

# Journey through Data: Exploring Wellness Tourism through Bibliometric Analysis with Dimensions.ai Database

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## Abstract

*Overarching the benefits of tourism a niche kind of tourism motivates people around the world to travel for wellness overcoming level of stress, enhance a sense of joy, harmonised body, mind, and spirit last but not the least gratifying customer experiences boosting an individual well-being has been highlighted as wellness tourism. Wellness Tourism is often erroneously conflated in the literature with medical tourism, despite constituting an entirely distinct segment of health tourism. Furthermore, very few thorough reviews have been done up to the current times to evaluate the after effects of COVID-19 on wellness stream of research and emergence of its prominence in wellness tourism studies. Fulfilling the gap bibliometric analysis technique using dimension.ai is used to evaluate the article authorship, publication trend, co-authorship with synthesis of total article with a total of 1005 pertinent publications written in English-language using mapping technique of VOSviewer programme, relational approaches and evaluation methodologies based on productivity and impact indicators. Proposals and recommendations for future research are highlighted to explore the future dimension of the research in wellness tourism field.*

**Keywords:** wellness tourism, health tourism, medical tourism, dimensions.ai, bibliometric analysis, COVID-19

## Introduction

The two most important words in today's common dictionary of every human being are identified as "well-being" and "fitness" merging into an area of research on wellness (Dunn, 1959). Wellness with its major characteristics' has been characterised as "a form of self-discovery lifestyle in an era of rising stress," and further well-being is seen as an all-encompassing idea that fosters both immediate gratification and long-term fulfilment (Chen et al., 2013). Wellness

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establishments have been around since 5000 BC, with Roman baths and Turkish hammams serving as examples of their steady development (Rancic et al., 2013). The Global Wellness Institute (GWI) highlights, wellness sector and tourism are two sizable, rapidly expanding industries that come together to form wellness tourism (GWI, 2018b). A yearly growth rate on average of 8.1% was recorded by the wellness industry between 2017 and 2019, with expected revenues of US\$617.0 billion and US\$720.4 billion, respectively (GWI, 2019b). The COVID-19 pandemic has caused significant disruptions in the world's political, social, and financial institutions whereas the tourism industry has seen one of the most severe shocks in history (Goussiou et al., 2021). Economic sectors across the borders have felt the effects of the global health crisis (Borges et al., 2022).

The wellness economy showed positive response and bounced back from the pandemic quite swiftly showcasing the size of the overall global wellness economy at \$5.6 trillion in 2022 surpassing the figures highlighted in data revealed to be 14% more as compared to figures of 2019 (GWI, 2023). In the modest way possible Global Wellness Institute (GWI) predicted economic growth by 8.6% in wellness sector on an average year, totalling to value of \$8.5 trillion (GWI, 2023). Beauty treatments, bodywork or massage, sports and fitness, spas, nutrition and detox programmes, holistic retreats, meditation, and nutrition are just a few of the many activities that come within the realm of wellness travel (Voigt, 2013). Modern and contemporary idea of wellness is not limited to few areas rather new and modern techniques are pressing hard in search by wellness tourists for authentic new experiences with latest additions to wellness like Inner detox programmes, body sleep programme, deep tissue massage, emotional detox therapy, Reiki, Shirodhara, toning massage etc (Charak, 2019; Koncul, 2012; Meikassandra et al., 2020; Wray et al., 2010). Smith and Puczkó (2015) asserts wellness tourist to be typically self-aware and prioritise their health, happiness, and well-being all together originating from travel motives, selecting a destination and experiencing best fit destinations. Throughout the world, tourism has been accepted as an important revenue generator fostering social and personal growth in numerous disciplines (Mishra, Panda, 2023). Further it has been highly realised tourism improves standard of living among the masses with better earnings with job creation mechanism (Romão et al., 2022). Since overall happiness and quality of life are strongly associated with health and wellbeing, most tourist sites in modern contemporary tourism have identified considerable traveller demand for specialised wellness services (Garjan et al., 2023).

Wellness vacations can help people feel less stressed and happier, which supports a balanced body, mind, and spirit as well as they can also provide customers with rewarding experiences that enhance wellbeing (Backman et al., 2023). With the rise in number of people selecting to travel abroad with keen focus on improvement to their health and wellbeing, the global tourism industry has profited from highlighted rising demand for wellness (Bushell, 2009). Travellers are particularly interested in locations highly linked to alternative medicine, naturopathy, ayurveda, yoga, energy healing, and other health-related pursuits, as well as spirituality (Karn, Swain, 2017). The greater interest in global wellness sector has emerged as one of the highly benefiting to the tourists and economic interest oriented to the host which is result of people's increasing need for experiences ending to encourage rest and renewal, especially throughout the pandemic and the aftermath (Mishra, Panda, 2023). Additionally, investigations in contemporary area of research in wellness (i.e. physical, emotional, spiritual, social, intellectual, environmental and financial wellness) are becoming more numerous, with some aiming to comprehend the mechanics underlying the want for wellness travel (Kempainen et al., 2021). Zhong et al. (2021) reviewed the research done between 1970 and 2020 on medical,

health, and wellness tourism, and the analysis confirmed an increase in interest among these tourist segments for wellness tourism further a greater showcase has also been seen in scientific community between 2013 and 2017. Globalised health markets have drastically transformed the conventional local and national nature of health care (Österle et al., 2013). Increased living standards, more flexible lifestyles, and individualistic notions about self-care all have influenced more common notion for travel for wellness and health-related purposes (Majeed et al., 2017). Though travel for medical treatments has been around for 25 years, the idea of medical-health-wellness tourism has just lately become a recognised academic discipline in the tourism industry (Mueller, Kaufmann, 2001). Large tertiary hospitals in India are increasingly creating on-site holistic centres with departments dedicated to homoeopathy, herbal medicine, naturopathy, and acupuncture in addition to yoga and meditation courses (Manhas, 2015).

Over the past decade, there has been a noticeable increase in the field of wellness tourism within the health tourism industry (Blešić et al., 2019).

To meet up the objectives to deep dive the subject it becomes necessary to undermine the academic databases. Scholarly databases, such as Scopus or Web of Science, are commonly used for research assessment in scientometric investigations (Mongeon, Paul-Hus, 2016). Recently, new databases like Microsoft Academic Search and Dimensions.ai have gained popularity among the bibliometrics research community (Martín-Martín et al., 2021). Dimensions.ai, a newer scholarly database, is a strong challenger alongside Scopus and Web of Science as it could be a viable alternative to existing databases (Thelwall, 2018). Scopus and Web of Science focus on Physical Sciences, Life Sciences, and Technology, while Dimensions.ai covers Arts & Humanities and Social Sciences more comprehensively (Singh et al., 2021). Dimensions.ai outperformed Scopus and Web of Science in terms of coverage, (Visser et al., 2021) found that the Dimensions database provides 25% greater coverage than Scopus.

## Literature Review

The wellness, health and medical tourism sectors are one of the rapidly expanding tourism business with a global upsurge in activity, and further seen as some of the most advanced and speedily growing areas (Costa et al., 2014). The sector is multifaceted, encompassing several categories such as holistic, spiritual, and spa tourism (Smith, Puczkó, 2015). Health, wellness, and medical tourism have become among the booming fields of academic study interest in both health and tourism studies due to its rapid rise over the previous few decades, with an emerging trend since the 1980s (Álvarez García et al., 2014). Given its history, health, wellness, and medical tourism are complex fields of study among wide range of subjects covered by research, depending on the disciplinary and cultural environment in which it is conducted (Hall, 2011). In the context of specific tourism goods, the relationship between health and tourism is referred to by a number of terms, such as wellness tourism, hospital and clinical tourism, health tourism, and occasionally medical travel (Kušen, 2011). It has been identified for organisations to come out as winners need to set the strategic goals that centre on the promotion of wellness tourism, slow tourism, yoga and health packages, and other new and healthy travel options (Hossain et al., 2022). Many decades ago, the identification of an idea among people to “redesign their life, sometimes in superficial and sometimes in profound ways, to achieve higher levels of physical, emotional, mental, and spiritual wellness” gave rise to the so-called “wellness revolution” (Bushell, Sheldon, 2009a).

Wellness tourism is similar to other forms of travel emphasising lifestyle from a lifetime perspective, embraces personal accountability for one's actions as part of a more holistic approach to health, and makes use of each person's potential for improved quality of life (Mueller, Kaufmann, 2001). Many other activities have been defined as part of or related to wellness tourism as a result of a holistic approach, such as volunteer travel, new age travel, outdoor, sports, and adventure activities like yoga and hiking, as well as spiritual and religious travel (Smith, Kelly, 2006). However, it is important to include the contributions coming from variety of fields, including sociology, public health, business, psychology, management, and marketing, in order to develop a uniform definition of wellness tourism (Bushell, Sheldon, 2009b). The primary reason for travel in healthcare tourism is to treat sickness, whereas the primary reason for travel in wellness tourism is to avoid illness or preserve one's health and wellbeing (Mueller, Kaufmann, 2001). With identification of tourism impact on health and holistic wellbeing emerging to be complex and multidimensional, investments in the travel and increasingly sought-after happiness is taken over by the businesses fulfilling the WHO's (World Health Organisation) recommended paradigm (Leandro et al., 2015). Uncovering the research dimension in health tourism allow to gain an insight into the futuristic approach emerging from opportunities and problems that lie ahead as health tourism gains traction in both theoretical and practical areas of travel (Garcia-Altes, 2005). The phrase "medical tourism" describes the movement of people across international borders for the purpose of accessing healthcare distinguishing it from health tourism; medical Tourism largely attracts travel by individuals abroad, usually for surgery and without a specific formal referral to access the healthcare system of host nations for operations and other invasive therapies, usually at their own expense (Johnston et al., 2010). More broadly, medical tourism can also be defined as travelling overseas to receive medical treatment (Balaban, Marano, 2010). This type of travel occurs for a number of reasons, including extensive waiting lists in the country of origin, medical specialisations not offered by the local or national healthcare system, and inadequate infrastructure in the patient's home country (Moir, Mylonopoulos, Parthenis, 2022). It is largely evident from the literature that medical tourism and wellness are intertwined within the broader framework of health tourism, and that health and wellness are always related to one another in terms of preventive and curative medical techniques (Connell, 2006) based of the principle of good health.

Conducting a bibliometric review using **Dimensions.ai Database** of wellness tourism, which includes articles about wellness tourism, medical tourism and health tourism, was thought to be relevant in fulfilling to fill in the below mentioned gaps.

## Methodology

The following research questions have been addressed in the study:

- RQ1.** Which publications have received the most citations in wellness tourism research, and which nations, journals, and authors have contributed the most?
- RQ2.** What is the relationship among Co-authorship network based on country and bibliometric coupling of authors?
- RQ3.** How did the pandemic affect the quantity of publications in the wellness tourism field, and what subjects received the greatest attention?

## Bibliometric Analysis

A bibliometric strategy is acknowledged as one of the sophisticated modern methods that uses fundamental and/or sophisticated statistical methods to sort data, including citations, author affiliations, keywords, themes investigated, and methodologies used for published research in the disciplines, with the goal of evaluating and monitoring the progress of a particular academic field (McBurney, Novak, 2002). Various approaches exist for organising contributions related to a certain subject; nevertheless, the advantage of bibliometric is that it is a methodical, uncomplicated, and repeatable procedure (Koseoglu et al., 2016). The technique of bibliometric analysis is widely applied in the fields of business, management, and tourism since the mentioned technique allow to do research on the multidimensional issues and determine its current state of knowledge (Cuccurullo et al., 2016). In order to demonstrate the degree of development in the tourism industry, bibliometric analyses have proved to well accept mechanism to determine intellectual framework, academic basis, knowledge domain, and social structure of the sector (Zhao, Ritchie, 2007). Bibliometric analysis is used to evaluate the areas that need more attention and to recognise the domain's state-of-the-art advancement (John, Firoz, 2022). In a bibliometric study by Kim and So (2021), 1,248 articles related to customer experience in tourism were analysed to find key writers and conceptual frameworks. This way of approach represented a structured review of trends, seminal works, and knowledge development and illustrated how the study of the development of a field over time can be traced through the use of bibliometric analysis.

## Data Collection

Data was gathered as on 4th April, 2024 using the Dimensions.ai database, which is accepted as one of the most reliable and preferred tourism industry's databases. The after approach was based on evaluating the quantity of publications in wellness, health tourism, and medical tourism. The articles determination criterion was fixed with, articles released between January 2004 and December 2023. The Boolean operators "AND" and "OR" were paired with the keywords "wellness tourism," AND "health tourism," OR "medical tourism" OR "covid-19". Only peer-reviewed literature published in English-language journals were chosen by the authors in order to hone the findings. 5795 pertinent records in all were located. The record is filtered based on research category, field of study (tourism only), and publication type (only articles are chosen for this research), and 1005 papers made it through the screening procedure; the full texts were analysed in more detail.

## Data Analysis

Bibliometrics is a quantitative analysis technique that employs statistical and mathematical approaches to gauge the importance and worth of research papers within a certain topic (Santos-Rojo et al., 2023). The most popular approaches are productivity and impact measure-based evaluation techniques, citation and publication totals-focused methods (Coll-Ramis et al., 2023), and relationship-building tactics through outcome mapping (Van Eck, Waltman, 2010). Co-authorship and co-occurrence analysis have been used to map the results using VOSviewer version 1.6.19 (Van Eck, Waltman, 2010). VOSviewer has been accepted as one of the best tools in field of syntheses of articles. A software programme for creating, displaying, and evaluating bibliometric networks is called VOSviewer. Publications, authors, keywords, journals, or



**Figure 1.** Data collection

nations can all be mapped with VOSviewer (Rocio et al., 2023). Higher weight objects are displayed more prominently than lesser weight objects with keyword in a map display. According to Santos-Rojo et al. (2023), each link contains an attribute displayed with an, example, the quantity of articles in which two researchers co-authored them (co-authorship linkages) or the quantity of articles in which two phrases appeared together (co-occurrence links).

## Results

### Sample Characteristics

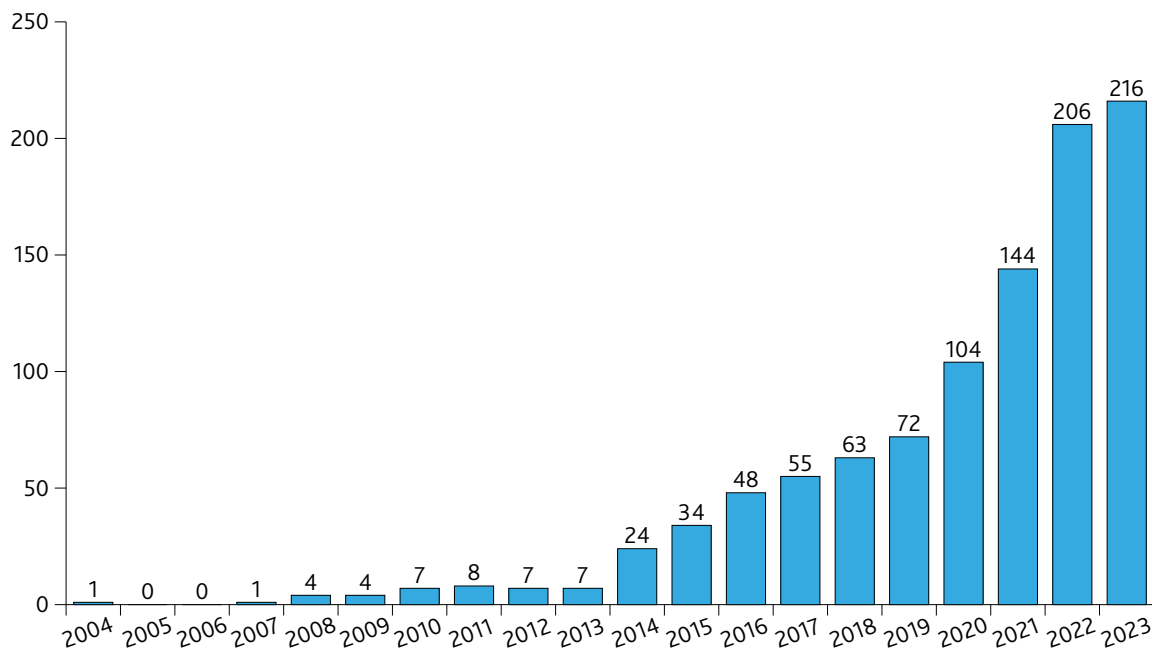
The primary focus of the current study is on journal articles that were included in the Dimensions.ai database and published between January 2004 and December 2023. The sample is made up of 2440 authors from 75 different nations with 1005 articles published in 425 journals. The major output of the result is highlighted in collaborative work with 2243 people showcased collaboration in the research output and contrary to the same and only 197 authors wrote independent articles.

### Performance Analysis

#### *Publications Trends*

From 2004 to 2023, the annual number of publications (Figure 2) indicates a consistently rising trend in the identified field. Although there are occasional annual variations in the quantity of publications, the tendency is generally seen an upward curve. The number of publications increased steadily between 2013 and 2023, with some years experiencing more notable upsurge than others. Between 2021 and 2022, the number of publications increased from 144 to 206, marking the biggest rise. During the pandemic, the key terms associated with wellness and pandemic showed a greater interest among the academic fraternity and growth of publications was evident. The overall growth rate of wellness, health, medical and covid-19 publications is 32.7% which is calculated from 2001 - 2023. There were 72 articles in 2018 prior to the covid-19 pandemic, and by the end of 2023, there were 216, indicating an increase in research on wellness tourism both during and after the pandemic.





**Figure 2.** Number of Publications from 2001 – 2023

### Top Authors and Countries

Table 1 display, based on citation metrics, the most important writers and the top nations with the greatest number of publishing documents in the field of wellness tourism, health tourism, medical tourism and COVID-19 pandemic research. With 6 publications, Kim H. (University of Nevada, Las Angeles, USA), Kim J. (University of Florida, USA), Song H. (The Hong Kong Polytechnic University, China) and Wen J. (Western Sydney University, Australia) have the most, indicating that their contributions to the field have received substantial attention and acknowledgment. Amongst the 75 nations publishing work in domain of wellness, health, and medical tourism data revealed, United Kingdom (89 publications), followed by China (65 publications). The large number of publications is indicative of the importance and acknowledgment with higher importance and future direction given by academics of UK.

**Table 1.** Top Authors and Countries

Authors	Total Publications	Country	Frequency
KIM H	6	UNITED KINGDOM	89
KIM J	6	CHINA	65
SONG H	6	INDONESIA	49
WEN J	6	SPAIN	49

### Most Global Cited Document

Table 2 shows the ranking of the top five referenced articles on wellness, health, and medical tourism research according to the total number of citations. With significant 586 citations, the research paper “COVID-19: potential effects on Chinese citizens’ lifestyle and trav-

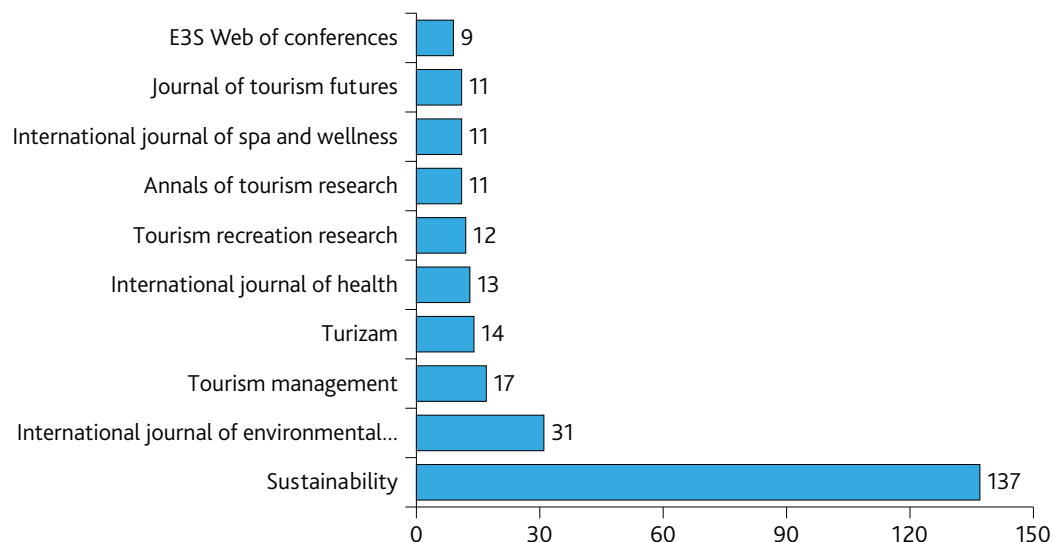
el”, written by (Wen et al., 2021), stood out as the most cited out of 1005 chosen articles. The results of the most cited article highlighted more impetus to the COVID-19 which is predicted to have far-reaching effects on visitor consumption habits, particularly in the areas of wellness and health travel from the results of the research article. Tourists are becoming pickier in their travels, spending more time in their preferred destinations. The current pattern of travel post COVID highly believe a similar pattern of travel would allow to mitigate the detrimental effects of travel and tourism on climate change and environmental degradation. Travellers in the post-COVID-19 period will not want to engage in mass tourism; instead, they will favour more planned journeys that prioritise longer stays and vacations.

**Table 2.** *Most Cited articles globally*

Authors	Title	Journal	TC
Wen, 2021	<a href="#">COVID-19: potential effects on Chinese citizens' lifestyle and travel</a>	TOURISM REVIEW	586
Scott, 2010	<a href="#">Weather and climate information for tourism</a>	PROCEDIA ENVIRONMENTAL SCIENCES	259
Hosany, 2016	<a href="#">Mediating effects of place attachment and satisfaction on the relationship between tourists' emotions and intention to recommend</a>	JOURNAL OF TRAVEL RESEARCH	251
Afshardoost, 2020	<a href="#">Destination image and tourist behavioural intentions: A meta-analysis</a>	TOURISM MANAGEMENT	230
Baum, 2015	<a href="#">Human resources in tourism: Still waiting for change: A 2015 reprise</a>	JOURNAL OF TRAVEL RESEARCH	219

## Key Journals

Figure 3 offers a list of top ten journals for research on wellness, health, and medical travel. Sustainability stands out on the top among 425 journals with notable publications totalling to 137 papers, followed by International Journal of Environmental Research and Public Health with 31 articles.



**Figure 3.** Top 10 Key Journals – number of published articles



## Co-authorship by Country

Analysis of co-authorship looks at the networks of collaboration between authors, institutions, or nations to further buildup knowledge matrix in a particular field of study (Rocio et al., 2023). Co-authorship analysis is a well-established and visible technique that provides valuable insights into scientific collaboration. Researchers no longer operate alone; instead, they collaborate with others, utilising a range of viewpoints and complimentary showcase abilities of multiple researchers accomplishing shared objectives. Consequently, co-authorship analysis effectively assesses patterns of collaboration and identifies significant contributors (Hanaa, Abdul, 2024). The purpose of the present study is to examine co-authorship research by country because it is important to understand the contributions and patterns of collaboration within certain geographic connections. Of the 75 countries, 40 engage in international co-authorship. Figure 4 shows these countries as labelled circles, with the size of each circle denoting the total number of articles written by authors from that nation. These relationships lead to the emergence of five different clusters. There are 12 elements in Cluster 1, 9 in Cluster 2, and 8 in Clusters 3 and 4 respectively. There are 3 entries in Cluster 5. UK has the most linkages, with total link strength of 90 and 27 links. With total 78 and 55 linkages, respectively, China comes in second place and the United States comes on third rank with the most links. It's interesting to note that 35 of the countries function independently, indicating a necessity for international collaboration between their authors.

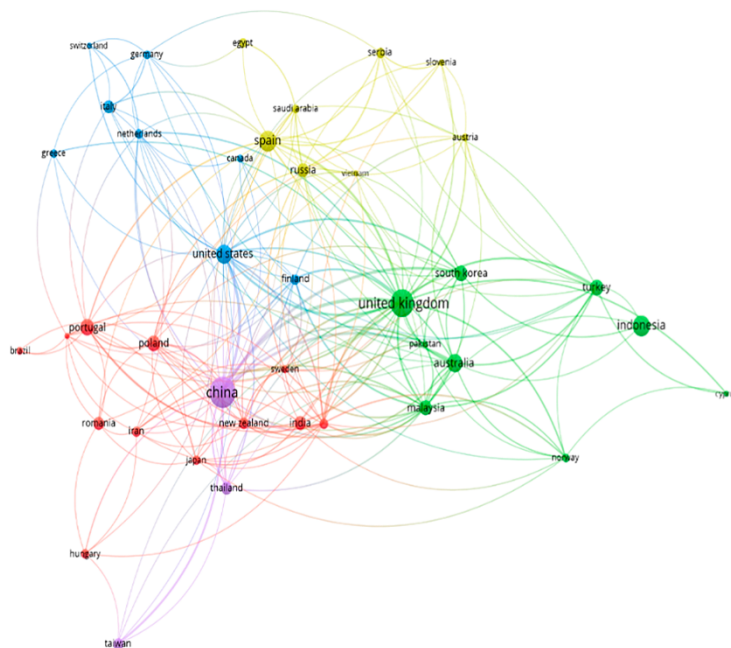


Figure 4. Co-authorship Analysis Based on Countries

## Bibliographic Coupling by Country

Bibliographic coupling refers to the situation where two documents cite the same third document. Depending on how many references are exchanged, the relationship value between two papers that share one or more references is specified as being of strength one, two, etc., according to (Martyn, 1964, p. 236) “two papers that share one reference contain one unit of coupling”. Figure 5 depicts these nations as labelled circles, with each circle's size according to its country. As a result of these connections, five distinct clusters with a total of 42 items appear. Fifteen elements can be found in Cluster 1, eleven in Cluster 2, six in Cluster 3 and 4 respectively and four in cluster 5.

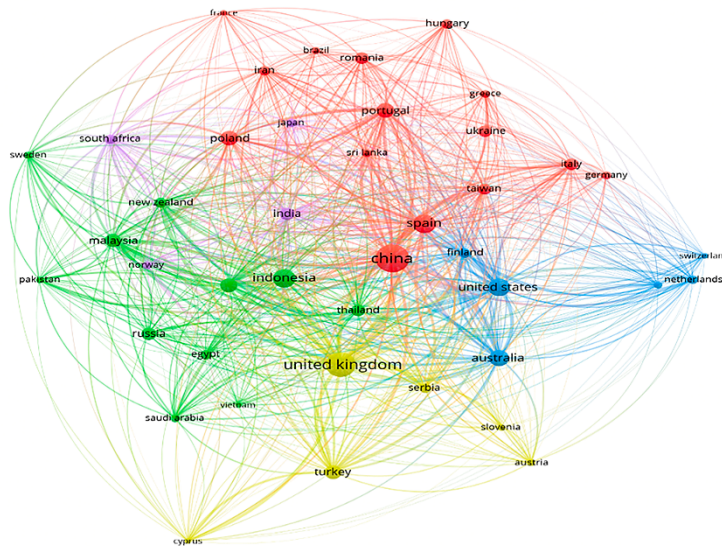
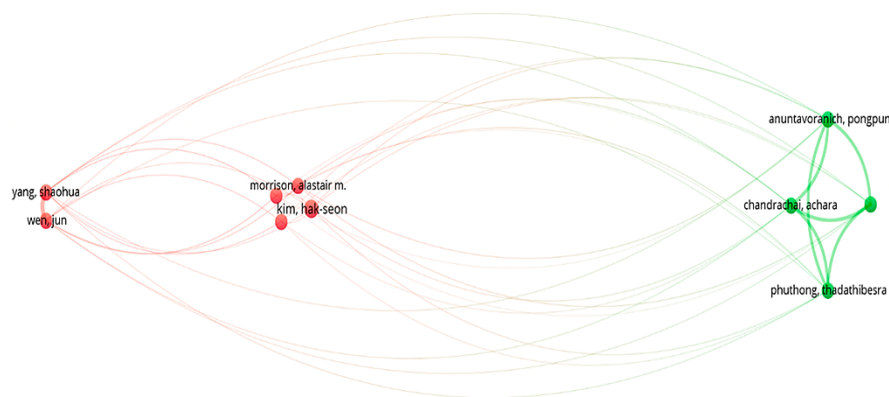


Figure 5. Bibliographic Coupling Based on Countries

## Bibliographic Coupling of Authors

Citations are used in bibliographic coupling to provide information on the similarities between two works, authors, organisations, or nations (Andersen, 2021). The procedure is predicated on the idea that two papers that cite a third paper are closely related and ought to be grouped together in the visualisation map's cluster solution. The total number of references or citations of other third texts that each paper share establishes the strength of the bibliographic coupling. Figure 6 depicts 2 clusters with total 10 items, 45 links and a total link strength of 1537. Cluster one in green colour consists of 6 items, link 9 and total link strength of 382. Deepak Chhabra (Arizona State University, USA), Heesup Han (Sejong University, South Korea), Hak-seon Kim (Kyungsung University, South Korea), Alaistair M. Morisson (University of Greenwich, UK), Jun Wen (Edith Cowan University, Australia), Shaohua Yang (Anhui University of Technology, China) are the authors in this cluster. The writers in before mentioned cluster typically showcased their interest in the research domain before the pandemic too and also conducted research after the pandemic phase. The results of the cluster showcase a high emphasis focus on elaborating wellness tourism and medical tourism role as a transformational catalyst in the lifestyle of travellers. It also highlighted the keen interest among the

travellers well suiting their transformational needs post covid with change in their travelling patterns and behaviours helping destinations to recognize their destination image. Cluster 2 in green colour comprises of 4 items, link 9 with total link strength of 547. PongpunAnuntavoranich (Chulalongkorn University, Thailand), Achara Chandrachai (Arizona State University, USA), Thadathibesra Phuthong (Silpakorn University, Thailand), KerkPiromsopa (Chulalongkorn University, Thailand) are the authors in this cluster with focus on wellness tourism destinations with elaborating their efforts to undermine the role of wellness tourism to economic wellbeing of the nations after COVID-19 pandemic. The research post covid allowed destinations to rebrand with realigning the thoughts on creating international standards for the development of wellness tourism and allied activities, measurement models to depict trend analysis in the similar research domain, and lastly showcasing the opportunities arising from the niche segment of wellness tourism to stakeholders using Global Tourism Wellness Index.



**Figure 6.** Bibliographic Coupling Analysis Based on Authors

## Conclusion

Wellness tourism is a niche area of the travel business that emphasises encouraging and improving people's wellbeing via a range of experiences, events, and offerings (Sthapit et al., 2023). It entails travelling to locations in order to preserve or enhance one's own wellbeing and promote body, mind, and spirit in harmony (Patterson, Balderas-Cejudo, 2023). In current research context, 1935 publications from the dimensions.ai database published between January 2001 and December 2023 were extracted and examined. Relational approaches were also used to map the results using the VOSviewer software version 1.6.19. (Van Eck, Waltman, 2010). The total number of citations and publications was the main focus of the assessment techniques utilised to analyse the data.

### **RQ1. Which publications have received the most citations in wellness tourism research, and which nations, journals, and authors have contributed the most?**

The most referenced publications as well as the most contributing authors, nations, and journals were determined via a performance analysis. Kim H (University of Nevada, Las Angeles, USA), Kim J (University of Florida, USA), Song H (The Hong Kong Polytechnic University, China), and Wen J (Western Sydney University, Australia) have the most publications (6 each), indicating that their contributions to the field have received significant attention and recogni-

tion. The United Kingdom tops among the 75 nations with at least one paper published in the field of wellness tourism, with China and Indonesia on 2nd and 3rd rank. With 586 total citations, the research paper “COVID-19: potential effects on Chinese citizens’ lifestyle and travel” by Wen et al. (2021) was the most-cited work. With 137 and 31 articles, respectively, Sustainability and International Journal of Environmental Research and Public Health were the most prominent journals. The majority of the top five journals that specialise in research on wellness highlighting the importance of publications with a tourism focus in this field. The analysis of data using VOSviewer software for mapping analysis, data was evaluated according to co-authorship. Co-authorship analysis as a technique looks at the networks of collaboration between writers, groups, or nations. Countries were chosen for analysing co-authors in the current study. 40 of the 75 identified nations participate in international co-authorship projects. The United Kingdom has the most links due to the authors engaging with 27 countries.

**RQ2. What is the relationship among Co-authorship network based on country and bibliometric coupling of authors?**

The country’s co-authorship network included 843 linkages, 5 clusters with a total of 42 items each, and 98800 link strengths overall. The co-authorship between Brazil, China, France, Germany, and the other eleven nations is displayed in Cluster 1 with 41 links. Egypt, Indonesia, Malaysia, New Zealand, Pakistan, Russia, Saudi Arabia, Thailand and another three countries depicted in Cluster 2 with 42 links. Cluster 3 is made up of six countries, including Australia, Canada, Finland, Netherlands, Switzerland and USA with 41 links. Cluster 4 is made up of six countries that form a network, including Austria, Cyprus, Serbia, Slovenia, Turkey and UK with 41 links. Cluster 5 is made up of India, Japan, Norway, and South Africa with 41 links.

**RQ3. How did the pandemic affect the quantity of publications in the wellness tourism field, and what subjects received the greatest attention?**

The travel and tourism sector were adversely affected by the COVID-19 pandemic (Bhatta et al., 2022). Travel bans and lockdowns were implemented by several nations to stop the virus’s spread (Wang et al., 2022). Travellers’ reluctance to go abroad was a major restraining factor affected the market centred around wellness (Li, Huang, 2022) for excursions. However, the epidemic increased people’s consciousness towards their health and wellbeing, which sparked an increased interest in wellness-related pursuits (Tiwari, Hashmi, 2022). Similarly, there has been tremendous increase in research agenda to comprehend around pandemic and its after affects underlying the demand for wellness travel. The number of publications annually from 2004 to 2023 showed a discernible increase tendency, according to the sample of 1005 chosen articles. The synthesis of data revealed no dip in research productivity since 2020 at the time of first impressions of start of the pandemic. But between 2020 and 2021, the number of publications significantly increased. The same upward surge showcased with an increase with sustained growth output in 2022 and a total outcome of 216 publications in 2023. It is plausible to anticipate continued rise in publications throughout 2024 as prior pattern seen in previous years is maintained with similar interest in the same direction in current times. The aforementioned results raise an intriguing question regarding the potential impact of the COVID-19 pandemic on scholarly interest in wellness tourism research. The same raises a series of interesting questions with similar kind of interest to similar kind of situations in the next coming future to the world. The present synthesis of the research topic largely sets its merits for further investigation in the next upcoming studies in similar or closely collaborating fields (Bočkus et al., 2023). The insightful elaboration on data offers revealing information from greater

interest in wellness tourism research and its impact as a global health crisis. Researchers are investigating on destinations and destinations guarantee towards safety, satisfaction emerging from pandemic tourists' demands, and fostering loyalty converging from changed travellers' impressions selected locations and services (Handler, 2022). Travellers may now be increasingly interested in immersive and mindful experiences coming out of health concerns; with increased interests research on authenticity, engagement, and wellbeing as acclaimed critical factors in wellness tourism (Loureiro et al., 2013). The predominance of before mentioned subject areas in research from and after 2020 on highlighted wellness tourism, as a whole, demonstrating industry's position and counter act strategies with adaptability and resilience towards the obstacles presented by the epidemic. In uncertain times, scholars and practitioners acknowledge the significance of attending to the evolving needs and expectations of travellers (Kongtaveesawas et al., 2022).

## Implications and Limitations

Bibliometric reviews allow practitioners, researchers and industry stakeholders to detect current research trends with the help of this bibliometric review (citation analysis, co-citation analysis and bibliographic coupling) on wellness tourism. The most researched subjects, new research fields, and possible holes in the body of literature are all identified with assistance of bibliometric analysis. The review's co-authorship and co-citation network analysis provides information on the existent academic relationships and influence between scholars. In the academic community, similar studies can promote information sharing and open doors for future collaborations (Rocio et al., 2023). Additionally, the undertaken study adds to the knowledge of wellness tourism research impacted by the COVID-19 pandemic. Similarly, it also provides future dimension of travellers' interest overcoming the world's most recent havoc of COVID 19 thereby underlying the future ready strategies for destinations in similar conditions. It sheds light on the most researched themes during the pandemic, as well as the more focus on the topics like health and medical tourism. The conclusions from the can be used by industry players in the wellness tourism sector to modify tourism products, marketing plans and actions and services delivery in response to shifting consumer demands. Kazakov and Oyner (2021) states that 2020 marks the beginning of another 75 years of study development on wellness tourism, the impact of wellness tourism on social and economic health is another factor contributing to the growing interest in this field.

Considering an important contribution made by the study, some limitations must be recognised and addressed. Comparing these findings with those from other databases, like Scopus or Google Scholar, is advised for further study (Montero-Díaz et al., 2018). Using dimensions.ai, a single database, as opposed to several sources for data retrieval is one significant drawback. Additionally, unpublished book reviews, conference proceedings working papers and doctorate theses were not included in the inclusion criteria, which may have led to the omission of important studies. Furthermore, study only included English-language publications; important research done in other languages might be missed. Future study addressing these constraints would offer a more varied and all-encompassing perspective on the topic.



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## References

- Álvarez García, J., del Río Rama, M. de la C., Fraiz Brea, J. A., Vila Alonso, M. 2014. Nivel de implementación de la calidad en los balnearios españoles. *PASOS. Revista de Turismo y Patrimonio Cultural* 12(2), enero-abril, 2014, pp. 259-280
- Andersen, N. 2021. Mapping the expatriate literature: A bibliometric review of the field from 1998 to 2017 and identification of current research fronts. *The International Journal of Human Resource Management* 32(22), 4687–4724.
- Backman, S. J., Huang, Y.-C., Chen, C.-C., Lee, H.-Y., Cheng, J.-S. 2023. Engaging with restorative environments in wellness tourism. *Current Issues in Tourism* 26(5), 789–806. <https://doi.org/10.1080/13683500.2022.2039100>
- Balaban, V., Marano, C. 2010. Medical tourism research: A systematic review. *International Journal of Infectious Diseases* 14, e135.
- Bhatta, K., Gautam, P., Tanaka, T. 2022. Travel motivation during COVID-19: A case from Nepal. *Sustainability* 14(12), 7165.
- Blešić, I., Kovačić, S., Syromiatnikova, Y., Freinkina, I. 2019. Recreation, relaxation or something else? Exploring the motives for visiting the wellness hotels in Serbia. Proceedings of the 4th International Conference on Innovations in Sports, Tourism and Instructional Science (ICISTIS 2019). Proceedings of the 4th International Conference on Innovations in Sports, Tourism and Instructional Science (ICISTIS 2019), Chelyabinsk, Russian Federation.
- Bočkus, D., Vento, E., Tammi, T., Komppula, R., Kolesnikova, N. 2023. Comparing the motivations behind wellness tourism in three source markets. *European Journal of Tourism Research* 33, 3303–3303.
- Borges, A. P., de Almeida, A. L., Vieira, E., Belucio, M. 2022. Travelling and discovering new destinations after the covid-19's lockdown: the role of routines and habits. *Enlightening Tourism. A Pathmaking Journal* 12(1), 70–93.
- Bushell, R. 2009. Quality of life, tourism, and wellness. In R. Bushell & P. J. Sheldon (Eds.), *Wellness and Tourism: Mind, Body, Spirit, Place* (pp. 19-36).
- Bushell, R., Sheldon, P. J. 2009a. Wellness and tourism: Mind, body, spirit, place. *Cognizant Communication*.
- Bushell, R., Sheldon, P. J. 2009b. Wellness and tourism: Mind, body, spirit, place. *Cognizant Communication*.
- Charak, N. S. 2019. Role of spa resorts in promoting India as a preferred wellness tourism destination—a case of Himalayas. *International Journal of Spa and Wellness* 2(1), 53–62.
- Chen, K.-H., Liu, H.-H., Chang, F.-H. 2013. Essential customer service factors and the segmentation of older visitors within wellness tourism based on hot springs hotels. *International Journal of Hospitality Management* 35, 122–132.

- Coll-Ramis, M. À., Horrach-Rosselló, P., Genovart-Balaguer, J., Martinez-Garcia, A. 2023. Research progress on the role of education in tourism and hospitality. A bibliometric analysis. *Journal of Hospitality & Tourism Education* 1–13.
- Connell, J. 2006. Medical tourism: Sea, sun, sand and... surgery. *Tourism Management* 27(6), 1093–1100.
- Costa, C., Quintela, J., Mendes, J. 2014. Health and wellness tourism: A strategic plan for tourism and thermalismvalorization of São Pedro do Sul. In *Health and Wellness Tourism: Emergence of a New Market Segment* (pp. 21–31). Springer.
- Cuccurullo, C., Aria, M., Sarto, F. 2016. Foundations and trends in performance management. A twenty-five years bibliometric analysis in business and public administration domains. *Scientometrics* 108, 595–611.
- Dunn, H. L. 1959. High-Level Wellness for Man and Society. *American Journal of Public Health and the Nations Health* 49(6), 786–792.
- Garcia-Altes, A. 2005. The development of health tourism services. *Annals of Tourism Research* 32(1), 262–266
- Gousiou, A., Poulaki, P., Lagou, M.K. 2021. Tourism employees' readiness during the COVID-19 pandemic: the case of Greek tourism industry. *Journal of Hospitality and Tourism*, 19.
- Hall, C. M. 2011. Health and medical tourism: A kill or cure for global public health? *Tourism Review* 66(1/2), 4–15.
- Hanaa, S. M., Abdul, A. P. 2024. A holistic approach to augmented reality-related research in tourism: Through bibliometric analysis. *Journal of Hospitality and Tourism Insights* 7(1), 76–94.
- Handler, I. 2022. Can senior travelers save Japanese hot springs? A psychographic segmentation of visitors and their intention to visit onsen establishments during COVID-19. *Sustainability* 14(4), 2306.
- Hossain, M. R., Bhatia, A., Akhter, F. 2022. Rerouting Tourism and Hospitality in Crisis: A Systematic Literature Review and Future Research Directions. In A. Hassan, A. Sharma, J. Kennell, & P. Mohanty (Eds.), *Tourism and Hospitality in Asia: Crisis, Resilience and Recovery* (pp. 309–336). Springer Nature Singapore.
- John, A., Firoz, M. (2022). Competitiveness of Tourism Destinations: A Mixed-Method Bibliometric Approach. *Enlightening Tourism. A Pathmaking Journal* 12(2).
- Johnston, R., Crooks, V. A., Snyder, J., Kingsbury, P. (2010). What is known about the effects of medical tourism in destination and departure countries? A scoping review. *International Journal for Equity in Health* 9, 1–13.
- Karn, S., Swain, S. 2017. Health consciousness through wellness tourism: A new dimension to new age travelers. *African Journal of Hospitality, Tourism and Leisure* 6(3), 1–9.
- Kazakov, S., Oyner, O. 2021. Wellness tourism: A perspective article. *Tourism Review* 76(1), 58–63.
- Kemppainen, L., Koskinen, V., Bergroth, H., Marttila, E., Kemppainen, T. 2021. Health and Wellness–Related Travel: A Scoping Study of the Literature in 2010–2018. *SAGE Open* 11(2), 215824402110137.
- Kim, H., So, K. K. F. 2021. Two decades of customer experience research in hospitality and tourism: A bibliometric analysis and thematic content analysis. *International Journal of Hospitality Management* 100, 103082
- Koncul, N. 2012. Wellness: A new mode of tourism. *Economic research - Ekonomska istraživanja* 25(2), 503–534



- Kongtaveesawas, N., Prasarnphanich, P., Sinthupinyo, S., Ashton, A. S. 2022. Attribute framework validation for wellness tourism within the context of Thailand. *Sustainability* 14(10), 5953.
- Koseoglu, M. A., Rahimi, R., Okumus, F., Liu, J. 2016. Bibliometric studies in tourism. *Annals of Tourism Research* 61, 180–198.
- Kušen, E. 2011. Positioning medical tourism in the broader framework of health tourism. *Tourism: An International Interdisciplinary Journal* 59(1), 95–99.
- Leandro, M. E., Nogueira, F., de Carvalho, A. B. S. 2015. Diversity and interconnection: Spas, health and wellness tourism. *Health and Wellness Tourism: Emergence of a New Market Segment*, 153–164.
- Li, C., Huang, X. 2022. How does COVID-19 risk perception affect wellness tourist intention: Findings on Chinese generation z. *Sustainability* 15(1), 141.
- Loureiro, S. M. C., Almeida, M., Rita, P. 2013. The effect of atmospheric cues and involvement on pleasure and relaxation: The spa hotel context. *International Journal of Hospitality Management*, 35, 35–43.
- Majeed, S., Lu, C., Javed, T. 2017. The journey from an allopathic to natural treatment approach: A scoping review of medical tourism and health systems. *European Journal of Integrative Medicine* 16, 22–32.
- Manhas, P. S. 2015. Marketing Analysis of Medical Tourism in India. *Enlightening Tourism. A Pathmaking Journal* 5(1), 1-39.5(1).
- Martín-Martín, A., Thelwall, M., Orduna-Malea, E., Delgado López-Cózar, E. 2021. Google Scholar, Microsoft Academic, Scopus, Dimensions, Web of Science, and OpenCitations' COCI: a multidisciplinary comparison of coverage via citations. *Scientometrics* 126(1), 871–906.
- Martyn, J. 1964. Bibliographic Coupling. *Journal of Documentation* 20(4), 236–236./
- McBurney, M. K., Novak, P. L. 2002. What is bibliometrics and why should you care? Professional Communication Conference, 2002. IPCC 2002. Proceedings. IEEE International 108–114.
- Meikassandra, P., Prabawa, I. W. S. W., Mertha, I. W. 2020. Wellness Tourism In Ubud. “A Qualitative Approach To Study The Aspects Of Wellness Tourism Development”. *Journal of Business on Hospitality and Tourism* 6(1), 79–93.
- Mishra, D. N., Panda, R. K. 2023. Evaluating visitor–therapist relationship in Indian spa and wellness resorts. *Journal of Hospitality and Tourism Insights* 6(5), 2433–2461.
- Moir, P., Mylonopoulos, D., Parthenis, S. 2022. Medical Tourism. Compatibilities and Incompatibilities When Medical Services are Provided Along With Tourism Services. *문화관광연구*, 24(1), 27–47.
- Mongeon, P., Paul-Hus, A. 2016. The journal coverage of Web of Science and Scopus: A comparative analysis. *Scientometrics* 106, 213–228.
- Montero-Díaz, J., Cobo, M.-J., Gutiérrez-Salcedo, M., Segado-Boj, F., Herrera-Viedma, E. 2018. A science mapping analysis of ‘Communication’WoS subject category (1980-2013). *Comunicar: Revista Científica de Comunicación y Educación* 26(55), 81–91.
- Mueller, H., Kaufmann, E. L. 2001. Wellness tourism: Market analysis of a special health tourism segment and implications for the hotel industry. *Journal of Vacation Marketing* 7(1), 5–17.
- Österle, A., Johnson, T., Delgado, J. 2013. A Unifying Framework of the Demand for Transnational Medical Travel. *International Journal of Health Services* 43(3), 415–436. /

- Patterson, I., Balderas-Cejudo, A. 2023. Tourism towards healthy lives and well-being for older adults and senior citizens: Tourism agenda 2030. *Tourism Review* 78(2), 427–442.
- Rancic, M., Popov-Raljic, J., Pavic, L. 2013. Spa-wellness center as part of the hotel facility. *Turizam* 17(2), 45–59.
- Rocio, H.-G., Jaime, O.-C., Cinta, P.-C. 2023. The Role of Management in Sustainable Tourism: A Bibliometric Analysis Approach. *Sustainability* 15(12), 9712.
- Romão, J., Seal, P. P., Hansen, P., Joseph, S., Piramanayagam, S. 2022. Stakeholder-based conjoint analysis for branding wellness tourism in Kerala, India. *Asia-Pacific Journal of Regional Science* 6(1), 91–111.
- Santos-Rojo, C., Llopis-Amorós, M., García-García, J. M. 2023. Overtourism and sustainability: A bibliometric study (2018–2021). *Technological Forecasting and Social Change* 188, 122285.
- Shokri Garjan, H., Paydar, M. M., Divsalar, A. 2023. A sustainable supply chain for a wellness tourism center considering discount and quality of service. *Expert Systems with Applications* 211, 118682.
- Singh, V. K., Singh, P., Karmakar, M., Leta, J., Mayr, P. 2021. The journal coverage of Web of Science, Scopus and Dimensions: A comparative analysis. *Scientometrics* 126, 5113–5142.
- Smith, M., Kelly, C. 2006. Wellness tourism. *Tourism Recreation Research* 31(1), 1–4.
- Smith, M., Puczko, L. 2015. More than a special interest: Defining and determining the demand for health tourism. *Tourism Recreation Research* 40(2), 205–219.
- Sthapit, E., Björk, P., Coudounaris, D. N. 2023. Towards a better understanding of memorable wellness tourism experience. *International Journal of Spa and Wellness* 6(1), 1–27.
- Thelwall, M. 2018. Dimensions: A competitor to Scopus and the Web of Science? *Journal of Informetrics* 12(2), 430–435.
- Tiwari, R., Hashmi, H. 2022. Integrating concepts of destination image, travel motivations, expectation, and future behavior to create a model of wellness travel intentions. *International Journal of Spa and Wellness* 5(2), 185–206.
- Van Eck, N., Waltman, L. 2010. Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics* 84(2), 523–538.
- Visser, M., Van Eck, N. J., Waltman, L. 2021. Large-scale comparison of bibliographic data sources: Scopus, Web of Science, Dimensions, Crossref, and Microsoft Academic. *Quantitative Science Studies* 2(1), 20–41.
- Voigt, C. 2013. Towards a conceptualisation of wellness tourism. In *Wellness tourism* (pp. 19–44). Routledge.
- Wang, G., Ren, L., Qiu, H., Yao, Y. 2022. Salient health goal, salient restoration? A transformative model of wellness tourism. *Journal of Travel & Tourism Marketing* 39(7–9), 591–608.
- Wen, J., Kozak, M., Yang, S., Liu, F. 2021. COVID-19: Potential effects on Chinese citizens' lifestyle and travel. *Tourism Review* 76(1), 74–87.
- Wray, M., Laing, J., Voigt, C. 2010. Byron Bay: An alternate health and wellness destination. *Journal of Hospitality and Tourism Management* 17(1), 158–166.
- Zhao, W., Ritchie, J. B. 2007. An investigation of academic leadership in tourism research: 1985–2004. *Tourism Management* 28(2), 476–490.
- Zhong, L., Deng, B., Morrison, A. M., Coca-Stefaniak, J. A., Yang, L. 2021. Medical, Health and Wellness Tourism Research—A Review of the Literature (1970–2020) and Research Agenda. *International Journal of Environmental Research and Public Health*, 18(20), 10875.