature research different advice and guidance is found regarding regenerative tourism. There is not a unique way to make a touristic community regenerative. Moreover, it cannot be achieved using the same pathway for different communities. The aim of this section is to highlight the most important concepts when applying the regenerative concept within tourism.

2.2.1 Mindset Change

Regeneration in tourism cannot happen without a change in humans' mindset. Experts agree on the fact that humans should stop thinking that we are separate to the natural world and that we can use its resources for our benefit (Du Plessis & Brandon, 2015; Pollock, 2019). We should realize that destinations are embedded in the natural environment and integrate within our values and actions the willingness to operate under nature's rules and principles (Hussain, 2021). Instead of thinking that the planet is full of resources that can be exploited, we should change the way we perceive the World and discover the capacity of the living system to evolve and self-generate (Pollock, 2019).

2.2.2 Collaboration

Collaboration is one of the key elements in the design and implementation of regenerative tourism. It is necessary that all the participants of the tourism system collaborate. So, local authorities, governments, tourists, destination management operators, tourist establishments and host communities should work together to create the conditions for the destination to adapt to continuous changes, thrive, flourish and self-regenerate (Pollock, 2019; McEnhill et al., 2020).

2.2.3 Community

In some cases, when governments, destination management operators, hosts or tourist establishments plan or organize the touristic activity in a place, its residents and community are not considered. Often, tourists' needs and rights are prioritized over the ones of the residents (Pollock, 2019). Nowadays we live in a global World characterized by continuous technological advancements. This technology enables destinations to be connected and visible through the internet and social media. This contributes to the fact that the residents of a place have no control of their town, city or region when it becomes a popular destination and attracts a lot of tourism (Hussain, 2021). To apply a regenerative tourism model, residents need to be listened. Considering that both the positive and negative impacts of tourism affect residents, their needs, aspirations, experiences, and contributions need to be given attention and comprehended. There should be a greater involvement of the destination's community in tourism decision-making (Pollock, 2019).

2.2.4 Tourism: From an Industry to a System

The concepts of collaboration and community are linked with the urgent need of considering tourism as a system instead of an industry. When considering tourism as an industry, we are forgetting the necessary collaboration with the community which is present in the tourist place (Pollock, 2016). Related to the mindset change, there should be a shift from an industrial approach to a system approach that considers the community and works in a collaborative networking (Ajoon & Rao, 2020). As Pollock (2019) stresses, tourism products and services cannot be considered as a result of an industrial production. When doing so, the fact that tourism is a system subject to nature's operating rules and principals is not taken into account and nature's degradation is perpetuated.

2.2.5 Marketing

Marketing will be a challenge in the regenerative context (Hussain, 2021). In other words, there must be a shift from a superfluous marketing which promotes mass-tourism and unsustainable practices towards a marketing that has a deeper purpose and uses its huge regenerative potential on communities, nature, enterprises and tourists. Regenerative tourism is not about stopping marketing, but about promoting a destination in a mature way, encouraging the commitment to protect the natural environment, participating in natural resources recovery and regeneration, and influencing tourists to leave their tourist place better than they found it (Pollock, 2019). Marketing has a huge force to encourage collaboration, resilience, and regeneration.

2.2.6 Suitability

Every place and community are different. Therefore, policies, plans, actions and strategies must be in line with the characteristics of each destination, as each one has its own social, cultural, and environmental processes (McEnhill et al., 2020). It is of high importance to get a deep understanding of the current state of the place and community in order to design the most suitable regenerative strategies. This implies the willingness to profoundly listen and observe (Pollock, 2019). What does the community want for their destination? What does the community want to share with their guests? What defines the uniqueness of the place? What is the state of the destination's cultural, environmental and social capital? All this information must be considered.

2.2.7 Conscious Travel Habits

Conscious travel habits are a key element of the regenerative tourism model (Hussain, 2021). In this sense, mass international tourism, based on an industrial operating model, is unsustainable (Pollock, 2020), and a conscious tourism consumption needs to be planned and developed. Its meaning and implications are explained in the next section.

2.3 Towards a New Tourism Operating System

Regenerative tourism is directly linked with conscious travel as regeneration within the tourism system takes place when tourists are conscious consumers (Pollock, 2013). In the last two decades this concept has gotten more attention, especially environmental conscious travel (Škrinjarić, 2018). Conscious travel transforms tourism into a positive contributor to well-being and thriving of all the stakeholders involved in the tourism system. Conscious travel is not about de-growth, it is about growth in quality over quantity. In other words, it is about the preservation of the environmental and cultural resources on which the touristic activity depends. This type of growth brings higher quality to tourist experiences and also benefits hosts and communities by protecting their social, cultural and environmental capital (Pollock, 2012).

According to Pollock, we do not need modification but transformation of the actual industrial operating model. Humans do not have to wait the change to come from the top (governments, for instance). As the expert states, there is no hero that will save us from mass tourism and will bring regeneration and consciousness into our communities. The change will come from the bottom: each individual, each tourist establishment, each destination's community, each enterprise can make a difference (Pollock, 2016). Tourism is a network of relationships between hosts, guests, and community, all of which are embedded in a place. Therefore, tourism is a human system which will change when the mindset of its participants changes (Pollock, 2012).

Other experts also stress the importance of responsibility as an inseparable factor from conscious tourism. Conscious tourists have a superior sensitivity and empathy and consider tourism as an experience of giving and receiving. It is both hosts and tourists' responsibility to avoid the negative impacts that tourism can have on biodiversity, cultural heritage, local population, and endogenous resources. Moreover, tourists that have conscious travel habits seek a sense of love for the destination they visit, implying an ethical dimension that goes beyond sustainability -which only comprises economic, social and environmental dimensions. (Liberato et al., 2021). Hence, it is important to highlight that conscious travellers' vision goes beyond engaging in responsible tourism practices: they seek to make a difference and to undergo through experiences that bring them personal and collective development (Živoder et al., 2015).

This paper departs from the understanding of the role of hosts as change agents. Conscious travel considers that hosts should be the leaders of the tourism model transformation due to their responsibility for the kind of tourism they create in their community. Moreover, if hosts change their behaviour, they have the power of changing tourists' mindset and travel habits. Hosts should be interested in being change agents and in preserving the natural and cultural context on which their activity is based (Pollock, 2013). Being a conscious host means to "help the guest slow down in a destination, learn to fully savour their experience by stimulating and satiating all their senses and making them feel more fully alive" (Pollock, 2013, p. 14). Becoming a conscious host is a work in progress that requires the development of their self-awareness and that hosts meet with community's participants to share their vision of the type of community they want to create and share with guests (see Pollock, 2016). Therefore, hosts need to attract, engage, and create the conscious traveller by designing experiences that transform because tourists with conscious travel habits want to be transformed and enriched when traveling (Pollock, 2013).

3. Methodology

This study aims to contribute to the lack of empirical knowledge on the way forward the development of a regenerative tourism model. In this paper the focus is on the role of tourism supply, specifically on tourist accommodations, due to their mentioned potential as drivers of regenerative tourism. The

objective of the study is to understand the role of tourist accommodations as agents of change in the tourism system. Concretely, the focus is on tourist accommodations that bring environmental concerns to the heart of the design and implementation of their business products. Some of them have been awarded an environmental certificate and others have not but all apply sustainable and ecological practices.

This paper contributes to the understanding of the implementation of environmental actions in tourism systems as a driver for a regenerative development of tourism. Moreover, it studies the importance of ecological certificates, as a critical information for the planning and development of tourism futures. In the end, the role of hosts as change agents is examined. In order to analyse the role of tourist accommodations for a regenerative development of tourism and explore their potential to drive change in the tourism system, this paper adopted a qualitative approach. Since exhaustive empirical knowledge is lacking and further research is still needed to have a conceptual foundation to develop a regenerative tourism framework from empirical data, qualitative studies are suitable for producing valuable contribution to our understanding of the importance of hosts' actions for a regenerative development.

The study sample is composed by two groups of tourist accommodations. The first group is formed by the ten accommodations with the EU Ecolabel certificate (European Commission, 2022) in Catalonia. While all the accommodations were contacted, six of them accepted to participate, which will be named 'Sample A'. Six other Catalan accommodations, in this case without environmental certificates, were also selected. Based on a non-probabilistic sampling method, seven tourist establishments were invited to be part of 'Sample B' following different criteria. First of all, they also had to be located in Catalonia for future data comparison. In the second place, sustainability or ecology had to be part of their activity's philosophy. Previous personal experience and consultation to Catalan rural experts allowed the elaboration of the list of seven mentioned establishments. Six of them positively answered and conform 'Sample B'. Table 1 shows the demographic profile of the respondents and the characteristics of the accommodations.

Table 1. Summary of Accommodations and Respondents' Characteristics

N	Sample	Destination			Accommodation		Respondents and Interview Information					
		Province	Town/City	Inhabitants	Type	Rooms	Gender	Age	Position	Date	Format	Duration (min)
1	A	Lleida	Senterada	50	Rural house	9	Female	46	Owner	16/02/2022	Face-to-face	122
2	A	Tarragona	Alcover	5108	Three rural houses	up to 30 people	Male	48	Owner	14/03/2022	Online	46
3	A	Barcelona	Tavertet	111	Rural apart-hotel	6 rooms, 3 studies and 3 little rural houses	Female	38	Director	15/03/2022	Face-to-face	59
4	A	Barcelona	Guardiola de Berguedà	887	Camping	67 camping pitches and 6 bungalows	Male	54	Co-owner	16/03/2022	Online	73
5	A	Barcelona	Sant Esteve de Palautordera	2749	Hotel	9	Female	24	Receptionist	18/03/2022	Online	48
6	A	Barcelona	Vilada	430	Holiday camp	84 children	Male	45	Co-owner	31/03/2022	Online	68
7	B	Lleida	Éller	20	Rural hostel	4	Female	47	Owner	19/02/2022	Face-to-face	45
8	B	Lleida	Toló	4	Rural house	4	Female+Male	55+57	Onwers	17/02/2022	Online	90
9	B	Tarragona	Vallverd de Queralt	25	Rural house	4	Female+Male	54+58	Owners	20/02/2022	Face-to-face	77
10	B	Barcelona	Rellinars	800	Rural house	3	Male	47	Owner	18/02/2022	Face-to-face	43
11	B	Lleida	Barruera (Vall de Boí)	578	Rural house	6	Female	57	Owner	20/02/2022	Online	55
12	B	Girona	Cadaqués	2752	Rural house	3	Female+Male	32+46	Owner	13/03/2022	Face-to-face	146

Source: Own Elaboration

Data was collected using semi-structured interviews, as an interview protocol was used not in a rigid but a flexible manner. From Sample A, two interviews were conducted face to face and four via Google Meet, with a duration between 46 and 122 minutes. From Sample B, four interviews were conducted face to face and two via Google Meet, with a duration between 43 and 146 minutes. Therefore, the average duration of the interviews was 73 minutes.

The interview protocol consisted of five parts, each one composed of a series of questions which was designed to respond to the objective and understand the characteristics explained earlier. The questions asked to tourist accommodations were divided in the following five sections:

1) Accommodation's history: in order to know when and why the business opened its doors; also its mission, vision, and values.
2) The second part of the interview protocol differs depending on whether Sample A or B is concerned. In the first place, this part consists of questions about the obtention of the EU Ecolabel certificate. The aim is to know the reason why the accommodation applied for it and the set of environmental practices that the accommodation follows. For the second sample, the purpose is to learn about their sustainable and ecological practices and their vision regarding environmental quality certificates.
3) The third section ais to understand the accommodations' management of the environmental practices, also in relation to their staff and customers.
4) The fourth part of the interview aims to understand the guests' profiles and the usage of environmental practices as a marketing strategy.
5) The fifth part aims to know the accommodations' opinion about the current state of the tourism system, to understand their vision about the future in tourism after Covid-19, and to comprehend the characteristics of their ideal tourism model.

These five parts specified above were used as an interview protocol. Each of the five sections contains different questions. Before conducting the interviews, its protocol was sent to a representative of the Catalan EU Ecolabel Competent Body, who gave us advice. He recommended offering to the accommodations the possibility of making the interview personal or virtual, thus increasing their chances of availability. This person also acted as the first contact to put them in context about this study, the interview and its objectives.

Moreover, the interviews' confidentiality and anonymity were explained at their start. The interviews were audio-recorded, transcribed, and analysed in Catalan while the results are translated into English. It is important to highlight that the interviews' transcripts were sent to the respective respondents to clarify any issues arising from the transcription in order to confirm the reliability and validity of the data. Since no issues were reported, the data analysis was conducted and the results are explained in the next section. A thematic analysis was conducted to identify the topics and the relationships between the topics and allows to structure the results in four sections that, based on the examples of practices, discuss the corporate identity of ecological accommodations, the environmental concerns for ecological hospitality, the impact of environmentally friendly practices, and the contribution of ecological accommodations as agents of change for a regenerative tourism model.

6. Results and Discussion

6.1 The Corporate Identity of Ecological Accommodations

Results show that accommodations with environmental concerns, whether certified or not, have incorporated their sustainable and ecological way of living into their establishments' operations from the beginning of their operations. The interviewed accommodations are small and family businesses where the own founders are at the forefront and those who have extrapolated their sustainable and ecological way of life to the way of working, for example in relation to the provision of dining services (Coll-Barneto & Fusté-Forné, 2023).

The only difference is that environmentally certified establishments have a more planned vision for their business than non-certified establishments, which are committed to living more on a day-to-day basis and continuing with their activity without considering any type of business growth. This shows that environmentally certified accommodations are more business-minded. In contrast, interviewees of the accommodations without environmental certification do not have this spirit as well developed and their establishment is a way to materialise their desired lifestyle change.

It is clear that both types of accommodations search for customers that are in line with their sustainable and ecological values. However, it is important to remember that according to certified accommodations, large operators such as Booking are a good way to attract many customers but a bad channel to receive the customers they are looking for. According to certified establishments, this type of platforms should give more importance to sustainability criteria and less to price criteria (Arzoumanidis, Petti & Raggi, 2022).

Moreover, non-certified accommodations observe a positive relationship between the length of the stay and the match between the type of customer they receive and the customer they want to welcome. This points to a possible relationship between tourists who are responsible and respectful of the environment and their desire, whether unconscious or not, for the creation of a transformative tourism experience. In other words, the positive relationship described by the accommodations suggest that tourist who are more environmentally friendly want to take longer trips. Previous research also shows that long stays are one of the main enablers of transformation. Longer stays can provide tourists with more sources of reflection. The longer the stay is, the more likely tourists are to experience a transformation during their stay (Pung & Chiappa, 2020).

6.2 The most Important Environmental Concerns for Ecological Hospitality

Results show that the greatest investment is made by the accommodations on environmental energy practices. In this sense, the environmental improvements that the accommodations propose in the short or medium term are also focused on the energy field. The accommodations explain that investment in green energy systems is a way to achieve economic savings in the medium term. In addition, it also shows their concern about "the extent to which tourism is driving up energy costs at the destination level", a worrying reality warned by previous studies (Epler Wood, Milstein & Ahamed-Broadhurst, 2019, p. 14). In other words, this shows that the interviewed accommodations think that energy efficiency practices contribute to reduce the climate change.

Looking at the results, certified establishments are currently engaged in more environmental practices than non-certified ones. We also find the same situation for the accommodations' future environmental objectives. This reflects that the European environmental certification is an efficient guideline for accommodations seeking to lower their environmental impact while meeting their customers' needs, as expressed by the European Commission (2017).

On the other hand, some non-certified establishments interpret the obtention of environmental certificates as a possible form of greenwashing. Greenwashing practise is adopted to make a company look more environmentally friendly than it is (Aggarwal & Kadyan, 2014). However, the interviews' results show that the vast majority of certified accommodations have always been environmentally friendly and that they have applied for the EU Ecolabel with the pure intention of being able to improve day by day with the help of the guidelines and their Environmental Policy.

In most cases, certified accommodations are aware of the high expenditure of the environmental practices. In contrast, non-certified establishments do not see it as a big effort, but as a way of living that is in line with their values. This is related to the previously mentioned fact that EU Ecolabel accommodations are more business-minded; and probably because the majority of them have more employees and the organizational structure allows to have a better cost control.

In this sense, certified establishments spend more time and effort talking about or showing their environmental practices to customers. This is due to the certificate, since accommodations have to display information about their environmental practices and the EU Ecolabel certificate on their website, in the accommodation and in the questionnaires that are sent to the customers after their stay. Moreover, the certificate is an opportunity to demonstrate the accuracy of the environmental practices. In contrast, non-certified accommodations only do it when they find interested customers in the topic, as they state that they do not like to use their ecological and sustainable values as a marketing strategy. Uncertified accommodations do not talk about their environmental practices without request from customers because they want to avoid any interpretation of greenwashing.

6.3 Environmentally Friendly Practices as a tool to Achieve Internal Business Advantages or External Benefits for Society as well?

Establishments with environmental concerns are aware that the current tourism model and its operations are not sustainable, and they work for a change. They believe that both accommodations and tourists need to act in line with sustainable and ecological values in order to build a better tourism system. Therefore, accommodations realized that we should integrate within our values and actions the willingness to operate under nature's rules and principles. As observed in the theoretical section, this is part of the necessary mindset change for a tourism regenerative development (Hussain, 2021).

They define the ideal tourism model as a tourism that adapts to the conditions and characteristics of nature, villages and cities, and does not try to change their physiognomy. According to the interviewees, destinations should not be artificially created or adapted to the tourist activity; but should show visitors, respectfully, the authentic way of life of each place, thus showing the real world of the locals. If accommodations improve tourists' access to the residents' lifestyle is because they realized that somehow it is beneficial for them. However, they should understand that by truly encouraging tourists to immerse themselves in the real life of the locals, they will be acting as transformative practitioners (Soulard et al., 2019). In this sense, the access to residents' lifestyle acts as a transformative facilitator within tourists' experiences (Pung & Chiappa, 2020).

Responses from the EU Ecolabel accommodations reflect that the biggest advantage of having this certification is to improve day by day in environmental and sustainable terms. But none of them have experienced an increase in bookings or a change in the type of customers coming to the accommodation as a result of having the EU Ecolabel. Moreover, the vast majority of customers do not know what the EU Ecolabel is. However, they believe that their sustainable and ecological values, continuously improved thanks to the certification, can also help to improve their reputation. In contrast, we found that uncertified accommodations have not considered whether their environmental practices can have a positive impact on their reputation, nor do they believe that their customers use sustainability criteria when choosing them.

In addition, certified accommodations would like to see certificates such as the EU Ecolabel as part of tourists' decision criteria when choosing an accommodation. This means that one of the areas where the EU Ecolabel needs to improve the public awareness of the certificate. For example, a more powerful and eye-catching website could be created to advertise all accommodations with EU Ecolabel and where customers could directly book their stay from this website. Another thing that could be done by Competent Bodies, in this case the Catalan one, is to promote the EU Ecolabel for tourist accommodations through physical and online marketing campaigns. In this way tourists can get to know about its existence and implications. It could also be good for visitors because they would discover a way to become agents of change.

In sum, environmental practices are beneficial for accommodations because they can be part of their brand image. However, if the tourism model they search for became a reality, it would not only benefit accommodations but also the tourism system and society in general. Through their environmental practices, accommodations can, both directly and indirectly, transform tourists into potential agents of change for the tourism model they desire: a non-consumerist tourism model that is far from the masses, that is conscious and slow, that adapts to the place's conditions, and which seeks transformation through experiences (see, for example, Morón-Corujeira & Fusté-Forné, 2022).

6.4 Ecological Accommodations as Agents of Change for a Regenerative Tourism Model

Most accommodations, based on their experience, believe that Covid-19 has only brought changes in tourism practices in the short term and these change were due to restrictions, but not due to a lasting growth of citizens' sustainable and ecological values. If that comes to pass, we will find ourselves in Hussain's (2021) pessimistic scenario entitled 'Back to normal', where after the pandemic the unsustainable paths of traditional, mass and over-tourism are not put under control. In this sense, the UNWTO World Tourism

Barometer (UNWTO, 2022) shows that "international tourist arrivals almost tripled in January to July 2022 (+172%) compared to the same period of 2021. This means the sector recovered almost 60% of pre-pandemic levels".

As respondents explain, there has been a growth in domestic tourism during the pandemic (see also Hussain & Fusté-Forné, 2021). This has made many people realise that there are beautiful and unknown places close to home. Thus, there is an opportunity to further promote domestic tourism after the pandemic and thus take advantage of its sustainable potential, also thinking in terms of deseasonalization of tourism. In addition, and it is observed by the establishments, tourists during the pandemic have preferred to stay for longer periods of time. As mentioned before, longer stays could be related to customers' needs, conscious or not, to be transformed during their stays.

Results also show that environmental concerned accommodations can become agents of change for regenerative tourism development. This has been demonstrated for several reasons. Firstly, their values and ideals fit with the mindset change that is necessary according to regenerative tourism. The first step towards a regenerative tourism model is a mindset change that implies being aware that humans are not superior to other life forms and that each of us can contribute to the Earth's health (Pollock, 2019). Secondly, the accommodations want to and are starting to work in a more collaborative way with other businesses and at a more community level. Related to the mindset change and for a regenerative tourism development, there should be a shift from an industrial tourism approach to a system approach that considers the community and works in a collaborative networking (Ajoon & Rao, 2020).

Another aspect is that, without realising it, they want to enhance their performance as transformative practitioners. By acting as transformative hosts, they can expand the sense of inclusiveness (Pritchard et al., 2011; Reisinger, 2013), and raise awareness about ecological and social impacts of consumption behavior (Neuhofer et al., 2020), and advocate for environmental protection and social empowerment in tourism (Coghlan & Gooch, 2011; Pung et al., 2020). If we shifted to a regenerative tourism model, tourists would have conscious travel habits (Pollock, 2013) that would transform tourism into a positive contributor to well-being and thriving of all the stakeholders involved in the tourism system (Pollock, 2012) where destinations are not products, but places.

7. Conclusion

The Covid-19 outbreak resulted in a global tourism closure, followed by a rapid reaction from the tourism system and a quick dissemination of guidance from the academia. During the pandemic the experts acknowledged that continuing business as usual within tourist activities would lead to the degradation of natural, cultural and social resources, the basis on which tourism is performed and promoted (Du Plessis & Brandon, 2015; Pollock, 2019; Hussain, 2021). While sustainability within the tourism system is essential, it is not enough (Pollock, 2019). The paper shows that there is an urgent need to move from sustainability to regenerative paradigm (McEnhill, Jorgensen & Urlich, 2020). Regenerative tourism is a holistic approach that wants to create positive impacts for all tourism stakeholders: from the hosts, guests, community and place to its natural and socio-cultural capital. It has been discovered that according to the regenerative tourism model, in order to make a tourist destination regenerative, in the first place it is necessary to heal and restore it. When the system becomes healthy, it is possible to create the conditions in order for human and natural systems to flourish, thrive, self-organise and regenerate (Axinte, Mehmood, Marsden, & Roep, 2019).

The results of the paper shows the relationship between regenerative, conscious and transformative tourism based on the environmental actions of ecological accommodations. Regeneration within the tourism system takes place when tourists are conscious consumers that search personal transformation in their tourist experiences which are facilitated by conscious hosts. Hosts are also agents of change and they have a pivotal role in preserving the cultural and natural environment on which their personal and professional life is based. Experts highlight the main role of hosts as change agents because if they change their behaviour, they have the power of changing tourists' mindset and travel habits (Pollock, 2013). There is currently no clear guidance on how the participants in the tourism system can move towards a regenerative model. This study adds texture to this understanding. Regeneration in tourism

cannot happen without a change in humans' mindset. There should be a shift from an industrial approach to a system approach that considers the community and works in a collaborative networking (Ajoon & Rao, 2020). Furthermore, regenerative tourism is not about stopping marketing, but about promoting a destination encouraging the commitment to protect the natural environment, participating in natural resources' recovery and regeneration, and influencing tourists to leave their tourist place better than they found it (Pollock, 2019).

Findings demonstrate that according to the accommodations, the most important advantage of being green establishments is to be in line with the tourism model they want for the future, far from mass and over-tourism and that leaves the current consumerist patterns behind. Their ideal tourism model is the one that adapts to the conditions and characteristics of each place. Environmentally concerned accommodations are in favour of a tourism that shows visitors, respectfully, the authentic way of life of each place, thus showing the real world of the locals while respecting their environmental, socio-cultural and economic heritage. However, the accommodations agree on the fact that Covid-19 has not changed tourists' mindsets and that visitors' practices, when all restrictions disappear, will return to the previous unsustainable paths that are leading to the depletion of cultural and natural resources.

7.1 Theoretical Implications

The qualitative approach of the study aimed to analyse the potential of tourist accommodations to drive change in the tourism system. Concretely, this paper contributes to the understanding of the implementation of environmental actions in tourism systems as a driver for a regenerative development of tourism. Moreover, we have studied the importance of environmental certificates, as a critical information for the planning and development of tourism futures. Therefore, the focus has been put on tourist accommodations that bring environmental concerns to the heart of the design and implementation of their business practices. Our study reveals that the only difference between certified and non-certified accommodations in terms of their corporate identity is that EU Ecolabel accommodations are more business-minded, have more employees and their organizational structure allows a better cost control. From the study it was found that environmental practices are not used as a marketing tool, because environmental, sustainable and ecological values are truly part of the accommodations' philosophy. In the same way, EU Ecolabel is mainly used as a guideline that helps accommodations improve day by day in environmental terms.

Results showed that the most relevant environmental practices for both certified and non-certified accommodations are the ones dedicated to achieving increased energy efficiency and the use of green energy sources. One of the main things to note is that environmentally certified accommodations apply more environmental practices than non-environmentally certified ones. The EU Ecolabel is not a form of greenwashing, but a reliable certification that helps accommodations to continuously set new environmental targets. However, the distrust of the second sample is due to the lack of methods to ensure that these are not just a green wash and also due to the "proliferation of small, little known, limited value ecolabels in tourism and hospitality" (Font, 2002, p. 1). Therefore, there should be a strict control over the various ecolabels in order to ensure that they are strict, as "ecolabels will only be effective in promoting sound levels of environmental performance if they are credible to consumers, to national regulatory authorities, to environmental specialists, to international, national, local and civil society organizations, as well as to businesses themselves" (Kahleborn & Dominé, 2001, p. 15). If done, establishments that had a certificate would actually see their reputation increase and will be able to openly speak about their environmental practices to raise awareness among customers and the society (Kahlenborn & Dominé, 2001).

7.2 Practical Implications

This study shows that accommodations that bring environmental concerns to the heart of all their business practices can be agents of change for a regenerative development of tourism, both environmentally certified or not. Even though the majority of them are not familiar with the concept of regenerative tourism, their willingness to change the current tourism model is in line with the mentioned steps towards

regenerative tourism. In the first place, they demonstrated that they are prepared for the necessary mindset change. Secondly, they have the desire to work on a community level and in collaboration with tourism stakeholders, which is essential within the regenerative model. Moreover, they unconsciously want to act as transformative hosts and want tourists to engage in a more conscious and slow tourism.

A regenerative tourism model needs a transformation of the actual industrial operating model, and a shift both from the demand and supply side. The change will come from the bottom: each individual, touristic establishment, destination community, and enterprise can make a difference. Tourism is a human system which will change when the mindset of its participants changes. This transformation is urgent if we do not want to lose the essence of the sites and places' environmental and cultural heritage. We can not ignore the environmental and socio-cultural costs of tourism growth and its invisible burden. In this sense, regenerative practices have played a part in tourism systems, and there are examples of businesses and destinations which have shown a profound respect for the Earth's resources and pioneered a regenerative understanding of hospitality and tourism. After this study we believe that Catalan accommodations with environmental concerns are ready to become, if they want to, agents of change for a regenerative development of tourism.

7.3 Limitations and Future Research

Despite its contributions and implications, this paper includes several limitations. The sample exclusively interviewed Catalan respondents. Therefore, future studies could employ a cross-cultural investigation while taking advantage of EU Ecolabel's European scope. In addition, all the accommodations in the sample are small family businesses. Future research could extend the sample to include larger businesses located in bigger cities. Moreover, this research only focuses on environmentally concerned accommodation, which leaves a knowledge gap for future studies that want to compare our results with accommodations that do not use environmental practices.

While previous studies have analysed environmental initiatives of hotels, few research has analysed the role of environmentally concerned accommodations as agents of change in tourism systems. Future studies on the subject will therefore help to conceptualise the analysis of accommodations' behaviour in regenerative terms and their readiness to move towards a new tourism model. Moreover, there is room for future research on the demand side in order to understand tourists' environmental consciousness and their desire to choose accommodations, and experiences, that promote a deeper communion with place as a source of conscious travel and regenerative tourism.

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Turn On and Tune In: Problematizing the Relationship between Soundscape and Tourist Mood

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ABSTRACT

This article aims to determine the effect of soundscape on tourist mood within the framework of sound pressure and sound types to provide a more effective destination experience. A theme park and a recreational area located in a central business district, which are important urban tourism attractions, were taken as research areas. For data collection, a Positive and Negative Affect Schedule was used. Furthermore, sound pressure measurements and environmental sound recordings were carried out through sound walks. At these locations, sound pressure levels and the types of sounds that make up the soundscape were identified. It was found that nature sounds, society, and human-induced sounds were predominantly heard in study areas. The results revealed that the sound types in soundscape, which have unique sound types in both study areas, produce a positive affect on tourists even if their pressure increases.

KEYWORDS

ARTICLE HISTORY

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1. Introduction

Multidimensional experiences contribute to a thorough understanding of the values and meanings of space. The sensory dimension of tourist experiences is therefore important for both practitioners and scientific researchers. The tourist experience has a complex structure, incorporating the sight, taste, touch, and hearing senses (He et al., 2018). Despite this complex structure, the visual dimension is more frequently addressed in scientific studies (Liu et al., 2018). Such dominance of visuality trivializes other emotions (Saldanha, 2009). In his study, questioning the dominance of visuality, Porteous (1990) underlines that sight alone is insufficient to perceive the world. Tourism researchers have recently focused on important aspects of tourists' other senses, emphasizing embodied activities to better comprehend tourist experiences (Kang & Gretzel, 2012).

Tourists' perception and interpretation of the space mature with site-specific sounds (Liu et al., 2018). Tourists who investigate the sound contextually learn about the culture and society of the place they are visiting from the sounds they hear and may envision the structure of that culture and society in their minds (LaBelle, 2010; Ay & Günay Aktaş, 2019). Auditory experiences are therefore part of the tourist experience, and Waitt and Duffy (2010) argue that tourism studies should pay closer attention to hearing and listening.

The term soundscape refers to sound ambience, which refers to the aggregate of perceptible sounds, their environment, their location, their interaction with each other and with the listener, and the listener's context (Truax 1984; Porteous & Mastin 1985; Yang & Kang 2005a; Dubois et al., 2006; Kang, 2007). Soundscape also encompasses an individual's or society's perception and understanding of the acoustic environment (Schafer, 1977; Axelsson et al., 2010; Brown et al., 2016). The soundscape can also trigger specific perceptions that cannot be experienced through visual stimuli and help people to understand their environment more comprehensively and act more rationally (Qiu et al., 2018a).

Soundscape is a component of tourist destination landscape. All landscape components correspond to existing and potential tourism attractions. The nature, culture and emotion of the destination are the elements consumed in tourism activities. While the landscape is consumed by tourists, it also determines what is to be consumed (Akgiş İlhan et al., 2022a). Tourists' perceptions and judgments are of great importance for many areas, including tourism planning and marketing (Akgiş İlhan et al., 2022b). This is because the spatial difference around the world is caused by the landscape, and the perception of everyday life is made up of emotions, sounds, and smells (Akgiş İlhan et al., 2022a). Tourists' perception of sounds is an important factor influencing their emotional experience of a destination (Waitt & Duffy, 2010). Therefore, listening to a soundscape involves a simultaneous physiological, psychological, and cultural process that differs considerably from just looking at the visual landscape. Opinions regarding a soundscape being affected by personal experiences, cultural background, environment, and other factors cause perceptual differences (Zuo et al., 2020). The perception of soundscape is therefore highly subjective, yet it can be perceived more directly and more quickly than visual landscape. Therefore, it can affect the tourists' moods more easily (Schafer, 1977; Qiu et al., 2018b).

Theoretically, mood refers to an individual's subjectively experienced transient internal state in a specific context. It is stated that mood produces similarly valued thoughts, and that this can affect behaviour (Peterson & Sauber, 1983). Mood is an extremely important concept for understanding human existence in the world (Kenaan & Ferber, 2011) and is an integral component of daily life. Negative and positive moods indicate how people evaluate their surroundings. This evaluation emerges as a result of information processing. Positive moods signal easy information processing and give the person a sense of safety. On the other hand, negative moods point to the presence of an unusual environment that requires attention and systematic information processing (Schwarz, 1990).

There is currently a scarcity of research on sound and human experience. These studies are mainly conducted on three themes. The first relates to noise pollution and its effects on tourists, the second concerns the value and significance of a natural, quiet soundscape, and the last is about the amphiboly experience and sonic interpretation (Merchan et al., 2014; Filipan et al., 2017; Liu et al., 2018; Chen et al., 2021). When the literature on tourism and soundscape is examined, it can be seen that studies have been carried out on various topics: soundscape expectation (Liu et al., 2013; Bernat, 2014; Liu et al., 2018; Ren

et al., 2018; Yang et al., 2020; Kankhuni & Ngwira 2021); satisfaction with soundscape (Kang & Gretzel, 2012; Jiang et al., 2018; Qiu et al., 2018b; Montazerolhodjah et al., 2019; To & Chung, 2019; Grguric, 2020; Jiang et al., 2020); perception of soundscape (Aletta et al., 2016; He et al., 2018; Qiu et al., 2018a; Grguric, 2020; Zuo et al., 2020; Gale et al., 2021; Gale & Ednie, 2021; Jiang, 2022); and the effect of soundscape perception on flow experience (Lu et al., 2021).

Soundscape plays a key role in fostering a favourable tourist experience and elevating tourist satisfaction (Liu et al., 2018; He et al., 2018; Qiu et al., 2018a; Qiu et al., 2018b; Jiang et al., 2020; Kankhuni & Ngwira, 2021; Lu et al., 2021). More nuanced studies that provide a new perspective on how tourists interact with their environment would be beneficial to maximize tourist satisfaction and enjoyment. Investigating how tourists are sensually affected by soundscapes is therefore a worthwhile topic.

In urban areas, it is difficult to distinguish between tourism and recreation. This is because, despite several significant differences, they both involve the same facilities, resources and environments. Therefore, the most important attraction for urban tourists, other than historical and cultural sites, is recreational areas (Hall & Page, 2006). Most of the previous soundscape studies were conducted on natural areas (Jiang et al., 2020; Kankhuni & Ngwira 2021; Jiang, 2022), rural areas (Ren et al., 2018; Chen et al., 2021), and urban areas (Aletta et al., 2016; Montazerolhodjah et al., 2019; Grguric, 2020). This article focuses on urban tourists in urban recreational areas with two different attributes. This is because, according to the UNWTO (2020), rapid urbanization, affordable transportation, increased mobility, ease of travel, the emergence of new technologies (such as digital platforms for property rental and accommodation services), and a growing middle class have made cities increasingly popular tourism destinations. 90% of COVID-19 cases occurred in urban areas (CCSA, 2021). The urban tourism performance index reveals that urban areas have experienced a devastatingly negative impact due to the COVID-19 pandemic (Anguera-Torrell et al., 2021). Despite predictions that the COVID-19 pandemic would cause permanent attitudinal changes meaning that tourists would tend to natural areas (Villacé-Molinero et al., 2021; Vaishar & Šťastná, 2022; Moya Calderón et al., 2022) recent data shows that tourism movements around the world have tended to revert to pre-pandemic patterns (UNWTO, 2022). The purpose of this article is to explain how tourism stakeholders may handle soundscape by disclosing the effect of soundscape on tourists' moods in urban recreational areas, and to underline the importance of soundscape in tourism research.

In this regard, we sought to provide evidence that could contribute to answering the following questions: 'Is there any correlation between tourists' moods caused by the soundscape and the sound pressure?' and 'Is there any correlation between tourists' moods caused by the soundscape and the sound type which is most prominent to them and which they hear the most?'.

Unlike other studies, this article not only focuses on determining the effect of the pressure of sounds that make up the soundscape on the mood of tourists, but also on the types of these sounds. In this study, sound pressure measurements and sound recordings were carried out concurrently with the data collection process of tourists' moods. Evaluation of the tourist mood caused by the soundscape, from the perspective of sound pressure and sound type, is the theoretical contribution of this study. This study also extends the literature on tourist satisfaction. The importance of soundscape in destination and recreational area development is revealed in this study, and recommendations for soundscape management are produced, which is the research's key practical contribution.

2. Theoretical Background and Research Hypotheses

Studies on the correlation between the pressure of sounds that make up the soundscape and the moods of tourists are relatively scarce. Several studies focus on how sound pressure in urban or natural areas affects the perception of the soundscape (Yang & Kang, 2005b; Harold, 2007; Nilsson et al., 2007; Pilcher et al., 2009; Szeremeta & Zannin, 2009; Merchan et al., 2014; Sharma & Bhattacharya, 2014; Calleja et al., 2017; Liu et al., 2018). There are also studies that aim to determine the relationship between the types of sounds in the soundscape and the perception of the soundscape. In these studies, there is a common finding that natural sounds are preferred by tourists to artificial sounds, and that these sounds have a positive effect on tourist satisfaction (Yang & Kang, 2005a; Guastavino, 2006; Axelsson et al., 2010; Jeon et al., 2010; Pheasant et al., 2010; Jeon et al., 2011; Jeon et al., 2013; Soares & Coelho, 2016; Li et al., 2018).

Apart from these, Liu et al. (2013) found that the physical characteristics of the visual landscape influence the perception of the soundscape. On the other hand, Choy et al. (2014) found that recreational areas are influenced by users' perception of soundscape.

The Environmental Protection Agency (EPA, 1974) listed the possible effects of sound pressure on humans. The World Health Organization (WHO, 1999) emphasized the effect of outdoor sound pressure on individuals and revealed the effects of sound according to the levels of pressure. Yang and Kang (2005a) report that natural sounds in the city are generally more pleasing than artificial sounds; Çankaya and Yılmazer (2016) report that music and natural sound sources are mostly preferred over electronic-mechanical sound sources; Pheasant et al. (2010) report that natural tranquility is important for people to be satisfied with their surroundings; Axelsson et al. (2010) report that people relax in a place with natural sounds, while they do not feel comfortable in a place with electronic sounds. Guastavino (2006), Jeon et al. (2010), Jeon et al. (2011) and Jeon et al. (2013) conclude that natural sounds are pleasing to people. Nilsson et al. (2007) claim that the sound types that make up the soundscape in urban parks and green open spaces and that the informational properties of the sound are more prominent determinants of quality compared to sound pressure. Accordingly, it appears that there are individual differences in the perception of sound. At this point, Gestalt theory comes to the fore. The reasons for individual differences in soundscape perception can be explained within the framework of Gestalt theory, which reveals differences in visual perception (Schafer, 1977). Gestalt theory explains how the individual mind organises similar images and how images are perceived by combining sensory input, including sight, hearing and smell. Gestalt theorists argue that people always exist in a field organised by their perceptions of their own needs or interests at a particular time and place (Lin, 2009). Similar to physics, the central tenet of Gestalt psychology is that an object is perceived according to the overall context in which it exists. Elements within a visual field either attract (group) or repel (ungroup) each other (Suler & Zakia, 2017). Given that tourism activities basically aim to make people feel better, and in line with the information given above, it is a valuable question as to whether the sound pressure level and dominant sound type influence tourists' moods. Therefore, the following hypotheses are proposed:

H1. The pressure level of sounds in the soundscape influences the positive mood of tourists.
H2. The sound type that is dominant for tourists in the soundscape influences the positive mood of tourists.
H3. The pressure level of sounds in the soundscape influences the negative mood of tourists.
H4. The sound type that is dominant for tourists in the soundscape influences the negative mood of tourists.

3. Methodology

This article has been designed within the framework of the six-layered research onion developed by Saunders et al. (2007). Positivist philosophy was used in this study because the researchers were not biased by the case and the data acquired using a highly structured assessment. As the aim was to generalize the result obtained by working on a sample, induction was determined as the research approach, and the strategy in collecting the data was determined as a questionnaire. The type of method chosen in the analysis and the interpretation of the data obtained is quantitative, whereas the time horizon is cross-sectional as the data were collected between 5 June 2021, and 15 July 2021.

3.1 Study Area

Eskişehir is set in a province located in the Central Anatolia Region of Turkey (Figure 1). The city is characterized by its specific nature and unique properties which differentiate it from other cities. Such differences originate from the city's natural landscapes, as well as human-made recreational areas that were made later, reinforcing the city's image and identity. Eskişehir attracts many visitors with its unique features (Tokay Argan, 2016). In 2020, 18,458 foreigners entered Turkey through Eskişehir Hasan Polatkan Airport. In addition, according to information received from the Ministry of Culture and Tourism, the

number using the accommodation facilities was 385,290, and the number of overnight stays was 545,645. It is known that there are many visitors to Eskişehir on daily tours, but there are no official statistics on this. Given the possibility of accommodation outside the facilities, the total number of visitors is expected to exceed 500,000. Eskişehir is also known to have numerous urban tourism assets (BEBKA, 2020). Given all this information, Eskişehir can be said to be one of the most important urban tourism destinations in Turkey and is assumed to represent all the urban tourism destinations through this feature.

Parks and streams in cities are important areas that provide recreational opportunities for people (Brown et al., 2014; Hong et al., 2019; Shan et al., 2020). Soundscape studies in tourism are intensively focused on nature-based tourism in urban areas (Yang & Kang, 2005b; Yang & Kang, 2005a; Nilsson et al., 2007; Liu et al., 2018; Jiang et al., 2020; Gale et al., 2021; Qiu et al., 2021; Wu et al., 2021; Jiang, 2022). Hong and Jeon (2015) studied soundscape in basic shopping districts, residential areas, central business districts and urban green spaces. In this study, two different study areas (SAs) were selected in a partially similar manner; an urban green space and a green space located in the central business district (CBD). These areas are Sazova Science, Culture and Art Park (SA-1) in Eskisehir, which attracts many tourists, and Adalar (SA-2) on the banks of the Porsuk river. Sazova Science, Culture, and Art Park, which is an urban green area, is the largest recreational area of the city, established on an area of 400,000 square meters. It is a theme park located ten minutes from the city centre. Adalar is located along a section of the Porsuk river that runs through the heart of Eskişehir, and is densely crowded with cafes, restaurants, patisseries, and hotels. This region is surrounded by buildings that range in height from one to seven floors. The lower levels of these buildings house cafes, restaurants, and patisseries. Adalar is also located in the central business district, where the population density is quite high, and is an important visiting area for tourists. Boarding points for gondola and boat cruises are also located in this area. Tourists can explore the Adalar locality by traveling along the Porsuk river on these cruises. It is thought that these areas with different attributes may have different soundscapes. In order to determine the effect of these different soundscapes on tourists' moods, two different study areas were studied.

In both study areas, fifteen-minute walking routes were constructed, based on the most popular and highly frequented tourist destinations (Figure 1).

Figure 1. a) Location of Study Areas, b) Study Area-1 Walking Route, c) Study Area-2 Walking Route
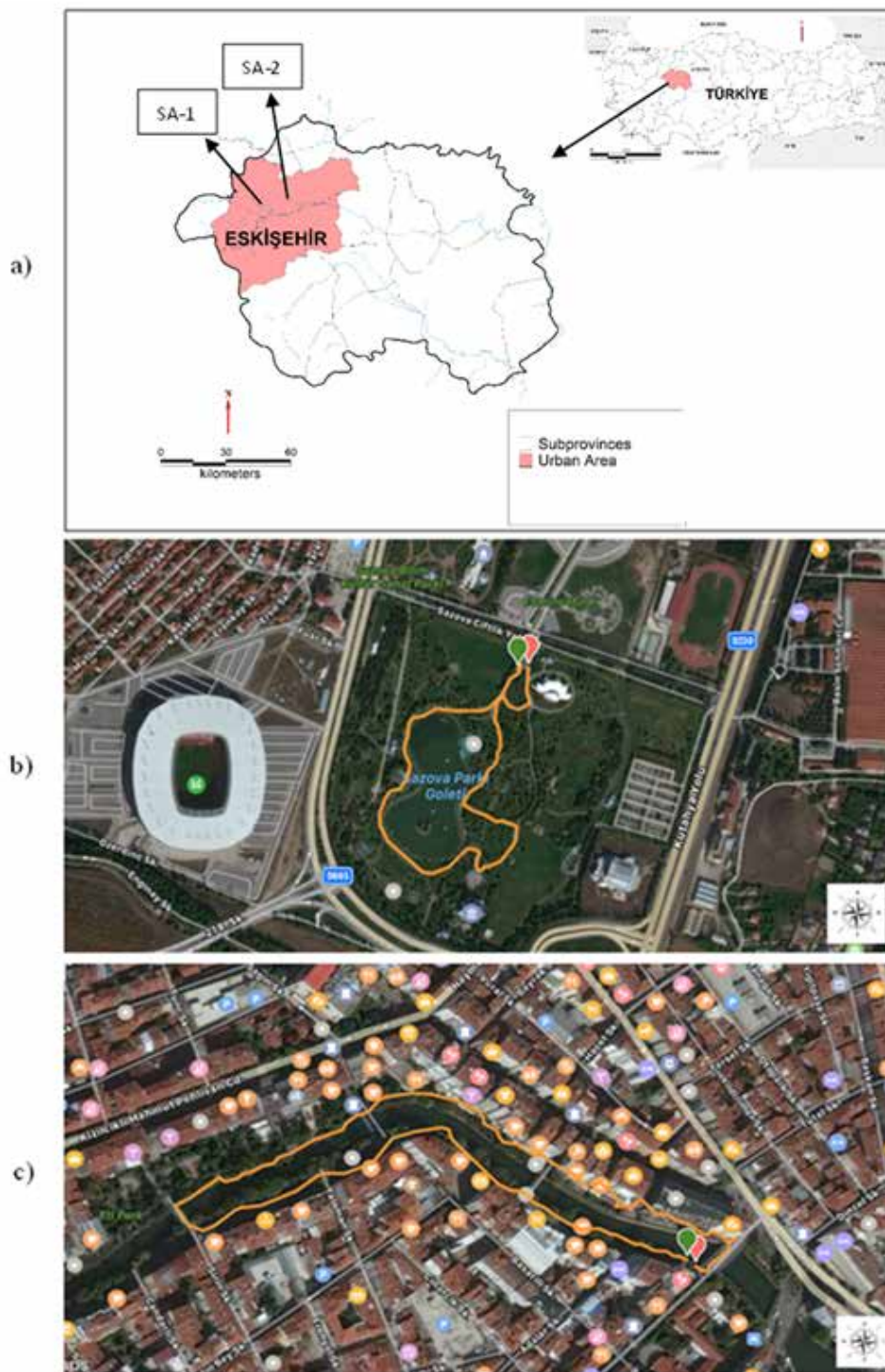
Source: Own Elaboration

3.2 Data Collection Tool

In this study, the Positive and Negative Affect Schedule (PANAS) was used to measure the mood of tourists induced by the soundscape. This is because Watson et al. (1988) propose the PANAS as a reliable, valid and effective tool to measure two key dimensions of mood; positive affect (PA) and negative affect (NA). The scale includes twenty mood descriptors, of which ten are positive and ten are negative. People given the PANAS were asked to reflect on how they felt, considering the soundscape they were in, and to rate how much they experienced each of these mood descriptors on a five-point Likert scale (1=very slightly

or not at all, 5=extremely). In addition, demographic questions providing information regarding the age, gender and educational status of the participants, and the question, 'Which sound is the most dominant sound for you among the sounds you hear now?', were also added to the survey.

The Cronbach α value of the scale was found to be 0.771 and, according to this value, it was understood that the scale is highly reliable. As a result of a confirmatory factor analysis (CFA) conducted to test the theoretical validity of the factor structure of the PANAS, the fit indices of the measurement model were found to be χ2/sd=3.98 IFI=0.904 CFI=0.903 GFI=0.921 RMSEA=0.061 AGFI=0900 NFI=0.875. Accordingly, it was found that each factor constituting the scale represented its constituent items with high fit values, and the structural validity of the two-dimensional PANAS was confirmed.

3.3 Sample

Purposive sampling, a non-random sampling technique, was used as the sampling method, taking into account time and financial constraints. Data were collected from a total of 794 tourists, of whom 397 visited SA-1 and 397 visited SA-2. Since data was collected during the period when travel restrictions were implemented due to the COVID-19 pandemic, data could only be collected from domestic tourists. 530 participants (66,8%) were female, and 264 (33,2%) were male. The participants were within the age ranges of 18-24 years (33.2%), 25-34 years (28.7%), and 35-44 years (20.8%). In terms of educational attainment, most of the participants (43.6%) held a bachelor's degree. According to the data on the place of residence of tourists, it was found that more than half of them, 72.4%, lived in the city centre, 24.7% in the district, 1.5% in the town and 1.4% in the village.

3.4 Data Collection and Analysis

Tourists visiting Eskişehir mostly prefer to walk around the city centre and mainly visit shopping, entertainment and recreational areas (BEBKA, 2020). To this end, data were collected from tourists who visited the study areas during weekends of high tourist mobility in June and July. The weekend days were chosen, when the tourist density is high. Due to COVID-19 pandemic restrictions, a Sunday curfew was imposed in Turkey during the month of June. For this reason, data could only be collected on Saturdays in this month. First, sound measurement and recordings were made, and then data were collected through face-to-face interviews.

During data collection, sound pressure measurements were made and the sounds in the soundscape were recorded simultaneously. These recordings were made with sound walks on the routes created in the study area. The sound recordings were listened to by the researcher daily, and the sounds were classified. In this research, the sounds that make up the soundscape are classified according to the referential aspects identified by Schafer. Schafer (1977) classified sounds by their 'physical characteristics' and 'referential aspects'. The classification, according to the physical characteristics, is a classification based on the physical characteristics of the sounds, attack, body, decay, duration, frequency, and dynamics. The classification, according to referential aspects, is the classification made according to the functions and meanings of sounds; natural sounds, human sounds, sounds and society, mechanical sounds, quiet and silence, and sounds as indicators (Table 1).

Table 1. Schafer's Classification of Sound by Referential Aspects

I. Natural Sounds	II. Human Sounds	III. Sounds and Society
Sounds of creation	Sounds of the voice	General descriptions of rural soundscapes
Sounds of apocalypse	Sounds of the body	Town soundscapes
Sounds of water	Sounds of clothing	City soundscapes
Sounds of air		Maritime soundscapes
Sounds of earth		Domestic soundscapes
Sounds of fire		Sounds of trades, professions and livelihoods
Sounds of birds		Sounds of factories and offices
Sounds of animals		Sounds of entertainments
Sounds of insects		Music
Sounds of fish and sea creatures		Ceremonies and festivals
Sounds of seasons		Parks and gardens
		Religious festivals

IV. Mechanical Sounds	V. Quiet and Silence	VI. Sounds as Indicators
Machines		Bells and gongs
Industrial and factory equipment		Horns and whistles
Transportation machines		Sounds of time
Warfare machines		Telephones
Trains and trolleys		Warning systems
Internal combustion engines		Signals of pleasure
Aircraft		Indicators of future occurrences
Construction and demolition equipment		
Mechanical tools		
Ventilators and air-conditioners		
Instruments of war and destruction		
Farm machinery		

Source: Schafer (1977)

For sound pressure measurements, a PCE-432 Type 1 sonometer, which can measure A-weighted and C-weighted sound pressure, was used to determine the A-weighted equivalent sound pressure level (LAeq) within the scope of this study. Recordings were made with a Zoom H6 audio recorder.

Background noise levels of the study areas were also determined in order to determine whether there was noise in these areas. For this, sound pressure measurements were made between 6.00 am and 7.00 am on weekdays when there were no crowds in the study areas. According to the measurements, the SA-1 background noise level was 49.7 dBA and the SA-2 background noise level was 48.9 dBA. You can listen to a sample background noise record of SA-1: https://soundcloud.com/e-ref-ay/sazova-background-noisewav, and a sample background noise record of SA-2: https://soundcloud.com/e-ref-ay/adalar-background-noisewav).

Image 1. Adalar Locality

Source: Own Elaboration

Image 2. Sazova Science, Culture, and Art Park

Source: Own Elaboration

An IBM SPSS 23.0 was used for data analysis and AMOS 23.00 statistical software was used for the confirmatory factor analysis of the scale. To test the effect of decibel levels and dominant sound types in the soundscape on the mood of visitors, multiple regression analysis was conducted. However, since the difference between the groups of the sound type variable here was not mathematically equal for the dominant sound variable to be subjected to regression analysis, that is, since the data were categorical, a dummy variable was created by re-coding. During the data collection phase of the study, no data could be obtained in the 'quiet and silence' group. In the multiple regression analysis to be applied, 'mechanical sounds' for SA-1 and 'sounds as indicators' for SA-2 were taken as reference variables, with four (D1, D2, D3, D4) dummy variables being formed. These dummy variables are presented in Table 2.

Table 2. Definition of Dummy Variables

Main variable: Mechanical sounds				
	D1	D2	D3	D4
Natural sounds	1	0	0	0
Human sounds	0	1	0	0
Sounds and society	0	0	1	0
Sounds as indicators	0	0	0	1
Main variable: Sounds as indicators				
	D1	D2	D3	D4
Natural sounds	1	0	0	0
Human sounds	0	1	0	0
Sounds and society	0	0	1	0
Mechanical sounds	0	0	0	1

Source: Own Elaboration

As the sample size was larger than 100 (n=794) in this study, the assumption of the central limit theorem was considered. According to the theorem, the number of samples must be at least thirty in order to apply parametric tests (Chang et al., 2008). Therefore, normality assumption was adopted.

4. Findings

An attempt was made to define the soundscape of the study areas using sound pressure measurements and sound recording analysis as part of the research.

Table 3. Sound Pressure Level of Study Areas

	Date	LAeq (dbA)		Date	LAeq (dbA)
	05.06.2021	58,3		12.06.2021	68,3
	12.06.2021	54,7		19.06.2021	64,3
	19.06.2021	56,1		26.06.2021	66,0
SA-1	26.06.2021	64,9	**SA-2**	03.07.2021	59,6
	03.07.2021	60,5		04.07.2021	60,5
	04.07.2021	55,2		10.07.2021	61,6
	11.07.2021	56,6		11.07.2021	62,8
	15.07.2021	55,2		15.07.2021	60,7
Average		**57,6**			**62,9**

Source: Own Elaboration

According to Table 3, the highest LAeq level for SA-1 was measured as 64.9 dbA on 26 June, 2021. The lowest LAeq level was measured as 54.7 dbA on 12 June, 2021. The highest LAeq level measured for SA-2 was 68.3 dbA on 12 June, 2021, and the lowest LAeq level was 59.6 dbA on 3 July, 2021.

Table 4. Frequencies of Foreground Sounds for Participants

	Study Area-1		Study Area-2	
Sound Type	n	%	n	%
Natural sounds	172	43,3	79	19,9
Human sounds	152	38,3	123	31,0
Sounds and society	37	9,3	161	40,6
Mechanical sounds	4	1,0	32	8,0
Sounds as indicators	32	8,1	2	,5
Total	**397**	**100,0**	**397**	**100,0**

Source: Own Elaboration

Sound recordings made in the study areas were listened to, analysed, and classified by the researchers (Table 4). The most prominent sound types for the tourists in the SA-1 were natural sounds (n=172) and human sounds (n=152). The most prominent sound types for the tourists in the SA-2 were sounds and society (n=161) and human sounds (n=123).

Table 5. Descriptive Statistics for the PANAS Dimensions of the Study Areas

	Dimensions	Mean	Std. Deviation
SA-1	PA	3,49	,918
	NA	1,30	,483
	n=397		
SA-2	PA	3,46	,925
	NA	1,43	,543
	n=397		

Source: Own Elaboration

To determine the soundscape-induced moods of the participants, the weights of the PA and NA averages, which are two aspects of the PANAS, were examined (Table 5). In line with the data obtained, the soundscapes in the SA-1 and SA-2 evoke more positive emotions (respectively $\bar{x}$ =3,49; $\bar{x}$ =3,46) in the tourists, while on the other hand, they evoke fewer negative emotions (respectively $\bar{x}$ =1,30; $\bar{x}$ =1,43).

The results of the multiple regression analysis are given in Table 6 and Table 7.

Table 6. The Effect of Independent Variables on Positive Mood

	Variables	Mean	Std. Deviation	St. Error	B	β	p
SA-1	Constant	-	-	,967	1,690	-	,081
	LAeq	57,423	3,2449	,014	,034	,120	,017*
	Natural sounds	,4332	,49615	,451	-,006	-,003	,989
	Human sounds	,3829	,48670	,453	-,146	-,077	,748
	Sounds and society	,0932	,29108	,469	-,208	-,066	,657
	Sounds as indicators	,0806	,27257	,476	-,805	-,239	,092

Dependent variable: PA
Reference variable: Mechanical sounds
R^2 = ,075; F (5,391) = 6,365, $p<0,05$
*$p<0,05$

	Variables	Mean	Std. Deviation	St. Error	B	β	p
SA-2	Constant	-	-	1,569	1,167	-	,458
	LAeq	62,496	2,0593	,023	,016	,035	,491
	Natural sounds	,1990	,39975	,661	1,462	,631	,028
	Human sounds	,3098	,46300	,659	1,335	,667	,043
	Sounds and society	,4055	,49162	,657	1,273	,676	,054
	Mechanical sounds	,0806	,27257	,673	1,306	,384	,053

Dependent variable: PA
Reference variable: Sounds as indicators
R^2 = ,018; F (5,391) = 1,400, $p>0,05$

Source: Own Elaboration

According to the SA-1 analysis results, the regression equation for predicting positive mood (Y) is as follows:

Y=1,690 + 0,34 * LAeq-0,006 * Natural sounds - 0,146 * Human sounds - 0,208 * Sounds and society - 0,805 * Sounds as indicators

For SA-1, the results of the analysis are statistically significant [(F 5,391) =6.365, $p<0.05$). The corrected R^2 value for SA-1 is 0,063. This shows that the 6% variance in the PA is explained by the variables. When the β coefficients of the variables are analysed, the decibel level of the sound (β=0.120, $p<0.05$) is found to have a significant contribution in explaining the PA. The correlation between them is positive. The dominant sound type variables have no significant contribution in explaining the variance in the PA ($p>0.05$).

The regression analysis for SA-2 shows that $p>0.05$ in the ANOVA table. Accordingly, it is understood that the independent variables do not have a significant effect on the dependent variable. According to the results of the analysis, hypothesis H1 was accepted for SA-1 and rejected for SA-2. Hypothesis H2 was rejected for both study areas.

Table 7. The Effect of Independent Variables on Negative Mood

	Variables	Mean	Std. Deviation	St. Error	B	β	p
SA-1	Constant	-	-	,515	2,056	-	,000
	LAeq	57,423	3,2449	,008	,000	,002	,968
	Natural sounds	,4332	,49615	,241	-,856	-,879	,000*
	Human sounds	,3829	,48670	,242	-,752	-,758	,002*
	Sounds and society	,0932	,29108	,250	-,699	-,421	,005*
	Sounds as indicators	,0806	,27257	,254	-,608	-,343	,017*

Dependent variable: NA
Reference variable: Mechanical sounds
R^2 = ,051; F (5,391) = 4,206, $p<0,05$
*$p<0,05$

	Variables	Mean	Std. Deviation	St. Error	B	β	p
SA-2	Constant	-	-	,904	2,762	-	,002
	LAeq	62,496	2,0593	,013	,002	,008	,867
	Natural sounds	,1990	,39975	,381	-1,580	-1,161	,000*
	Human sounds	,3098	,46300	,379	-1,377	-1,172	,000*
	Sounds and society	,4055	,49162	,378	-1,495	-1,352	,000*
	Mechanical sounds	,0806	,27257	,388	-1,427	-,716	,000*

Dependent variable: NA
Reference variable: Sounds as indicators
R^2 = ,055; F (5,391) = 4,576, $p<0,05$
*$p<0,05$

Source: Own Elaboration

According to the SA-1 analysis results, the regression equation for predicting negative mood (Y) is as follows:

Y = 2,056 + 0 * LAeq – 0,856 * Natural sounds – 0,752 * Human sounds – 0,699 * Sounds and society – 0,608 * Sounds as indicators

According to the SA-2 analysis results, the regression equation for predicting positive mood (Y) is as follows:

Y = 2,762 + 0,002 * LAeq – 1,580 * Natural sounds – 1,377 * Human sounds – 1,495 * Sounds and society – 1,427 * Mechanical sounds

The multiple regression analysis results are statistically significant for both of the study areas; (F 5,391) =4,206 $p<0,05$) and (F 5,391) =4,576, $p<0,05$). The corrected R^2 value for SA-1 is found to be 0,039. 3% of the

variance in the NA is explained by the variables. The corrected R^2 value for SA-2 is 0,043. This indicates that the 4% variance in the NA is explained by the variables. It was found that all the dominant sound types in these areas contribute significantly to explaining the NA, and that they are negatively correlated with the NA. For both areas, the decibel level of sound (LAeq) variable does not have a significant contribution in explaining the variance in NA ($p>0.05$). According to the results of the analysis, hypothesis H3 was rejected for both study areas. Hypothesis H4 was accepted for both study areas.

5. Discussion

This study was conducted to determine the effect of soundscape on tourists' moods in urban recreational areas. Auditory experiences are part of the tourism experience (Waitt & Duffy, 2010). Sound may contain deep information about a culture (LaBelle, 2010). Therefore, a significant part of the tourist experience is associated with the sounds around them (Qiu et al., 2018b). Soundscape can trigger certain special perceptions that cannot be experienced with visual stimuli and help people act more rationally by understanding their environment more comprehensively (Qiu et al., 2018a). According to 'selective perception', which is considered within the framework of Gestalt theory, in an environment with multiple stimuli, the individual perceives several of them. This is because individuals make unconscious choices between stimuli based on differences in factors such as past experience, culture, motivation, and expectations. When considering selective perception in the context of tourism, tourists' inability to respond to all stimuli in destinations can only be explained by perceiving certain stimuli in the foreground and others in the background (Wu et al., 2013). From this perspective, tourists were first asked which sound was dominant for them.

The senses belong to the body and are affected by the state of our bodies (Shusterman, 2000). Whether a sound is a figure, or a ground is partly related to acculturation (habits), partly to the individual's mental state (mood, interest), and partly to the individual's relationship with the space (local, foreign) (Schafer, 1977). Bruce and Davis (2014) argue that individuals learn what kind of soundscape a place should have through experience, and this affects their perceptions of that space. As the place they live in affects the senses, tourists were asked about their moods based on their surroundings.

The tourists stated that they heard natural sounds, such as birds, water and wind, most often in the SA-1 theme park, with human sounds coming second (*Sample record of SA-1 may listen via that link: https://soundcloud.com/e-ref-ay/sazova-ses-atmosferiwav*). The average PA of the theme park arising from soundscape is higher than the average NA. It has been determined that as the decibel level of the soundscape consisting of natural sounds, which is the dominant sound type, increases, the average PA of the tourists increases and the average NA decreases. It seems that the research hypothesis regarding the effect of the pressure level of sounds in the soundscape on the positive mood of tourists is accepted for the Theme Park. Jiang et al. (2018), Yang et al. (2020), Gale and Ednie (2021), Kankhuni and Ngwira (2021) and Jiang (2022) also conclude that the same types of sounds are heard intensely in parks, similar to the SA-1, and that satisfaction with the soundscape is high. It can be said that visitors to the theme park enjoy hearing the naturals sound and human sounds that dominate these areas, and that the increase in the pressure of these sounds does not negatively affect them and that, as the natural sounds and human sounds increase, the tourists' NA decreases. It was observed that the research hypothesis regarding the effect of the dominant sound type for tourists in the soundscape on the negative mood of tourists was confirmed. This can be explained by the conclusion of Nilsson et al. (2007) that 'sound types in urban parks and green open spaces are more important than sound pressure among the determining factors of the soundscape'. Additionally, Montazerolhodjah et al. (2019) state that human sounds increase acoustic comfort. On the other hand, Filipan et. al. (2017) also state that individuals' feeling of peacefulness in such park areas is related to the decibel level of the soundscape and that low decibel sounds are more peaceful. From this point of view, satisfaction in SA-1 may also be due to the fact that the sound pressure in the theme park is not at disturbing levels that may cause hearing loss according to EPA (1974).

When the SA-2 in the CBD was put under the spotlight, it was found that in this recreational area, sounds and society, such as the sounds of business centres, the sounds of vehicles in the city and the sounds of music, are more prominent and dominant, and the second dominant sound is human sounds

(*Sample record of SA-2 may listen via that link: https://soundcloud.com/e-ref-ay/adalar-ses-atmosferiwav*). In this study area, it can be said that the soundscape originating the PA average is higher than the NA average, as Yang and Kang, (2005a) and Montazerolhodjah et al (2019) state, it can be said that the sounds of natural sounds and society and human sounds are related to the welcome by people. As the average of sounds and society and human sounds, which are the dominant sound types in the CBD, increases, the average of the NA decreases. As this area is located in the CBD, it can be said that human sounds and sounds and society are sounds specific to this field, and tourists are aware of this. It can be seen that hearing the sounds specific to this field, regardless of their type, reduces negative emotions in tourists. This finding supports Hong and Jeon's (2015) conclusion that individuals tend to think that live acoustic environments created by human activities may be suitable for the function of urban recreational areas. Hong and Jeon also reveal that the soundscape of visually pleasing urban spaces is also perceived as pleasant by people. Xu and Wu (2021) state that visual stimuli affect the perception of the soundscape, and that sounds that match the visuals are perceived positively. Considering that the study areas in this article are places with visually pleasing elements, it can be said that the result obtained supports the results of other researchers.

When the two study areas were compared, it was clear that the average PA was lower in the CBD than in the theme park. It can be said that the reason for this is that the sounds coming from music and places of business are more prominent in the CBD, and that mechanical sounds are heard more than in the theme park. This is because To and Chung (2019) found that mechanical sounds are not welcomed by people. Grguric (2020) also concludes that music broadcast in tourism destinations disrupts the soundscape structure of the city, and argues that the music broadcast in public spaces should be kept under control.

6. Conclusion

In this article, unlike previous studies on soundscape in tourism, two recreational areas with different characteristics located in the city were studied, and the effects of both types of sounds that make up their soundscapes and the pressure levels of these sounds on the mood of tourists were examined. Therefore, how tourists are sensually affected by the soundscape is revealed. It is understood that the decibel level of the sounds that make up the soundscape for the theme park has a positive effect on the tourists' PA average. This can be explained by the fact that the sounds that make up the soundscape here are natural sounds that are pleasing to people, such as birdsong, water sounds and wind sounds. These sounds are also the dominant sound types heard by tourists in this area. It can be seen that the perception of sounds in the soundscape of the theme park is independent of the pressure levels of these sounds. The pressure level of the sounds here is not at a level that poses a threat to human health according to the EPA (1974) and the WHO (1999). This suggests that such sounds are unlikely to cause disturbance in similar recreational areas. In addition, the dominant sound types for tourists in the soundscape of this area were found to have a negative effect on the average NA. Yet again, this can be explained by the fact that the sounds that make up the soundscape here are mostly natural sounds that people like to hear.

Human and society-generated sounds, such as business centre sounds, human voices and music are more prominent and dominant for tourists in the CBD. It was determined that the dominant sound types for tourists here have a negative effect on their NA average. In other words, as the sounds here increase, the NA of the tourists decreases. This can be explained by the fact that these sounds are unique to this region. The sounds in the soundscape of this area are human-induced sounds, such as the sound of engines, music, bicycles, trams, and so on. On the other hand, mechanical sounds, such as engine noises and tram sounds are heard more in the CBD compared to the theme park. Mechanical sounds cause discomfort in people. Therefore, the average PA in the CBD is lower than that in the theme park. In addition, it was found that the mean PA in both areas was higher than the mean NA in general. Again, this can be explained by the fact that the soundscape in these areas contains unique sound types, that tourists visit these areas knowing the sound types they are likely to encounter, and that these areas contain sound types (such as sounds of nature, human voices, music) that are pleasant to people. In line with all these data, it has been confirmed that there is a correlation between tourists' moods caused by the soundscape and the sound pressure. It has also

been confirmed that there is a correlation between tourists' moods caused by the soundscape and the sound type which is most prominent to them and which they hear the most.

The first key contribution of this study is to extend the literature on the presence of a correlation between the pressure and types of sounds in the soundscape and tourists' moods in urban recreational areas. The effect of soundscape on the tourist experience (He et al., 2018) and the importance of a multidimensional approach to ensure a better tourist experience have been confirmed. In this research, it has been found that the soundscape of the spaces examined is perceived positively by the tourists visiting there, because it contains the space's unique sounds. Furthermore, the tourists' positive perception of the soundscape has not changed, even though it contains sound pressure levels or sound types that are anticipated to be disturbing. The fact that certain sound types, such as birdsong, water sounds, wind sounds, human voices and human community sounds, increase PA and decrease NA regardless of their pressure in theme parks is an issue that tourism planners and city administrations should pay attention to. In line with this finding, the article serves as a tool to draw the attention of both local and national stakeholders in the practitioner position to the soundscape, which is another contribution of this article. In addition, for the sustainability of these areas, noise inspections must be carried out by sound pressure measurement and appropriate sanctions applied. In general, it can be seen that activities are carried out to plan and design the physical conditions of recreation areas. It is known that there are shortcomings in the planning and design practices with regard to the soundscape of places. For the landscape planning of destinations and recreational areas, it is recommended that the original soundscape of these places be preserved, and that studies be carried out in this direction. A lack of sustainability and consumption of destinations through unconscious destruction are among the main problems of tourism. This article emphasizes the importance of the soundscape they have for the sustainability of destinations.

6.1 Limitations and Future Direction

This study was conducted in two urban recreation areas, one located in the CBD and the other a theme park, which also has high visual attraction. Although the soundscapes are intensively visited by tourists, in order to determine the effect of soundscape on the emotional state of tourists, studies should also be conducted in areas with soundscapes consisting of mechanical sounds or sounds as indicators that are likely to cause discomfort and sound pressure at levels that may pose a risk to hearing. This is because, conducting studies to measure how such a soundscape will be perceived by tourists is important in terms of extending the results of this article. Moreover, as emotions are important in tourist satisfaction, conducting studies in which senses such as smell and taste, which are other components of landscape in destinations, are measured and analysed, will contribute to the literature. In order to measure emotions in this study, the quantitative method was preferred. Future studies to be conducted using different research methods will likely provide a more in-depth understanding of the subject.

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A Structural Relationship between Local's Appreciation, Knowledge and Actual Visitation to Adaptive Reuse Heritage Buildings

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ABSTRACT

Appreciation on adaptive reuse historical buildings (ARHB) can be stimulated by visitor's knowledge on historical and cultural background of the building, which later translated through their actual visitation; ultimately increase their revisitation and recommendation to others. The study aims to examine the effects of appreciation and knowledge towards actual visitation to ARHB from local perspectives. This study developed and empirically tests a conceptualized model based on 241 surveys collected among local visitors at two historical buildings reused as a restaurant and event space in Kuching, Sarawak. A Structural Equation Modelling (SEM) via Partial-Least Square (PLS) technique was adopted to test the hypotheses developed. The empirical findings were revealed; (1) visual elements of ARHB have significant effects on appreciation and actual visitation, (2) clarity purpose of ARHB have significant effect on appreciation but not on actual visitation, (3) appreciation have direct effects on actual visitation, (4) appreciation mediates the relationship between ARHB attributes and actual visitation, and (5) knowledge does not moderate the relationship between ARHB attributes and appreciation. The study outcomes provide additional insight on appreciation and knowledge in adaptive reuse historical buildings context in tourism and hospitality management theory and suggests, in practice, to adapt this 'new light' urban regeneration strategy for tourism development and sustainability.

KEYWORDS

ARTICLE HISTORY

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1. Introduction

The commercialization of heritage can generate revenue to conserve heritage resources and improve the economic development of local communities while increasing income, creating employment opportunities, improving living standards, as well as promoting and preserving local culture (Rasoolimanesh et al., 2017). However, many heritage sites and historical buildings suffered dilapidation resulting to abandonment and demolition, even worst, extinction. Like in the case of Singapore, the country's heritage tourism was affected due to the declination of its heritage assets as most of the heritage shophouses were replaced with high-rise and modern buildings (Irene, 2016). In recent years, adaptive reuse gained much attention as an effective urban renewal strategy as it reduces the need for demolition and reproduction of building materials for the transformation of existing structure (Wong, 2022). According to Bottero et al. (2019), the expected outcome of the application of adaptive reuse in cultural heritage is not only about raising the awareness and protection of the building itself, rather it is for a greater preservation of its cultural, historical and architectural significance. Moreover, it retains the symbolic values and the adaptation to a new economically profitable alternative. The said approach could prolong the lifespan of existing structure and preserve the heritage value of the building (Edward, 2021; Wong, 2022). Moreover, repurpose of historical buildings include for educational, cultural and commercial purposes which aid the city's tourism development (Mehmood & Jan, 2022). Essentially, adaptive reuse historical buildings help to retain tourist visitation and at the same time can add value so the current and future generations able to appreciate for what have been left from the past (Ali et al., 2018).

Owing to the importance of heritage tourism particularly in Sarawak, the largest state in Malaysia, historical buildings are regarded as valuable local cultural heritage assets that requires sustainable protection and preservation (Lorna, 2022). This is because historic buildings have existential values beyond historiography that enhance place, personal and group identity of the local people (Coeterier, 2002). In Sarawak, restoration and conservation are considered newfangled alternative to preserve the valuable historical buildings. In line with the 11ᵗʰ Malaysian Plan (2016-2020), the local authorities including Sarawak Museum Department have been collaboratively involved in upgrading and maintaining the state's heritage projects (Tawie, 2022). One of the initiatives is to encourage the reuse and re-purposing of heritage buildings from dilapidation and abandonment as part of heritage tourism development and sustainability. There are two adaptive reused historical buildings successfully converted for commercial purposes, the Old Court House, formerly served as the seat of Sarawak's government and state council meetings, which now served as a restaurant cum event space known as The Commons. Secondly, the former detention center known as the Square Tower that currently served as one of the local and tourist eating spot, The Magenta Restaurant. These buildings are located in the heart of the capital city that purposely reuse to re-live the site as one of tourist attractions. As of 2021, another city's 135-year-old historical building which was used for various civil purposes was converted into a restaurant known as The Round Tower 1886. According to the Minister of Tourism, Creative Industry and Performing Arts Sarawak, "many forts were upgraded for useful purposes but their main structure of outlook is being preserved...These buildings may be old but whomever we lease them out to will be able to look after them so that they can be appreciated by the future generations" (Edward, 2021).

Appreciation can be stimulated by the visitor's knowledge on cultural and historical background of the building, which eventually increase their repeat visitation and recommendation to others (Coeterier, 2002; Plevoets et al., 2012; Ariffin et al., 2020; Fajarwati & Hendrassukma, 2022; Liu et al., 2023; Lee et al., 2023). Without visitor's appreciation towards adaptive reuse heritage sites that indirectly affect their local experiences, the implementation of adaptive reuse for tourism will unlikely to succeed (Adiwibowo et al., 2015). Although appreciation and knowledge can complement for one another to enhance tourist experience, the role of appreciation and knowledge as significant drivers of tourist behaviours are still inconsistent (Liu et al., 2023). Adiwibowo et el. (2015) argued that knowledge does not influence visitors' appreciation and visitation to adaptive reuse historical building that reuse for retail purposes, contradicting Coterier's (2002). However, Ariffin et al. (2020) later revealed that knowledge on building's background is regarded as one of the essential factors that influence visitor's appreciation and actual visitation to adaptive reuse historical building (ARHB) that converted into a restaurant. Therefore, the current study

aims to; (1) identify the key factor influencing appreciation towards adaptive reuse historical buildings; (2) examine the mediation effect of appreciation in the relationship between adaptive reuse historical buildings and actual visitation; (3) determine the moderation effect of knowledge on building's historical background in the relationship between adaptive reuse historical buildings and appreciation.

2. Literature Review

2.1 Adaptive Reuse Historical Buildings on Actual Visitation

Adaptive reuse is regarded as a process by which structurally sound older buildings are developed for economically viable new uses (Austin et al., 1988 in Rodrigues & Freire, 2017). The concept of adaptive reuse or reuse of buildings into other functions indirectly increases competition to attract tourists resulting many historic buildings converted for commercial purposes (Ariffin et al., 2020; Fajarwati & Hendrassukma, 2022). According to Black (1990), the clarity of new purpose of the reused building and its visual elements plays significant role when evaluating adaptive reuse historical building in determining the public's preferences. Adiwibowo et al. (2015) found that exterior façade positively stimulates the publics' appreciation and behavioral intention to visit historical buildings that reused as retail stores in Bandung, Indonesia. Supporting Adiwibowo's, Ariffin et al. (2020) further revealed that tourists' appreciation is enhanced by the positive perceptions on clarity purpose, visual elements and knowledge of adaptive reuse historical buildings (ARHB), which further influenced their actual visitation. The visual elements and interior design of adaptive reuse heritage building enhances dining experience which become one of the reasons of visitation (Fajarwati & Hendrassukma, 2022). Since appreciation is part of human's consciousness, Lee et al. (2023) found that the more aesthetic experience the visitors gained in a reused heritage building, the stronger their behavior intention in the future. Hence, it is hypothesized:

> **H1.** Clarity purpose of adaptive reuse historical buildings have significant direct effect on locals' actual visitation.
> **H2.** Visual elements of adaptive reuse historical buildings have significant direct effect on locals' actual visitation.

2.2 Local's Appreciation as a Mediator in the Relationship between Adaptive Reuse Historical Buildings and Actual Visitation

Appreciation is an essential ingredient for post-consumption service evaluation, including behavioral intention and repeat visitation to a place that have cultural and heritage elements (Liu et al., 2023). Earlier findings by Plevoets et al. (2012) and Adiwibowo et al. (2015) found that appreciation positively correlate adaptive reuse historical buildings and intention to visit. Fajarwati & Wulandari (2020) described adaptive reuse helps to create awareness and indirectly develop a sense of community among the local citizens which increase their level of appreciation towards the area that provide occupant-friendly environment. Local people are regarded as an integral part of the "heritage locus" who can contribute vitality to an area and thereby assist in the maintenance of an atmosphere conducive to tourism (Schulz,1980 in Nuryanti, 1996, p. 256). As mentioned by Coeterier (2002), the local residents or so called 'lay people' bears the 'genius loci' of the place identity, the reminiscences and feelings as well as the identity of the town, thus granting them to have a voice in the fate of the valuable historic buildings within their locality.

Consequently, this sense of feeling could enhance their appreciation and foster knowledge towards historical buildings, thus supporting the initiative of sustainable adaptive reuse historical buildings through their visitation. In adaptive reuse historical buildings context, several studies on intention to visit and revisit to adaptive reuse heritage buildings have been widely explored in different contexts such as museum (Jamal et al., 2014), retail store (Adiwibowo et al., 2015), heritage hotel (See & Goh, 2019), dining outlets (Maulina et al., 2022), and public art space (Sahahril & Mohamed, 2022). Ariffin et al. (2020) further revealed that the local tourists' perception on adaptive reuse historical buildings that converted

into dining and event space increases the appreciation level and further influence their actual visitation and returns. Typically, studies that examining the actual behavior in most areas including tourism are less compared to the behavioral intention due to the complexity in tracking actual behavior (Hsu & Huang, 2012). Therefore, it is hypothesized:

H3. Clarity purpose of adaptive reuse historical buildings have significant direct effect on locals' appreciation.

H4. Visual elements of adaptive reuse historical buildings have significant direct effect on locals' appreciation

H5. Local's appreciation has significant direct effect on actual visitation to adaptive reuse historical buildings.

H6. The locals' appreciation significantly mediates the relationship between clarity purpose and local residents' actual visitation.

H7. The locals' appreciation significantly mediates the relationship between visual elements and local residents' actual visitation.

2.3 Knowledge on Building's Historical Background as a Moderator in the Relationship of Adaptive Reuse Historical Building Attributes and Local's Appreciation

Possessing knowledge and information about a destination prior visit is essential in tourists' decision making to visit a destination (Tessitore et al., 2014). Tourists are more incline to revisit and recommend to others when they know if the building has significant heritage values which could enhance their positive emotions and satisfaction (Samuell et al., 2012), leading to appreciating its existence as historical tangible asset that left from the past for the current and future generations. Despite the goodness of adaptation for new commercial purposes, the significance historical value of the old historical buildings should be highlighted as one of the main reasons of visitation for long-term sustainability and livability (Bullen, 2007; Bullen & Love, 2011).

Previous studies revealed that prior knowledge on the historic background of the reused buildings for commercial lodging and F&B purposes have significant impacts on the intention to visit (See & Goh, 2019), actual visitation (Ariffin et al., 2020) and repeat visitation (Maulina et al., 2022). In line with Coeterier's (2002) earlier finding, he found that educated people valued the historic information and knowledge more compared to those who have less knowledge on reused building's historical background, thus inclined more to preserve and appreciate the rare buildings. However, Adiwibowo et al. (2015) argued that visitors' knowledge on the reused historical buildings as retail store does not influence their appreciation towards the converted building. As a result, there was weak relationship between visitor's knowledge and intention to visit to the adaptive reuse historical building that converted for retail purposes. Addressing the inconsistency of the findings on the role of building's background knowledge in adaptive reuse historical building for different commercial purposes, thus, it is hypothesized:

H8. The knowledge on building's historical background significantly moderates the relationship between clarity purpose and local's appreciation.

H9. The knowledge on building's historical background significantly moderates the relationship between visual elements and local residents' appreciation.

3. Methodology

Figure 1 presents the conceptual framework of the effects of adaptive reuse historical buildings attributes on knowledge, appreciation and actual visitation.

Figure 1. Conceptual Model
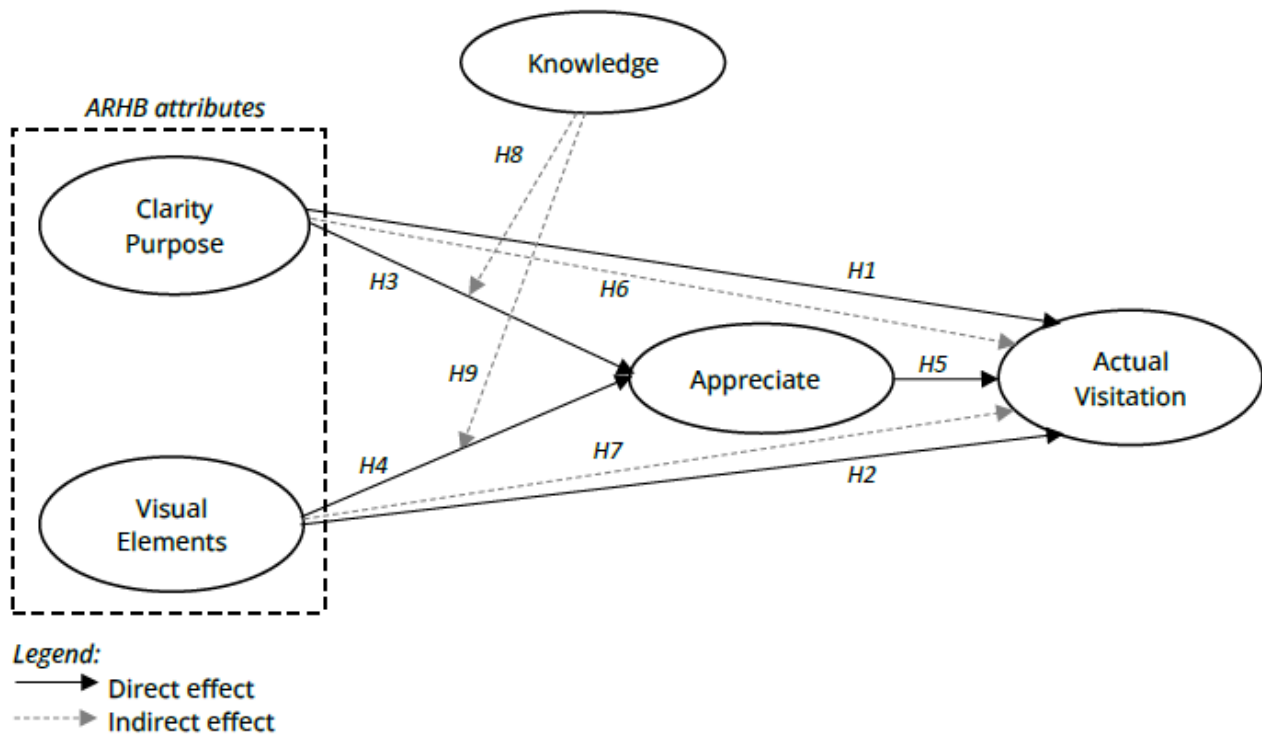
Source: Own Elaboration

3.1 Survey Instrument

A questionnaire was adapted from Ariffin et al. (2020) to test the hypotheses formulated. All four latent constructs in the model were constructed using eight-item scale and slight modification was made in the sentence structure to meet the suitability of the study context. A Likert scale of 1 (strongly disagree) to 5 (strongly agree) was employed. The instrument was pre-tested through pilot study for the internal consistency assessment. The reliability analysis based on Cronbach's alpha score was performed for all latent constructs; clarity purpose, visual elements, knowledge, appreciation and actual visitation. Based on the pilot results, all constructs exceeded the acceptable Cronbach alpha value of greater than .70 (Hair et al., 2007) indicating strong association among the items measured; clarity purpose (α=.897), visual elements (α=0.894), knowledge (α=.707), appreciation (α=.905), and actual visitation (α=.772). Therefore, all items were proceeded for actual study.

3.2 Data Collection and Analysis

A total of 300 self-administered questionnaires were distributed and 241 valid samples were returned with a recovery rate of 80%. The data were collected among the visitors who visited to two adaptive reuse historical buildings located in the central of Kuching city, the Old Court House Kuching (currently known as The Commons) and the Square Tower (currently known as Magenta Restaurant) either for dining or attending an event, during a 3-week survey period. In reaching the targeted samples, a purposive sampling technique was employed. This non-probability sampling allows the researcher to specify and be selective for the most suitable sample in meeting the research objectives. The majority of respondents were local visitors who resided within Kuching city (refer to Table 1). More than half of the respondents were male (52%); the highest proportion of respondents were aged 21-30 years (40%); and majority were single (56%). Most of the respondents were undergraduate background (52%) and worked in private sectors (31%).

Table 1. Respondents' Demographic Profile (N=241)

Demographic Items	Frequency	Percentage (%)
Gender		
Male	124	52
Female	117	48
Residency		
Within Kuching city	212	88
Outside Kuching city	29	12
Age (years old)		
18-20	25	10
21-30	96	40
31-40	28	34
41-50	30	12
51-60 and above	8	4
Marital Status		
Single	135	56
Married	106	44
Education Level Attained		
Secondary school	70	29
Undergraduate	126	52
Postgraduate	19	45
Profession		
Professional	36	15
Government sector	58	24
Private sector	76	31
Self-employed	28	12
Student	43	18

Source: Own Elaboration

4. Results

This study implemented Structural Equation Modelling (SEM) via Partial-Least Squares (PLS) technique, using Smart PLS v4.0 software to examine the hypotheses. PLS-SEM is utilized for "maximizing the amount of variance explained in the endogenous constructs of the structural model, often viewed as prediction, and at the same time facilitating explanation of the model relationships" (Hair, 2021, p. 5). It is a "combination of theory explanation and prediction that allows both prediction and the ability to describe the relationship among the theoretical constructs" (Gregor, 2006 in Hair, 2021, p. 5). Basically it "predicts and explains a key target construct and/or to identify its relevant antecedent constructs" (Chin et al., 2020, pp. 21-62). Hence, the measurement model and structural model were assessed.

4.1 Measurement Model

The outer model was assessed based on reliability and validity, internal consistency reliability, indicator reliability, convergent validity and discriminant validity. First, as displayed in Table 2, the structure's

internal consistency reliability was tested with Cronbach's alpha (α) ranging from 0.832 to 0.877 and the composite reliability (CR) ranging from 0.831 to 0.898. Secondly, most of the indicators' reliability was acceptable as all loading values of the structure indicators were higher than 0.60. Conversely, indicators with factor loading lower than 0.6 (Gefen & Straub, 2005) were removed from the model; VE3= 0.597, KNW6= 0.148, KNW7= 0.157, APP4= 0.543, AV1= 0.584, AV7= 0.577 and AV8= 0.462. Thirdly, the convergent validity was evaluated by the average variance extracted (AVE) values exceeding satisfactory value of 0.50 (Ringle et al., 2018). Finally, to assess the discriminant validity of the constructs, three commonly used criteria were implemented; cross-loading, Fornell-Larcker criterion and heterotrait-monotrait ratio (HTMT) (Fornell & Larcker, 1981; Hult et al., 2022). As presented in Table 2 and 3, the outer-loading for each latent variable was higher than the cross-loading with other measurements. Values of the AVEs in the diagonal column are greater than the correlation coefficient between variables as illustrated in Table 4. According to Hair et al. (2019), HTMT criterion should be utilized for testing discriminant validity in PLS-SEM measurement model as the accuracy of the validity "ensures each construct is empirically unique and captures a phenomenon not represented by other construct in a statistical model". All model constructs' HTMT values were assessed with threshold value of 0.90 (Henseler et al., 2015; Hair et al., 2019; Hult et al., 2022), thus indicating that the model's discriminant validity is well established. As a result, the outer measurement model's outputs were sufficient and appropriate for structural model's assessment.

Table 2. Assessment of the Measurement Model

Code	Items	Outer Loading	α	C.R	AVE
	Clarity Purpose of ARHB		**0.871**	**0.898**	**0.527**
CP1	The overall conversion of the reused historical building is a very good move	0.674			
CP2	The conversion made is useful for commercial purposes (eg: restaurant/hotel/art gallery)	0.621			
CP3	The conversion made gives a new life to the old building	0.709			
CP4	The adaptive reuse of historic building is one of the ways of preserving from extinction	0.756			
CP5	Adaptive reuse of historical building promotes sustainable benefits	0.795			
CP6	Adaptive reuse of historical building promotes country's economic development	0.798			
CP7	Adaptive reuse of historical building promotes sustainable environment	0.721			
CP8	Adaptive reuse not only for preservation, but it gives significant historical values	0.715			
	Visual Elements of ARHB		**0.840**	**0.846**	**0.511**
VE1	The involvement of the overall visual elements of the reused historical building plays an important role	0691			
VE2	The visual elements undertaken makes the building looks new and refresh	0.745			
VE4	The visual changes through decoration and color beautified the historical building	0.653			
VE5	The interior decoration of the reused historical building creates the ambience of the past	0.728			
VE6	The interior decoration included old and historic materials	0.800			
VE7	The color of the building plays the role in portraying the authenticity	0.691			
VE8	The reuse historical building is well-maintained with its original color	0.687			

	Knowledge on building's background		**0.869**	**0.886**	**0.654**
KNW1	Although I am not growing with the historical building, but I know it is a heritage building	0.780			
KNW2	I care about the history of the building	0.843			
KNW3	I believe the building has its own history	0.861			
KNW4	I know the building aged more than hundred years	0.718			
KNW5	I know the building has significant historical values	0.835			
	Appreciation		**0.877**	**0.879**	**0.578**
APP1	I support the overall conversion made towards the historical buildings	0.749			
APP2	I appreciate that the building has been converted instead of demolish	0.774			
APP3	I appreciate the historical building being reused for the new commercial purpose	0.656			
APP5	I really appreciate of maintaining the preservation of the reuse historical building	0.802			
APP6	I wanted more abandoned historical building to be adaptively reused	0.791			
APP7	I wanted more adaptive reuse of historical building to be sustained for future generation	0.835			
APP8	I translated my appreciation through visitation	0.700			
	Actual Visitation		**0.832**	**0.831**	**0.601**
AV2	Because of the importance of preserving the historical building through adaptive reuse made me to visit	0.684			
AV3	Because of the attractive beauty of the building itself made me to visit	0.745			
AV4	Although changes are made, maintaining the originality of the building made me to visit	0.791			
AV5	My appreciation towards the conversion of the building made me to visit	0.839			
AV6	My appreciation towards the preservation of historical building through adaptive reuse made me to visit	0.807			

Source: Own Elaboration

Table 3. Cross Loading Results

	Actual Visit	Appreciate	Clarity Purpose	Knowledge	Visual Elements
AV2	**0.684**	0.515	0.472	0.453	0.427
AV3	**0.745**	0.451	0.33	0.204	0.434
AV4	**0.791**	0.398	0.361	0.317	0.410
AV5	**0.839**	0.449	0.390	0.333	0.366
AV6	**0.807**	0.474	0.417	0.437	0.375
APP1	0.496	**0.749**	0.586	0.332	0.529
APP2	0.393	**0.774**	0.572	0.447	0.502
APP3	0.470	**0.657**	0.584	0.25	0.435
APP5	0.464	**0.802**	0.501	0.559	0.461
APP6	0.399	**0.791**	0.528	0.473	0.490
APP7	0.478	**0.835**	0.599	0.579	0.496
APP8	0.467	**0.7**	0.513	0.406	0.536

CP1	0.332	0.499	**0.674**	0.252	0.456
CP2	0.239	0.433	**0.621**	0.068	0.388
CP3	0.37	0.553	**0.709**	0.324	0.467
CP4	0.332	0.529	**0.756**	0.341	0.369
CP5	0.419	0.540	**0.795**	0.383	0.451
CP6	0.473	0.583	**0.798**	0.444	0.449
CP7	0.381	0.494	**0.721**	0.323	0.462
CP8	0.396	0.588	**0.715**	0.444	0.537
KNW1	0.444	0.505	0.378	**0.780**	0.343
KNW2	0.377	0.432	0.354	**0.843**	0.299
KNW3	0.333	0.509	0.411	**0.861**	0.287
KNW4	0.277	0.266	0.211	**0.718**	0.250
KNW5	0.389	0.533	0.435	**0.835**	0.384
VE1	0.311	0.564	0.513	0.324	**0.691**
VE2	0.437	0.55	0.547	0.300	**0.745**
VE4	0.371	0.346	0.354	0.143	**0.653**
VE5	0.396	0.498	0.478	0.379	**0.728**
VE6	0.368	0.484	0.473	0.322	**0.800**
VE7	0.326	0.309	0.315	0.237	**0.691**
VE8	0.395	0.422	0.347	0.217	**0.687**

Source: Own Elaboration

Table 4. Inter-construct Correlations, the Square Root of AVE and HTMT Results

	Fornell-Locker AVEs Values					HTMT Values				
Variables	**AV**	**APP**	**CP**	**KNW**	**VE**	**AV**	**APP**	**CP**	**KNW**	**VE**
AV	**0.775**									
APP	0.597	**0.760**				0.692				
CP	0.514	0.731	**0.726**			0.590	0.834			
KNW	0.457	0.576	0.459	**0.809**		0.521	0.632	0.492		
VE	0.523	0.649	0.618	0.393	**0.715**	0.619	0.740	0.707	0.442	

Source: Own Elaboration

4.2 Structural Model

The hypotheses were then tested by a structural equation analysis (SEM). The VIF values indicated below 5 which ranging from 1.497 to 2.481. In particular, the model's explanatory power was assessed using coefficient of determination, R^2. The estimated coefficient value enables the relevant construct in a model explain the direct, indirect and total effect of a targeted construct of interest (Chin et al., 2020). The R^2 values for endogenous latent constructs of appreciate and actual visitation met the acceptable limit of 0.10 (Chin, 1998 in Chin et al., 2020). Hence, the adequacy of predictive validity for the structural model was confirmed.

Table 5. Coefficient of Determination (R²) of the Model

| Endogenous Latent Construct	R²
Appreciate	0.654
Actual Visitation	0.393

Source: Own Elaboration

The path coefficient, *β, t*-value and *p*-value of the hypothesized association were analysed using a bootstrapping technique with 5,000 samples and no sign changes option to test for coefficient's significance (Becker et al., 2018). The hypotheses of the results were illustrated in Table 6 below, given the path coefficient values and the relevant significance. Based on the findings, clarity purpose was found to have no significant influence on actual visitation to ARHB (*β*=0.104, *p*=0.136), therefore H1 was rejected. On the other hand, visual elements were found to be significantly influence actual visitation (*β*=0.209, *p*= 0.006), thus, H2 was accepted. Secondly, both clarity purpose and visual elements were found to be significantly correlate to appreciation at *β*= 0.448 and *β*=0.275, *p*=0.000, respectively. Hence, hypotheses H3 and H4 were confirmed. Thirdly, the findings revealed that appreciate construct (*β*=0.275, *p*=0.000) have significant direct effect on actual visitation, supporting H5. According to Lee at al. (2016), if both direct and indirect effects are significant, the results suggest partial mediation, while if the direct effects are insignificant, the results show full mediation. Surprisingly, the mediation results revealed that clarity purpose (*β*=0.172, *p*=0.000), has full mediation effect whilst visual elements (*β*=0.106, *p*=0.006), partially mediate the relationship. Overall, H6 and H7 were supported. Lastly, the results also confirm the moderation effect of knowledge on adaptive reuse historical building attributes towards appreciation. However, both attributes found to have insignificant moderation effect on appreciation. Therefore, H8 and H9 were rejected. Although insignificant, based on the path coefficient value for clarity purpose which is positive (*β*=0.016, *p*=0.67), this indicate that knowledge on building's historical background strengthens the positive relationship between clarity purpose and appreciate. Whereas visual elements (*β*=-0.048, *p*=0.489), indicated otherwise. Figure 3a and 3b depicts the graphical interaction of moderation effect of knowledge, using James Gaskin Statistical Tool.

Table 6. The Structural Model's Results

|	Hypotheses	Beta (*β*)	*t*-Values	*p*-Values	Results of Hypotheses
H1	CP → AV	0.104	1.491	0.136	Rejected (InSig. direct effect)
H2	VE → AV	0.209	2.774	0.006*	Accepted (Sig. direct effect)
H3	CP → APP	0.448	8.76	0.000*	Accepted (Sig. direct effect)
H4	VE → APP	0.275	4.219	0.000*	Accepted (Sig. direct effect)
H5	APP → AV	0.385	4.205	0.000*	Accepted (Sig. direct effect)
H6	CP → APP → AV	0.172	4.153	0.000*	Accepted, Full mediation
H7	VE → APP → AV	0.106	2.723	0.006*	Accepted, Partial mediation
H8	CP → KNW → APP	0.016	0.426	0.67	Rejected
H9	VE → KNW → APP	-0.048	0.693	0.489	Rejected

*p-value<0.05
Source: Own Elaboration

Figure 2. Tested Structural and Measurement Model
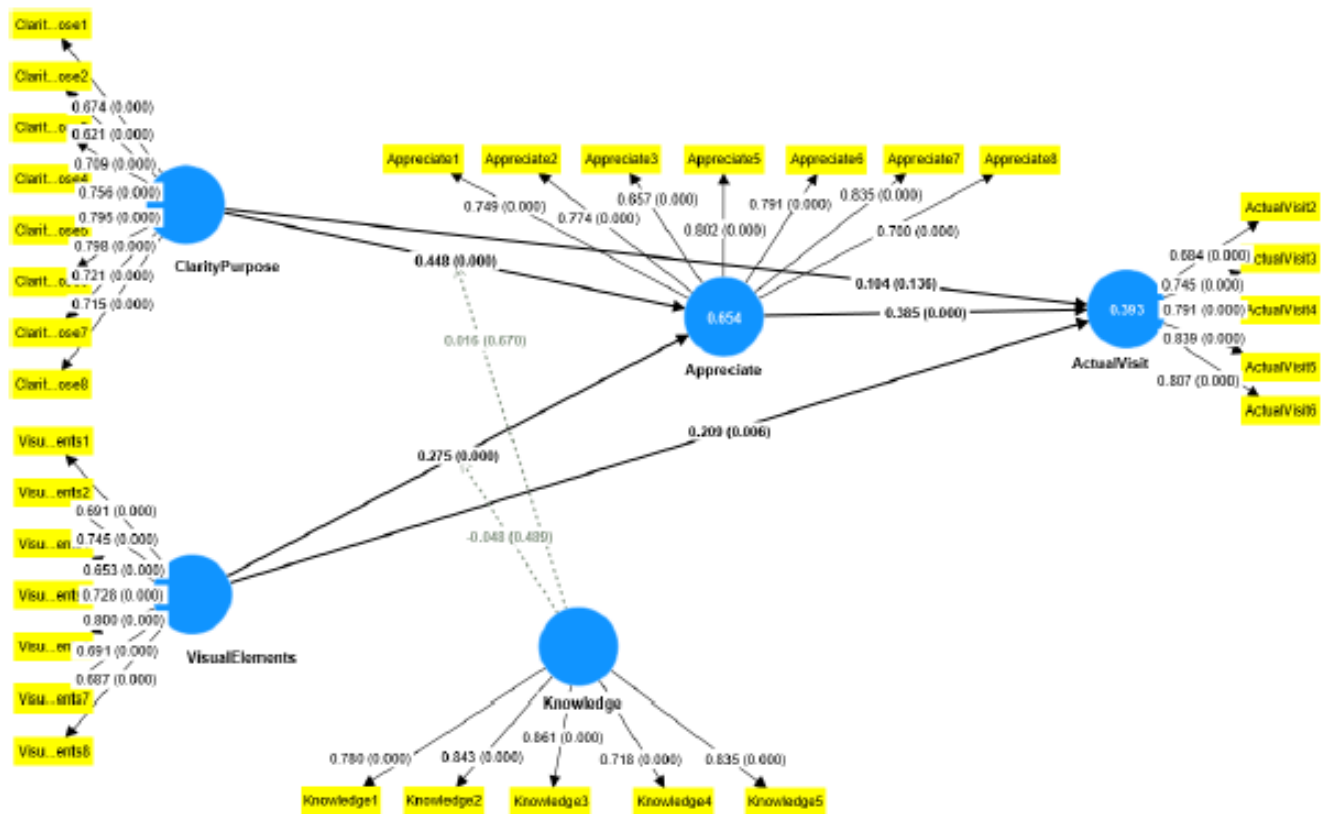
Source: Own Elaboration

Figure 3a. Interaction Plot for the Knowledge Moderation Effect on Clarity Purpose towards Appreciation
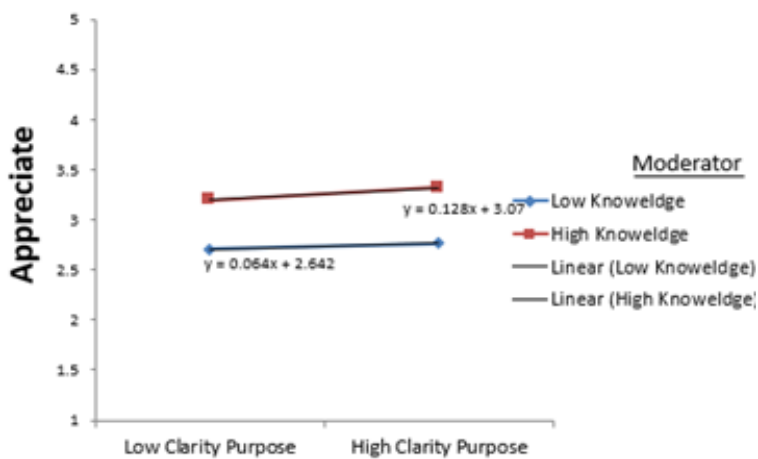
Source: Own Elaboration

Figure 3b. Interaction Plot for the Knowledge Moderation Effect on Visual Elements towards Appreciation
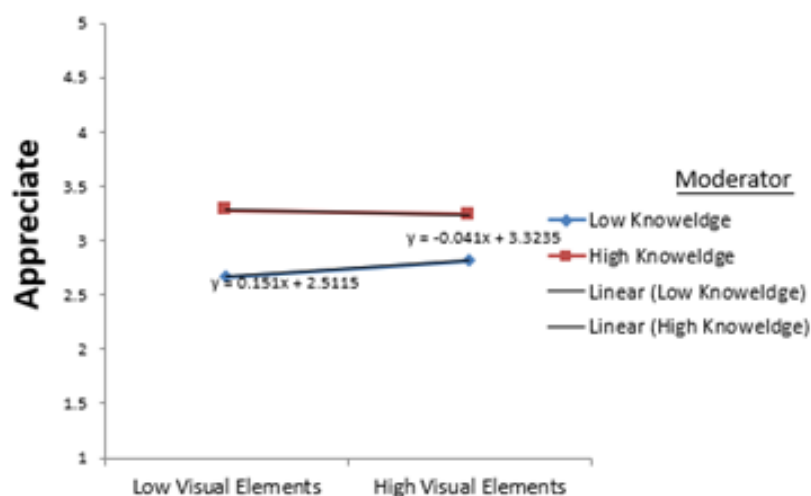
Source: Own Elaboration

5. Conclusion

5.1 Theoretical Implications

The SEM analysis support for the statistically significant relationships between visual elements of ARHB and actual visitation (H2), ARHB attributes and appreciation (H3 and H4), and appreciation and actual visitation (H5). The SEM analysis also confirmed the full mediation role of appreciation played between clarity purpose attribute and actual visitation (H6), and partial mediation role of appreciation between visual elements attribute and actual visitation (H7). The hypotheses H1, H8 and H9 were rejected as there is no significant relationship between the constructs.

The findings strongly supported previous literatures (Plevoets et al., 2012; Adiwibowo et al., 2015; Ariffin et al., 2020) that adaptive reuse historical buildings play crucial role in locals' appreciation and actual visitation to converted buildings in an urban area. Interestingly, visual elements were found to have greater influence on locals' appreciation and actual visitation to ARHB. It is found that local visitors to adaptive reuse historical buildings appreciate more if the building's façade and interior design maintains the historical elements that creates past ambience. Such historic ambience able to reminisce and reconnect the locals with their own heritage, thus increasing their visitation (Fajarwati & Hendrassukma, 2022).

On contrary, clarity purpose of ARHB may influence locals' appreciation but may not affect their actual visitation. Unlike findings by previous scholars (Black, 1990; Adiwibowo et al., 2015; Ariffin et al., 2020), this finding contributes to the new body of knowledge which warrants further exploration on this variable in a different ARHB that reuse for different commercial purposes. As the present study conducted on ARHB that converted into a restaurant cum event space in an urban area, different heritage building reused for different purposes might affect the different level of appreciation and intention to visit to such places (Adiwibowo et al., 2015). This indicate that when the locals have a clear perceptions and acceptance on the practicality of reused historical building for a new function, the visitors will appreciate more as long the building is not being abandoned or destroyed. As highlighted by Coeterier (2002), it is essential to conserve the original form of the historical building although it is no longer reuse its original purpose.

Although previous scholars postulated that knowledge on building's historical background could enhance visitors' appreciation and visitation, surprisingly, the current study contradict past findings (Coeterier, 2002; See & Goh, 2019; Ariffin et al., 2020; Maulina et al., 2022). However, supporting Adiwibowo's et al. (2015) where knowledge on building's history and identity found to be a weak factor to influence visitor's behaviour towards reused historical building for commercial purposes. Despite of reuse for different

commercial purposes, local knowledge on cultural and historical values are essentials in stimulating positive attitude and behavioural intention (Liu et al., 2023). Therefore, the current finding indicates that locals' knowledge on building's historical background would impact on their visitation to ARHB. Whether they know about the history of the building or not, they might still visit the building just because the place has been reused for commercial purposes such as dining or event space, but the visitation may not really affect their appreciation level towards the historical significance of the building.

5.2 Managerial Implications

In addition to the above theoretical implications, the findings yield several relevant practical implications as well. First, supporting past literatures, adaptive reuse historical building is regarded as an urban regeneration catalyst for a holistic local tourism and economic development and sustainability. This study provided empirical evidence that historical buildings reused for tourism and commercial purposes receive positive support and perceptions from the locals. The findings revealed that the locals supported the government's efforts to preserve and protect the valuable historical buildings and expressed their appreciation towards ARHB through their visitation. Thus, this strongly provide indication to the local government and tourism stakeholders that ARHB help to increase tourist arrivals to the city.

Besides, the utilization of reusing abandoned historical building for commercial purposes bring a 'new light' to heritage tourism where the said approach not only helps to protect and preserve the building's historical values, but also creates safer and sustainable environment, where demolition and building new structure could be prevented. The government should therefore enforce more local and private stakeholders' involvement in reusing abandoned historical buildings for tourism and hospitality purposes not only in city area but also in rural areas, for rural tourism development. Furthermore, the local government and ARHB operators should strive to ensure in maintaining the original structure with minor modification made to the building that reflect the authenticity and aesthetic values of the building as this would influence the overall visitors' perceptions and support towards ARHB.

Additionally, the findings suggest that the managers of adaptive reuse historical building that converted for commercial purposes such as restaurant and event space should take into consideration to provide and display the historical information about the building so that it could generate visitor's knowledge and appreciation to establish repeat visitation and recommendation to others. Also, worth mentioning here, the ARHB operators should take into account on the 'new function' of ARHB should serve and meet the current and future generations' contemporary demand and preferences. That is, to adapt the changes according to the current trends in order to attract and sustain the continuous visitation to ARHB as well as to preserve the existing valuable historical treasures.

5.3 Limitation and Future Recommendations

Although the present study provides additional insights into the impact of appreciation and knowledge on actual visitation to adaptive reuse historical buildings, it is not without limitations. First, it is important to acknowledge that the conceptualized model in this study may not be comprehensive. Additional predictors and outcomes of actual visitation to adaptive reuse historical buildings may exist. It would be a fruitful research avenue to further integrate and investigate the role of other relevant factors such as cultural motivation (Liu et al., 2023), experience quality (Maulina et al., 2022) and life satisfaction (Fajarwati & Hendrassukma, 2022) that may reveal the omissions and misrepresentation of the relationships tested in the current study and to further conceptual refinement and extension.

Additionally, the respondents were limited to local visitors who reside within Kuching city and nearby districts. Future research can extend to international visitors to better comprehend their behaviour towards adaptive reuse historical building and at the same time promotes local heritage and culture. Besides, conducting cross-national comparative studies between neighbouring countries such as Indonesia, Thailand or Singapore can be worth consideration to extend and verify the results from both local and international perspectives.

Furthermore, additional brief information or materials about the building's historical background was not provided to the respondents in this study. This could lead to personal biasness and misinterpretation

when they are unable to identify, recall and/or get familiar with the past or history of the building, especially among the current generations who may not know much about the building before its transformation. Hence, future study may aid the survey with graphical or written information on historical background of the reused building.

Finally, the present study was conducted using quantitative approach mainly focused from local perspectives. Future research should consider to conduct qualitative or mixed method for robust representation of causal relationships of the conceptualized model, from both local and outside tourists. Also, to consider the appreciation and knowledge on adaptive reuse historical buildings for other tourism and hospitality purposes to continue moving towards a holistic account of the particularly important component of tourists' behaviour.

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