# 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

Wellness Tourism, Wellness, Bibliometric Analysis, Covid-19, VOSviewer.

## 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
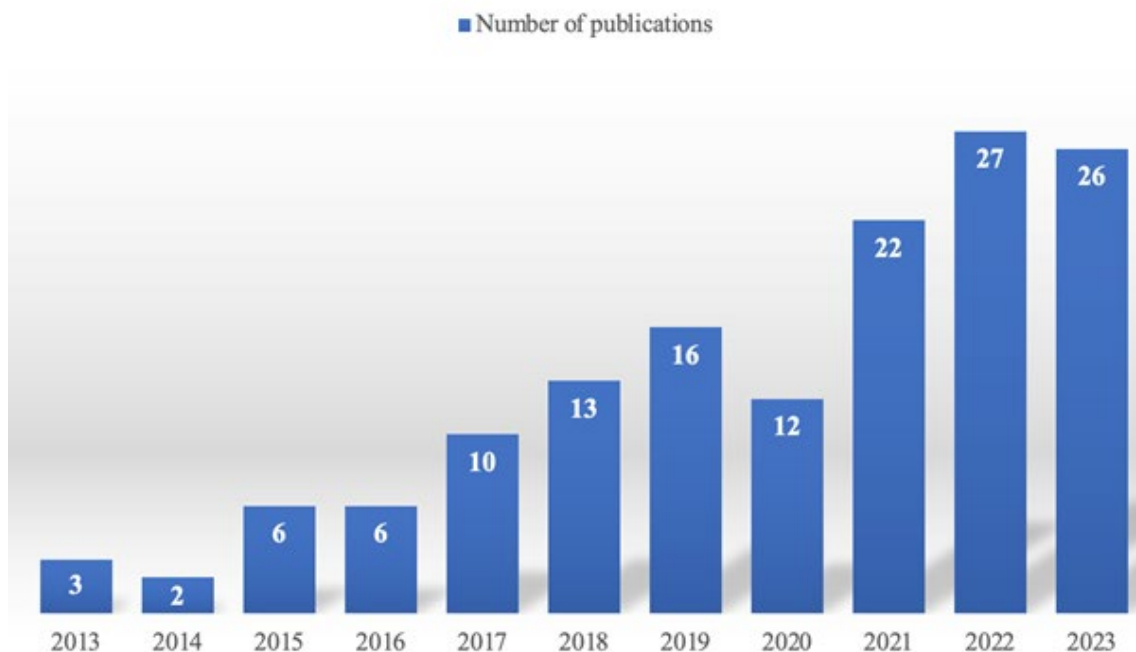


Source: Own Elaboration

**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
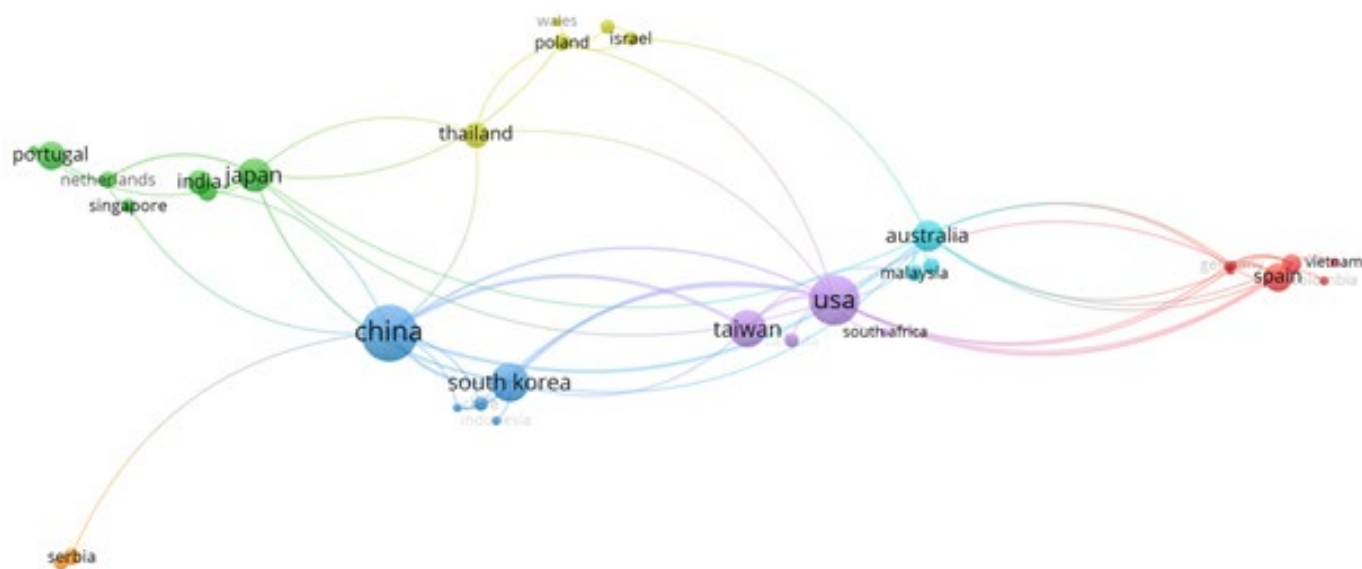Source: Own Elaboration

### 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



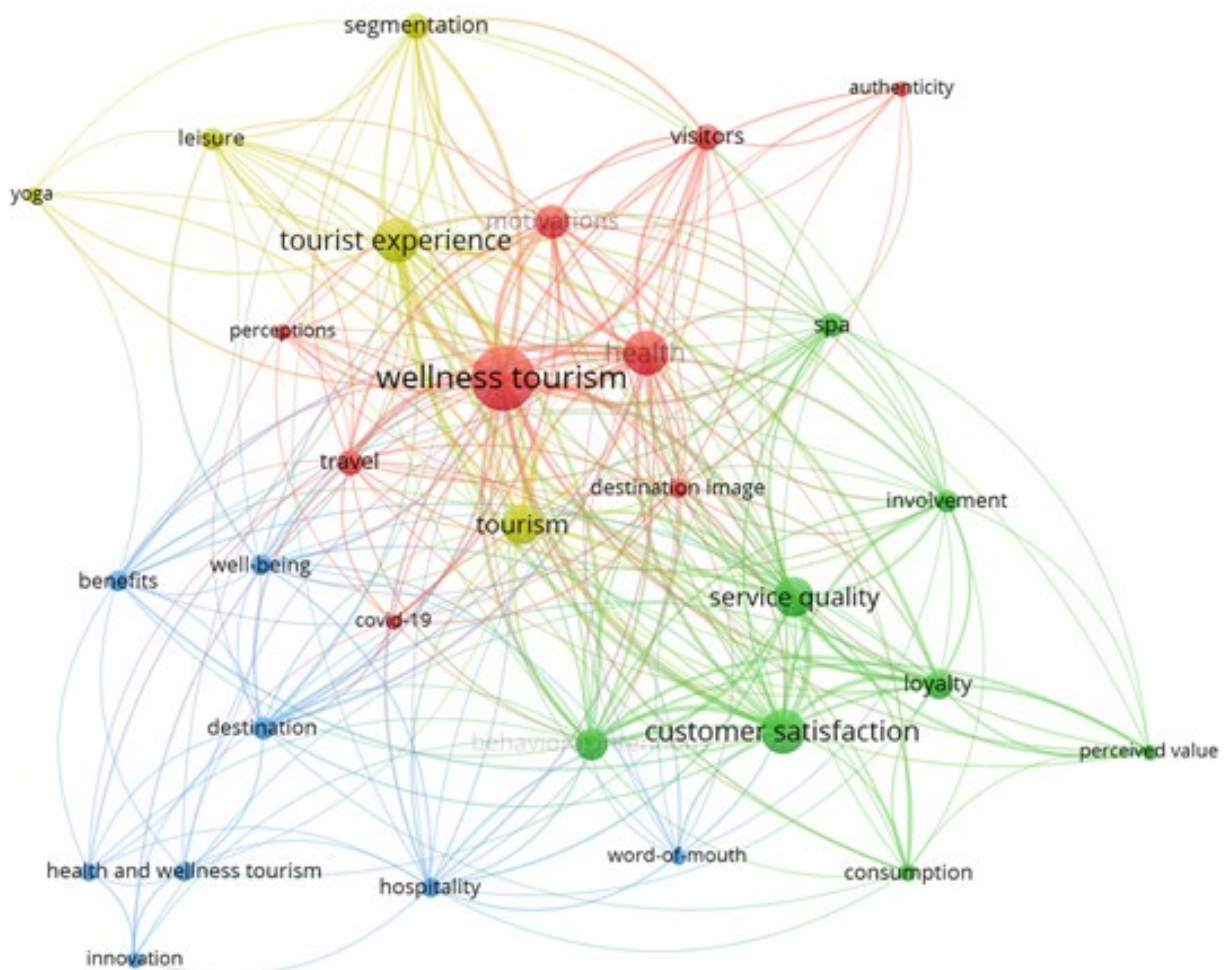Source: Own Elaboration

## 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<br>• Explore how risk perception influences wellness travelers' decision-making and travel behavior<br>• Examine the impact of destination image on perceptions of safety among wellness travelers<br>• Investigate the role of sustainability in destination attractiveness for wellness travelers<br>• Identify and analyze the rise of new and emerging wellness tourism destinations<br>• 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<br>• Examine how the authenticity of wellness experiences enhances cultural immersion for tourists<br>• Assess the relationship between perceived value and wellness offerings<br>• Analyze the link between service quality in wellness tourism services and customer satisfaction<br>• Conduct longitudinal studies to measure the long-term well-being outcomes of wellness tourism experiences<br>• 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<br>• Assess the effectiveness of loyalty programs in wellness tourism and their influence on behavioral intentions<br>• Examine the relationship between positive word-of-mouth and intentions to recommend wellness tourism experiences to others<br>• Study the role of crisis management in building customer loyalty and positive word-of-mouth during challenging times<br>• Explore the influence of social media on word-of-mouth in wellness tourism<br>• 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.

## ACKNOWLEDGEMENTS

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