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Wellness Tourism Management Research
A bibliometric analysis

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Abstract. *The aim of the article is to analyze the wellness tourism topic, focusing on the overview and the research directions in the period 2012-2022, published in WoS and Scopus databases. This attempt is aided by the methods of bibliometric analysis, such as co-citation analysis, bibliometric coupling, reference analysis and keywords analysis. The current research reveals information about which pair of papers, authors or journals are cited together as sources of articles from the past almost 11 years formatting the core of the topic of wellness tourism regarding destination, marketing and management in this area. As result of the research, can be concluded that articles in wellness tourism topics highly published in Social Science and Economic disciplines, mostly in English language both in WoS and Scopus databases. Based on the keyword analysis, 7 clusters related to the research of the last almost eleven years resulted. These clusters namely can be defined as: researches focusing on competitiveness, wellness tourism philosophy, quality, sustainability, digitalization, motivation, marketing and management, loyalty and customer satisfaction, and COVID-19 pandemic situation.*

Keywords: bibliometric analysis, wellness tourism, clusters, WoS and Scopus database.

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Introduction

One of the fastest growing branches of tourism is health tourism, within this there are two main fields: medical tourism where the primary motivation is in the use of medical treatment and wellness tourism, in which the emphasis is on preventive health promotion (Lopes and Rodrigez-Lopez, 2022).

Along with other factors, wellness tourism has played a significant role in the rapid growth of the wellness industry. Increasing stress, a fast-paced lifestyle, changing the traditional community structures, attention to health preservation and disease prevention, and, in many cases, skepticism toward Western medicine, have contributed to the development of demand for wellness (Voigt, Brown & Howat, 2011). The economic level of sectors such as: workplace wellness, real estate wellness, healthy eating, physical activity, thermal/mineral springs, wellness tourism and public health and prevention, is strongly

influenced by the level of living and happiness in a country or even from a certain region (Shun et al., 2023).

The purpose of the current research is to highlight the evolution of research in the field, the direction of research carried out on the topic of wellness tourism, respectively the research that created the core of the clusters that form the topic of wellness tourism. In order to understand the development of the wellness tourism topic, bibliometric analysis was used as research method.

Bibliometric analysis is used to evaluate information in a research area, to reveal hidden trends, cooperation, collaborations, associations and to measure descriptive data`s and knowledge of the literature (Zupic & Cater, 2015).

Literature review

To defining wellness tourism Dunn, Ardell, and Hettler were the pioneers in this field. Also, Dunn and his philosophy in the 50s is remarkable, it places in the center of human well-being the triad of body, soul, and mind and the balance between these three (Dunn, 1959). In holistic terms, wellness includes physical, mental, cultural, spiritual, and social dimensions (Dunn, 1957).

Global Wellness Institute (GWI) defines the core of wellness as doing activities, making decisions, and creating a lifestyle that leads to a holistic state of health. Usually, these are the total of service providers that make it possible in the wellness industry for consumers the introduction/implementation of wellness activities and lifestyles into everyday life (GWI, 2020). Smith and Puczkó`s approach to clarifying the concept established a remarkably transparent theory, respectively the relationship between health tourism, medical tourism and wellness tourism, stating that in medical tourism the health treatments play an essential role, while in the case of wellness services the treatments are not a mandatory requirement, here, prevention is emphasized (Smith and Puczkó, 2008). Essentially, health is the main target, and wellness points the way that leads to achieving the goal (Dillette, Douglas & Andrzejewski, 2021).

The role of bringing wellness into the center of public awareness and the concept becoming widespread is attributed to Ardell and Ardell Wellness Report, in his works promotes a five-element model consisting of nutritional awareness, stress management, environmental sensitivity, physical fitness, and the central element, self-responsibility (Ardell, 1977).

In the history of wellness, the Hettler model lists the social, physical, spiritual, occupational, intellectual and emotional dimensions. The social dimension stands for the harmonious relationship with the environment, the general well-being of the community, and avoiding conflicts. The physical dimension covers the avoidance of addictions that are harmful to one's health and the promotion of activities that enhance one's health, such as regular physical activity and a healthy diet. The spiritual dimension stands for creating one's one value system, intolerance towards others and conflicts may be avoided. The occupational dimension encompasses the profession, a carrier that suits the individual's personality, and is in harmony with their personal values and interests, the occupation to become a source of happiness. The identification of intellectual problems and solving them in the most effective way significantly decreases stress. The emotional dimension draws attention to the importance of an optimistic perspective (Hettler, 1976).

The rapid development in sciences and technology accelerated lifestyle and stress that this triggers place today's society under great pressure, which may lead to various health problems—to which wellness offers solutions (Feng et al., 2021). Wellness tourists declare their primary motivation for traveling to be health prevention and promoting health, when they purchase complex service packages that include physical fitness, healthy diet, meditation, beauty care, and education (Mueller & Kaufmann, 2001).

In order to increase competitiveness in wellness tourism, one of the most important steps is to understand travel motivation. In this approach, the needs of tourists, the intention to return to the given destination, understanding their behavior or factors influencing their loyalty can have an important role. Phuthong et al. (2022) created a 7-dimension model to examine competitiveness in wellness tourism that focuses on the destination environment, the infrastructure and capacity, the man-made and cultural resources, innovation potential, wellness tourism travel, and policy and wellness strategy and structure.

The economic, social, ecological and political changes of the previous decades have only increased people's demand for wellness tourism. Wellness tourism is the fastest-growing and one of the most significant segments of the world tourism industry. "Wellness tourism is a global phenomenon; its implementation is predominantly localized in the resorts with the appropriate natural conditions and infrastructure." (Tutberidze, 2021, p. 1).

Natural resources are connecting factors between balneology, wellness and tourism, this association is important, prominent nowadays (Hojcska & Szabo, 2021). The availability of resources can be a vulnerable point because inappropriate consideration can easily turn an advantage into a disadvantage. This can be felt enormously in regard to the exploitation of natural resources because although it may open up the possibility of offering complex service packages, at the same time, irresponsible exploitation holds dangers as well (Printz-Markó & Molnar, 2019).

Tourism destinations face increasing competition in the global market (Voigt & Pforr, 2014). The rate of success of the supply side is influenced by the health factors, infrastructure, the service package on offer, and the quality of the services, in which the development of the human resources plays a significant role. (Wendri et al., 2021).

In the last decade, the concept of sustainability rose to the focus of attention from a social, leadership, and economic point of view (Sancho et al., 2002). The reason is partly to be found in the negative effects of unsustainable economic development models that urged the appearance and acceptance of a global sustainable paradigm. As a response to this, "Agenda 2030" appeared, which is, in fact, a global agreement that obliges all member states of the United Nations to follow and to reach the defined aims of this sustainable development program before 2030 (Bebbington & Unerman, 2018). The recognition of the economic power of tourism generated the sustainable paradigm and the need to apply it in the tourism sector (Sgroi, 2020). Creating a hospitable attitude and atmosphere, and a client-friendly approach, are indispensable in case of constant development, and these must direct both destination and company-level measures (Tuominen et al., 2016).

Considering the presence of anthropogenic factors in the tourism industry, they can influence the life of local communities, natural resources and the ecosystem. (Rosato et al., 2020). It can be recognized that there is a gap between the current reality and the desired one, a phenomenon that exists at the group level, but also at the level of societies, and this gap has generated the need for social innovation (Păunescu, 2014). One of the solutions to

reduce this gap would be to give due importance to health and wellbeing, and wellness tourism can support this achievement.

Wellness tourism is connected with all these described elements present in the tourism industry. Research directions are focused on these elements appeared in publications over time. Bibliometrics is one of the adequate methods for examining them and analyzing the wellness sector.

In the topic of health, medical and wellness triad was made one bibliometric analysis, based on publication appearing in WoS database between 1970-2020. The results highlights the authors productivity, countries of authors, institutions, keywords frequencies and based on the keywords analysis research themes and directions. (Zhong et al., 2021). Aluculesei et al., studied publications on WoS database published between 1997-2021 the topic of medical spas analyzed by co-words analysis in Vosviewer (Aluculesei et al., 2021).

Memorable experience studies in wellness tourism appearing in WoS and Google Scholar databases between 2010-2022 (Dahanayake, Wanninayake & Ranasinghe, 2022).

On the topic of mobile technology in the wellness tourism destination, research is found to extract relevant information using the Scopus database and in the period 2001-2021 (Phuthong et al., 2022). Another topic is Chinese health tourism past 40 years bibliometric analysis (Zhong et al., 2022). Mohanan and Shekhar (2022) used WoS database to extract articles published between 2006-2021, their research reveals which are the top journals, authors, countries, affiliations and what were the most frequent keywords used, but they do not made clusters for which were the research themes. Suban (2022) research has a time spam 1998-2021 appeared in Scopus, in the topic of wellness tourism, the methods of research was citation and co-citation analysis, performance analysis, science mapping, but still not a systematic keyword analysis.

The methods of bibliometrics analysis have become solid pillars of scientific fields and research evaluation methodology, and it plays a significant role in the international ranking of institutions, journals, and universities (Ellegaard & Wallin, 2015). The bibliometric research facilitates mapping academic fields and areas of a topic, in addition to examining the type of research literature (Dalpé, 2002; White & McCain, 1998).

The popularity of the method has soared in the field of business research – the appearance of numerous bibliometrics analysis software such as Gephi, VOSviewer, Bibexcel demonstrate it (Khan et al., 2021). The existence of statistical data following the bibliometric analysis are reported to articles and journals, promoting the cooperation between them and the mapping of the structure in the literature. (Donthu et al., 2021). Applying bibliometric research facilitates the development of new knowledge in a field by analyzing one particular aspect (Gaziulusoy & Boyle, 2013). The result is an overview of the present state of the given academic field; it may shed light upon the weaknesses and point to new aims and avenues (Duque, Taulet & Rodriguez, 2006).

Research methodology

The method of bibliometrics deals with the quantitative analysis of published papers (Egghe & Rousseau, 1990; Wolfram, 2003). Bibliometrics analysis shows the results of both qualitative and quantitative research and changes in any academic research field (De Bakker et al., 2005). To reach this aim of present research, one needs to collect the objective data generated from the databases, such as the number of quotations, citations, and the frequency of keywords (Donthu et al., 2021).The samples often center on a wide or narrow topic,

for the analysis of which several other approaches are possible: for example, the geographic approach (Lin, 2012) – examines the geographic grouping of academic papers – the chronological development of institutional angles, and performance indicators (Huffmann et al., 2013). In this respect, the results of the institutions where the authors are affiliated, the number of publications of an author, and the number of citations of the papers could be considered indicators. Reporting citations means in fact, citing one article as the source of another (Wang et al., 2016).

In the present research, will be used co-citation analysis and bibliographic coupling through reference analysis in the sampled category. Co-citation analysis is used based on the citation indices, to find instances of new documents where co-cited articles appeared; on the other hand, it helps define which studies has been the primary literature of present studies (Osareh, 1996). As opposed to this, bibliographic coupling focuses on the citation list of a paper. The documents are considered connected on the level of bibliography if they contain at least one common reference (Kessler, 1963). The more the references found in several papers, the stronger the link between the articles (Van Eck & Waltman, 2010).

To do the bibliometric analysis of wellness tourism, the sampling relied on Clarivate Web of Science (WoS) and Scopus databases. These databases were chosen because the academic community considers these two databases their main sources of references (Hoz-Correa, Muñoz-Leiva & Bakucz, 2018). The current research lies on the model presented in figure 1.

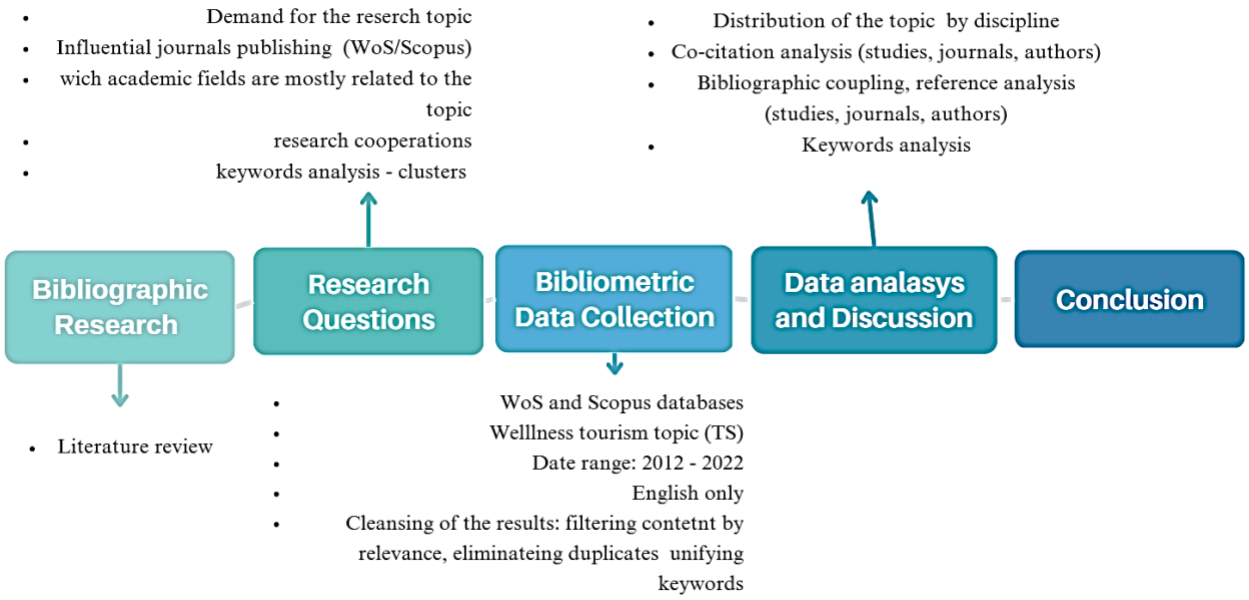


Figure 1. Methodology

Source: Authors` own contribution.

The sampling was in November 2022 and included the publications of the last almost 11 years, so the period under scrutiny is 2012-2022. To carry out the research in the WoS and Scopus databases, the "topic" (TS – abbreviation used for topic in WoS database) which encompasses the analysis of keywords, abstract and the title as well, revealed itself in the search. Furthermore "wellness tourism topic" will be abbreviated "WT".

During the filtering process the "wellness tourism" term was used, and just the researches written in English were used. Cleansing the resulting databases was the next step, which involved the following: a) filtering content based on relevance to the topic, b) eliminating duplicates from the sample, c) unifying keywords; that is, turning them either into plural or singular (e.g., wellness tourists and wellness tourist, spas and spa, etc.).

WoS – TS= (wellness tourism) and English (Languages) and 2012-2022 (Publication date), results: 321 matches.

Scopus – TITLE-ABS-KEY (wellness tourism) AND PUBYEAR> 2012 AND PUBYEAR < 2023 AND [LIMIT-TO (LANGUAGE, "ENGLISH")], results: 505 matches.

Research questions

The study aims to find answers to some questions regarding the scientific concern for the field of wellness, especially for the last years, and from the point of view of the magazines that were the most significant, where articles in the field appeared, respectively in which academic fields research is carried out in the field of wellness. During the research period, we are looking for who are the researchers in the field of wellness and if there is a cooperation between them. Wellness tourism is related to other fields, that's why the study looks for the most popular research fields in relation to wellness tourism. Also, an answer is sought to what extent management is present in research in the field of wellness tourism.

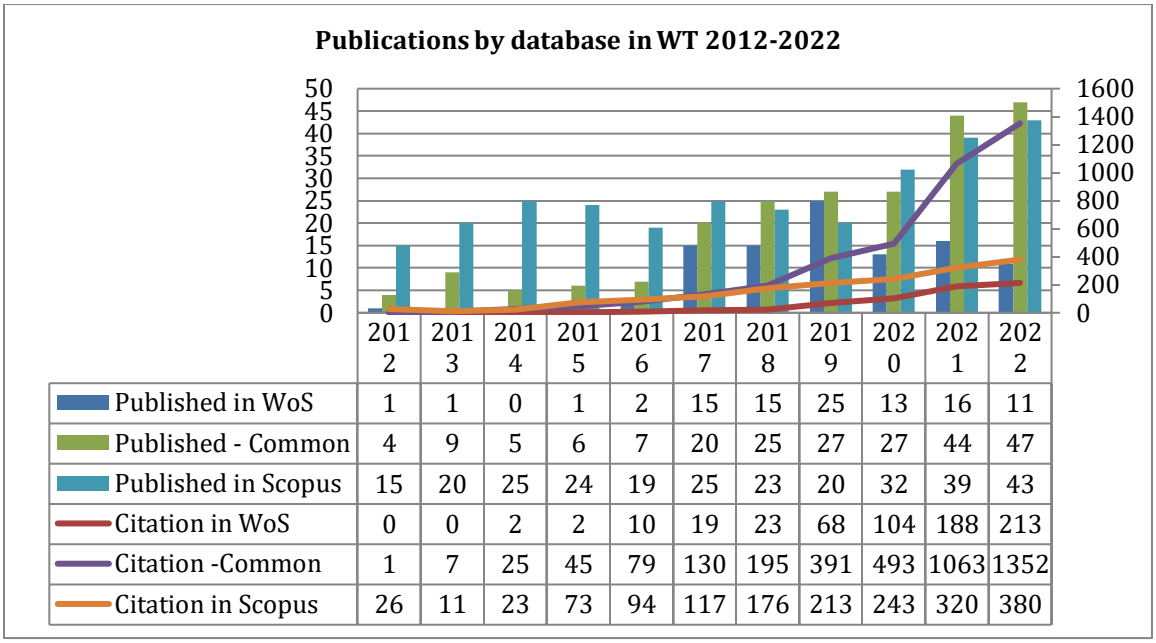
The research is based on quantitative methods of analysis; the analysis tool used is the bibliometric analysis program VOSviewer.

Results and discussion

The data's used for the present research were gathered from WoS and Scopus databases in the period under scrutiny (2012-2022)

In the topic WT, WoS database shows total 337 researches, however most of them was written in English 321 (95.25%), Spanish 7 (2.08%) and all others less than 1 % in Portuguese, Czech, German, Italian, Polish language. The Scopus database has overall 529 researched conducted in wellness tourism whereof 505 (95.46%) was published in English, and all others in German, Polish, Portuguese (0.57 % each), Greek and Spanish (0.38 % each), Chinese, Croatian, Hungarian, Italian, Japanese, Slovenian (0.19% each).

The data from the databases overlap on numerous cases, there are many articles that can be found both in WoS and Scopus databases. Quantified: 221 articles in WT that are present in both databases, 100 papers present only in WoS databases, and 285 only in those in Scopus. Examining the year of publication reveals that in the WT, in the period examined, the highest number of articles were published in 2021 (99) and in 2022 (101). The citations within WT, the year 2022 was prolific, 1945 citations.



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Published in WoS	1	1	0	1	2	15	15	25	13	16	11
Published - Common	4	9	5	6	7	20	25	27	27	44	47
Published in Scopus	15	20	25	24	19	25	23	20	32	39	43
Citation in WoS	0	0	2	2	10	19	23	68	104	188	213
Citation -Common	1	7	25	45	79	130	195	391	493	1063	1352
Citation in Scopus	26	11	23	73	94	117	176	213	243	320	380

Figure 2. Publications and citation numbers in WT

Source: WoS and Scopus, own research and editing.

The highest number of wellness tourism-related articles appeared in the academic disciplines of Social Sciences, Business Management and General Management, Environmental Science and Ecology, Economics, Econometrics and Finances, and Business Economics. The papers published in the areas listed above make up 65.21% of wellness tourism publications, while the remaining 34.79% are distributed among Medical Science, Engineering, Humanities, Earth Sciences, Psychology, etc.

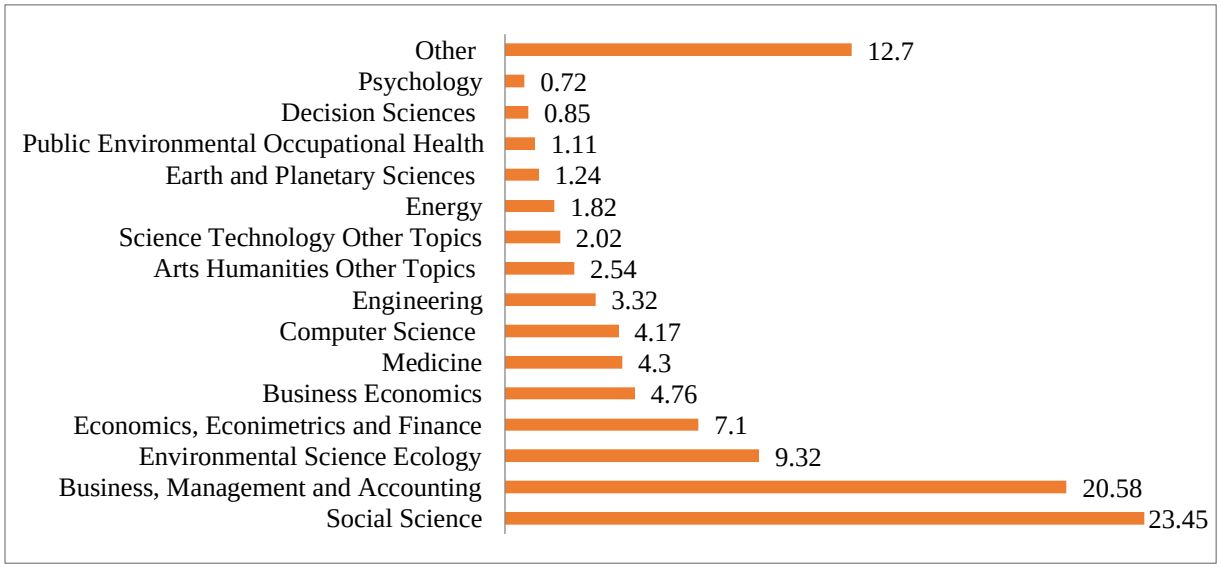


Figure 3. Wellness tourism research by discipline

Source: WoS and Scopus databases, own research and editing.

Co-citation analysis

a. Studies

The co-citation analysis of the articles, WT in WOS database 13654 and in the Scopus database resulted in 23953 external references. However, upon limiting the minimum citation frequency to 5 items, the numbers dropped in WoS to 297 and in Scopus to 91. If the connection of articles is examined in WoS, 16,543 valid connections are found, while in Scopus 1541 connection. The scrutiny of research topics in the past years shows that authors often cite the following:

- Mueller, H., and 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.
- Smith, M., and Puczkó, L. (2008). Health and wellness tourism. Routledge.
- Voigt, C., Brown, G., and Howat, G. (2011). Wellness tourists: in search of transformation. Tourism Review.
- Smith, M., and Kelly, C. (2006). Wellness tourism. Tourism recreation research, 31(1), 1-4.
- Mak, A. H., Wong, K. K., and Chang, R. C. (2009). Health or self-indulgence? The motivations and characteristics of spa-goers. International Journal of tourism research, 11(2), 185-199.

b. Journals

WT category includes in the WoS database 321 articles, which has 6700 external references/sources, after that the minimum number of references was set to 15, lead to a result of 116 matches. In this case, the top journals are Tourism Management (933 references), followed by Annals of Tourism Research (573 references), then the Journal of Travel and Tourism Marketing (272 references).

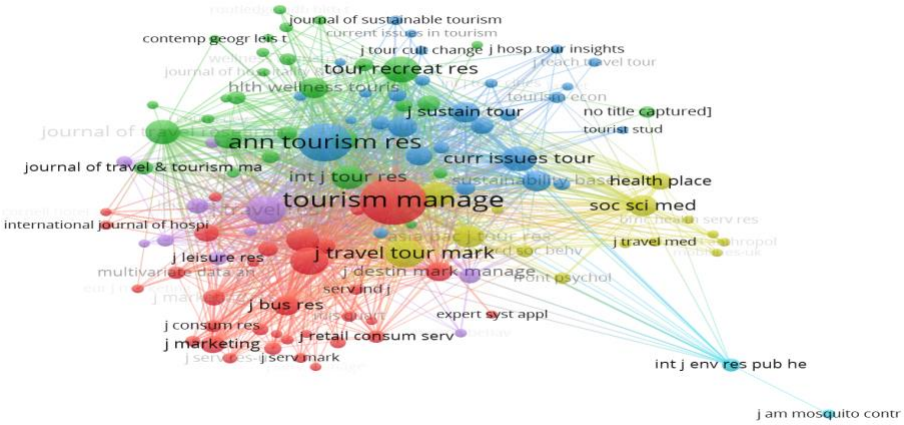


Figure 4. Co-citation – WT in WoS journals

Source: WoS, own research and editing.

Upon examining the Scopus database, the most frequently cited journals used as source are Tourism Management (869 Scopus), and Annals of Tourism Research (644 Scopus), then, in the case of Scopus, the Journal of Travel Research (430 Scopus) is in third place. In the Scopus database, in terms of 505 publications of the 12243 references in the final sample (at least 15 references), 134 were left.

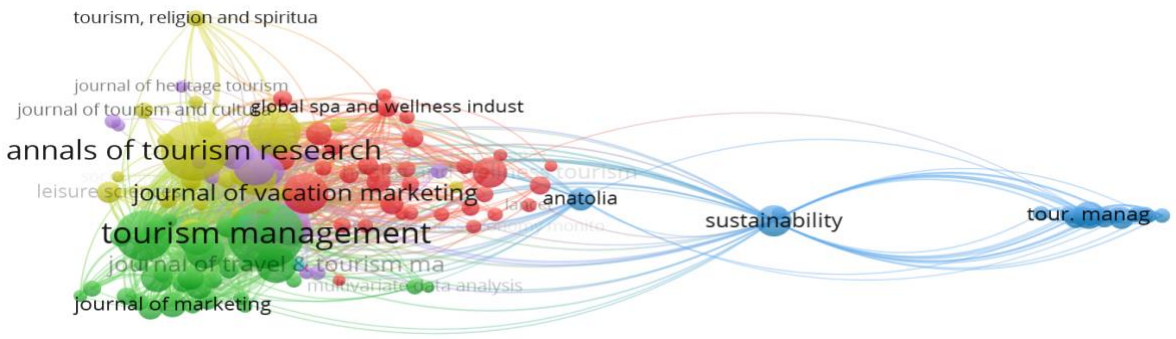


Figure 5. Co-citation- WT in Scopus journals

Source: Scopus, own research and editing.

c. Authors

Upon performing co-citation analysis in the WT, 9932 authors could be listed in the WoS sample and 26975 in Scopus. The following criteria (minimum citation frequency/author 15) reduces the number of authors to 101 in WoS and 332 in Scopus. Figure 6 illustrates the most frequently cited authors in the WT and those with the strongest connections, to mention a few authors: Smith, M.; Mueller, H.; Voigt, C.; Chen, K.H. (65 only in WoS); Han, H.; (35 only in WoS). Global Wellness Institute; Dunn, H., (135 only in Scopus) Uysal, M.; Puczkó, L. (250 only in Scopus). Articles by the above-mentioned authors cover the analysis of demand and supply sides of wellness, the investigation of destinations, statistical data on the global wellness tourism and projections of future trends.

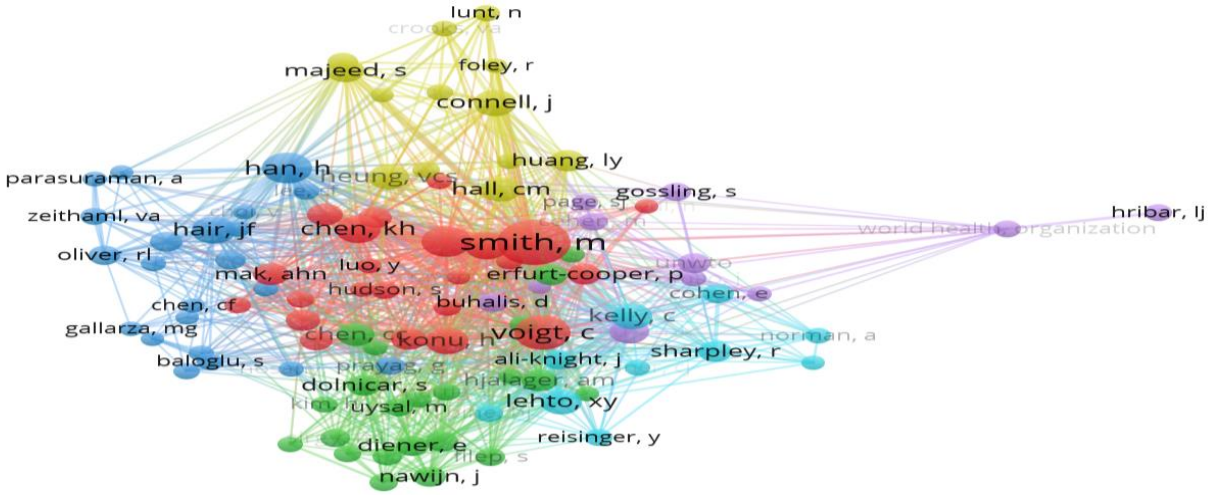


Figure 6. Co-citation – WT authors

Source: WoS and Scopus, own research and editing.

Bibliographic coupling, reference analysis and keyword analysis

a. Studies

According to the established criteria of minimum citation at least five times, in the WoS database from 321 articles 139 have met the criteria, while from 505 Scopus articles 190 met the criteria. In the WT, the most frequently cited articles are presented in the table 2.

Table 1. Studies containing the largest number of references

Article	Short overview	Nr. of references
Napier, A. D., Ancarno, C., Butler, B., Calabrese, J., Chater, A., Chatterjee, H., ... & Woolf, K. (2014). Culture and health. The Lancet, 384(9954), 1607-1639.	It examines the relationships between health care, medical best practice, and culture; it also points to the problems, and the emerging demands, examines inequalities in health care, differences in care. They suggest future actions in the fields of health care and culture in 12 points.	374
Wen, J., Kozak, M., Yang, S., & Liu, F. (2020). COVID-19: potential effects on Chinese citizens' lifestyle and travel. Tourism Review, 76(1), 74-87.	The research aims to investigate both the short-term and the long-term effects of COVID-19 on tourism – how it changes the lifestyle choices and traveling habits, even preferences of Chinese tourists. Among the projections figured the demand for health tourism, wellness tourism, slow tourism, and smart tourism.	332
Chen, C. C., & Petrick, J. F. (2013). Health and wellness benefits of travel experiences: A literature review. Journal of Travel Research, 52(6), 709-719.	In the research, the authors try to offer an overview of the literature on the advantages of traveling regarding health and wellness. It also defines future research trends; and identifies present insufficiencies, for example, the lack of research that focus on what positive effects traveling experiences have upon health.	174
De la Hoz-Correa, A., Muñoz-Leiva, F., & Bakucz, M. (2018). Past themes and future trends in medical tourism research: A co-word analysis. Tourism Management, 65, 200-211.	The research aims at the longitudinal (1931-2016) examination of the development of medical tourism. For this, bibliometric tools were applied when analyzing Scopus and WoS databases. Based on the results, the authors defined six topics: "ethics-related questions, trust, and accreditation", "health tourism, wellness tourism, medical tourism, and quality of services", "health-related questions, medical treatments, and tourism", "socially responsible practices in MT", "medical tourism destinations and marketing", and "globalization, policies, and the effect these have on international patients".	116
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.	The authors examined the importance of customer service and its role in determining the quality of services in the case of the Taiwanese hot water spring hotels and wellness tourism focusing on the aging generation, as services supply and the demand sides.	107

Source: WoS and Scopus, own research and editing.

The figure 7 presents the performance of the articles, and it shows their level of citations. The highly cited articles appear in the brightest colored field. It also shows that the articles clustered around it have a similar topic.

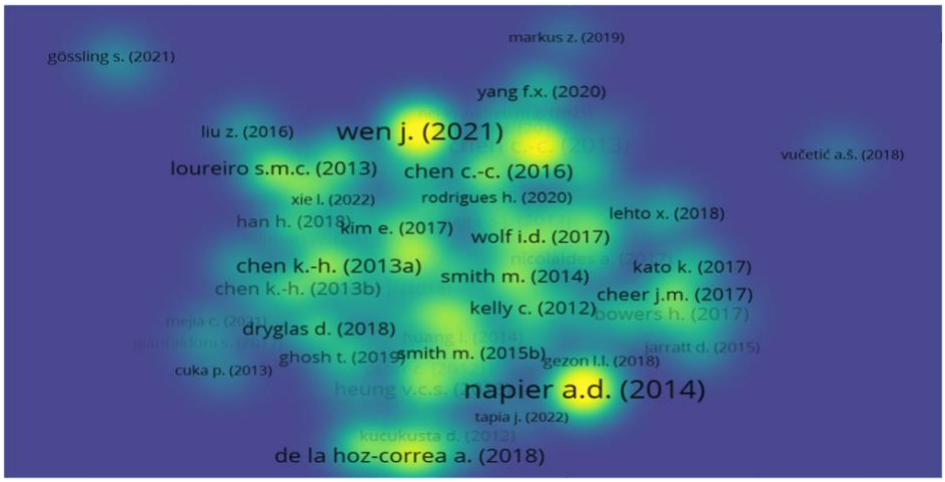


Figure 7. The most cited articles written in WT

Source: WoS and Scopus, own research and editing.

b. Journals

In connection with WT topic articles, one of the significant data is quantifiable in the number of published articles. Regarding the published articles, both WoS and Scopus databases, delimiting the following categories was necessary: only Scopus, only WoS, and common. The highest number of articles was published in the International Journal of Spa and Wellness (29) found in Scopus, followed by Sustainability (22) in the common databases, Journal of Travel Tourism Marketing (12) in common databases, while International Journal of Contemporary Hospitality Management (11) in common databases.

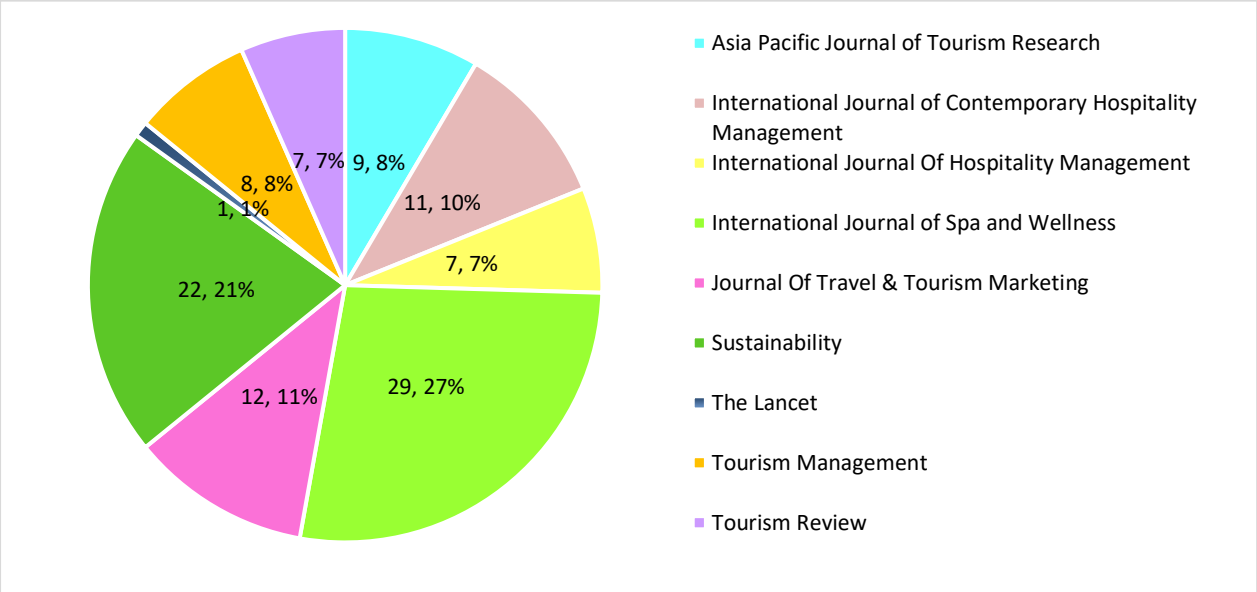


Figure 8. The top journals with the highest number of publication

Source: WoS and Scopus, own research and editing.

The WoS and Scopus journal ranking regarding the number of citations are the following: International Journal of Hospitality Management (7 publications and

410 references). Tourism Review (7 publications, 407 references), Tourism Management (8 publications, 384 references). The Lancet, from Scopus database, for 1 published article has 374 references. These data show which journals has the highest number of citation on WT and play a central role in the category under scrutiny.

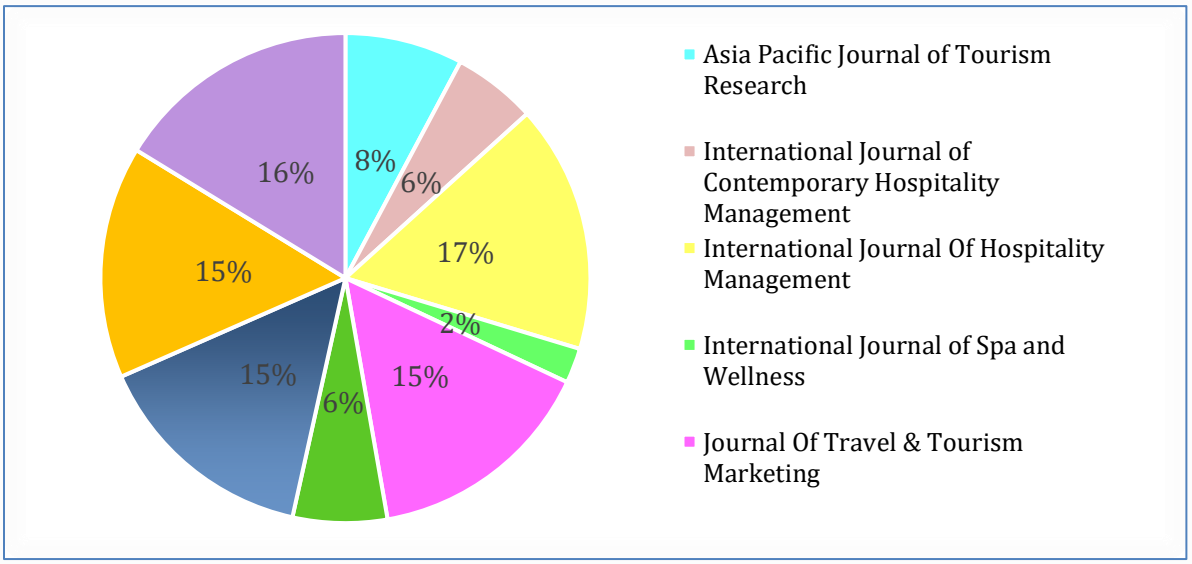


Figure 9. The top journals with the highest number of citation

Source: WoS and Scopus, own research and editing.

c. Authors

In the sample, there are 1192 authors. Of these, 126 authors had two published articles, 38 had published 3 articles, 20 authors had published 4 articles, 9 authors published 5 articles, and 2 authors published 6 articles, on average 1.97 authors per article.

The number of articles does not show direct proportionality with the number of citations. Kozak, Liu, Yang, and Wen has published only one article and has the highest number of citations 332, except Wen - he published one more article but without further citation.

Table 2. The top 9 authors in WT

Author	Nr. of articles	References	Total link strength	Author	References	Nr. of articles	Total link strength
Demicco F.J.	8	27	2.80	Kozak M.	332	1	71.71
Majeed, S.	6	77	373.45	Liu F.	332	1	71.71
Chen K.-H.	6	190	348.23	Wen J.	332	2	80.71
Chang F.-H.	5	190	256.10	Yang, S.	332	1	71.71
Han H.	5	114	282.34	Chen C.-C.	282	3	215.34
Lee T.J.	5	92	220.69	Petrick J.F.	275	2	114.03
Liberato D.	5	3	187.25	Chang F.-H.	190	5	256.10
Liberato P.	5	3	187.25	Chen K.-H.	190	6	348.23
Sharma P.	5	88	333.75	Smith M.	163	4	317.24

Source: WoS and Scopus, own research and editing.

d. Keywords analysis

In the sample WoS and Scopus databases, there were 1652 keywords altogether in the wellness tourism topic. However, this number decreased when the lowest limit of keyword occurrence was set to 5. The frequency of occurrence of keywords fitting the criteria above is a total of 749 words, the five most frequent (see in the table below) ones are wellness tourism (121), wellness (71), tourism (54), medical tourism (46), spa (35), health (21), health and wellness tourism (20), COVID-19 (18), motivation (16), wellbeing (16). It is important to note that a part of these is built around the triad of health, wellness tourism, and medical tourism. Then it channels in the direction of wellness services, undoubtedly among the hot topics of articles are the effects of COVID-19 pandemic period, and the research focusing on the business effects of wellness, as well as the ones targeting the demand and supply side in which motivation also figure. Another important topic is research on competitiveness and overviewing sustainability and sustainable development. In the table 5, a few countries also appear, and are quite frequent, they point to the geographical area where the research had been conducted.

Table 3. Keyword Analysis, top 30 most frequent keywords

keyword	frequency	%	keyword	frequency	%
wellness tourism	121	16.15	sustainability	9	1.20
wellness	71	9.48	sustainable tourism	9	1.20
health tourism	54	7.21	Thailand	9	1.20
tourism	54	7.21	customer satisfaction	8	1.07
medical tourism	46	6.14	healthcare	8	1.07
spa	35	4.67	loyalty	8	1.07
health	21	2.80	sustainable development	8	1.07
health and wellness tourism	20	2.67	wellbeing	8	1.07
COVID-19	18	2.40	quality of life	7	0.93
motivation	16	2.14	tourism destination	7	0.93
well-being	16	2.14	tourism development	7	0.93
satisfaction	15	2.00	competitiveness	6	0.80
yoga	13	1.74	culture	6	0.80
china	12	1.60	service quality	6	0.80
spa tourism	12	1.60	hospitality	6	0.80

Source: WoS and Scopus, own research and editing.

The results of the keywords analysis highlights 7 clusters, which can be seen in Figure 9.

The first cluster is the competitiveness of wellness tourism (green): most articles contain research on natural resources, cultural factors, unique service packages, authenticity, innovation, analysis of the strategic decision, infrastructure, professional staff, retaining them, and quality services. However, linking culinary or gastronomy services with wellness can also be listed here.

The second cluster is wellness services and wellness philosophy (red): a parallel can be drawn between various wellness dimensions and wellness services. For example, there is a parallel between the spiritual dimension and yoga, meditation, ayurveda, mindfulness, and religion-related pilgrimages - all characterized by a deep relationship with one's inner self. The social and the physical (be it active, e.g., fitness, or passive, e.g., spa services) dimensions

are linked to adventure tourism and cruise tourism, hotels built around hot springs, and alternative and traditional therapy.

The third cluster is quality (gold): is comprised of research done in given supply units and ones focusing on the quality assessment of the demand side. Research focus on medical wellness, spas, and service providers built around hot springs, or thermal water springs.

The fourth cluster is sustainability and digitalization (light blue): natural resources, for example, sustainable exploitation of hot springs, emission of carbon dioxide, ecotourism and eco-conscious mindset, environmental protection, and preservation of biodiversity.

Besides sustainability, and research on smart and virtual tourism, artificial intelligence is also present.

The fifth cluster is the analysis of COVID-19, effects (purple): it also formulates suggestions for possible solutions. The negative effects, the present tenseness, quick responsiveness, and strategic approach all play a part in reducing the negative effects and in filling the need for security.

The sixth cluster is examining motivation and marketing activity (dark blue): As far as motivation is concerned, age groups and other demographic groups have different characteristics. This could lead, for example, different marketing communication in terms of demographic characteristics. The researches in the sample cover a wide range of topics, and the methods used for investigation. Several researches occupied the examination of marketing activities effects, some of them highlights the role of: positive messages, active presence on social media platforms, and overcoming language barriers. These are only a few examples of the activities that influence the efficiency of marketing activity. In the case of research methodology used there is a wide range of methods used, the example: eye-tracking, servqual, and netnography, etc.

The analysis reveals the connections between wellness tourism related research and marketing specific viewpoints, in which case be found consumer behavior, and quality rating of services.

The seventh cluster is loyalty and measurement of customer satisfaction (orange): satisfaction measurement, previous experience, positive emotions, and experiences, satisfaction increases loyalty (Singh et al., 2022). Tamasits & Prónay (2011) do not consider satisfaction and loyalty regular, instead, they argue for behavioral loyalty, which triggers simply repeated purchase - complex customer loyalty is to be formed when the customer's attitude towards the brand becomes positive, and they become committed towards it.

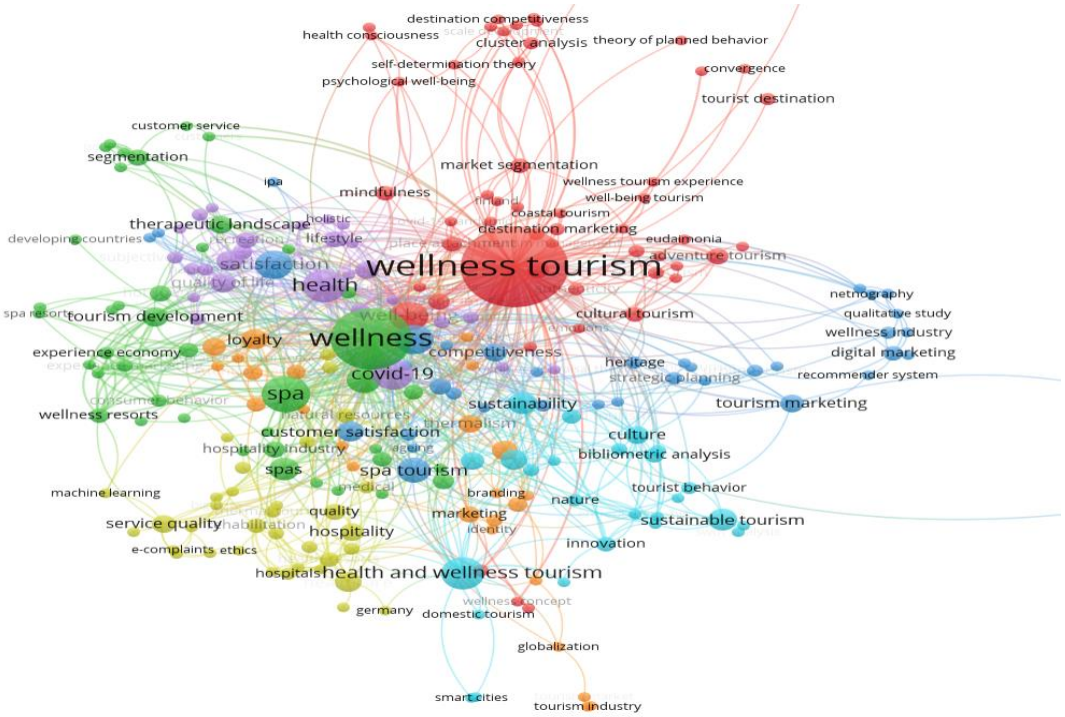


Figure 10. Keyword analysis in the WT

Source: WoS and Scopus, own research and editing.

It is interesting to examine that, following the keyword analysis, marketing appears among the prominent areas, but management is only among the sub-branches of some of the clusters. Afterward, an investigation was carried out to examine the role of management in the WT research topic, in relation to the researches of the past 11 years. There are a total of 128 researches in the WoS and Scopus databases that also involve the topic of management.

The figure below is intended to illustrate the role of management in relation to the areas of health, medical and wellness tourism. Regarding the frequency of keywords, destination management was the most common term in the management topic, but supply chain management, knowledge management and information management, relationship management, brand management and strategic planning, modern management tools and sustainable tourism management were also concerned.

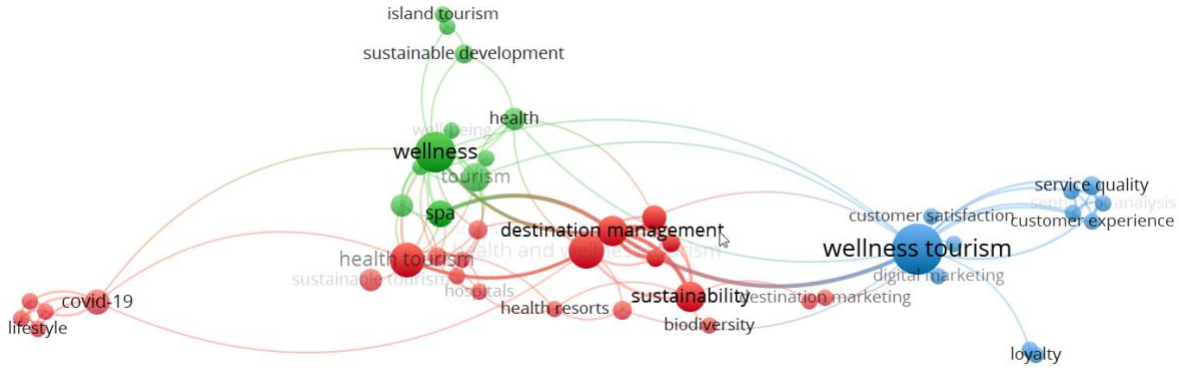


Figure 11. Keywords analysis – wellness tourism management

Source: WoS and Scopus, own research and editing.

Conclusion

One of the most important conclusions is that the increase in the number of articles does not show a parallel relationship with the number of references. The TS= (wellness tourism) topic supports this because, in 2022, the number of articles increased only by a small number compared to the previous year, and the number of citations soared by almost. The highest number of articles in the topic was published in the years 2021 and 2022; therefore, can be conclude that the study of wellness tourism is becoming more and more acknowledged and recognized in research. This statement answers the first research question; thus, the category is still topical, and the demand is still great in this field.

In the case of citation, the highest number of articles did not trigger a high number of citations in all the cases. For example, Sustainability occupied the first position due to the number of articles, but in terms of citations, it ranked eleventh. The same idea is supported by the authors' number of articles, and the comparison between the number of references to these articles. Thus, in the sample, a higher number of articles did not trigger an increase in the number of citations. Thus, the answer to the second research question (which are the top journals in the category?) is that the top three journals based on the number of citations are International Journal of Hospitality Management (410), Tourism Review (407), and Tourism Management (384).

The focus of the third question was in which academic fields wellness tourism researches appear. The distribution of the topic, according to academic fields, suggests that wellness tourism counts as a Social Sciences and Economic Sciences topic. Besides these, the articles yield significant results in the areas of Environmental Studies and Ecology.

As far as the authors are concerned, the most highly cited ones are Kozak, M., Liu, F., Wen, J., Yang, S., with their article entitled "COVID-19: potential effects on Chinese citizens' lifestyle and travel" it worth mention that from them Wen, j. has 2 publication, but his citations are received from the above mentioned article.

Considering the present trend of research in the field, one of the most significant research trends gaining large proportions in wellness tourism is the study of competitiveness. Numerous studies in the sample aim to discuss the effects of COVID-19 and how the negative impacts can be eliminated. One of the reasons could be the period under scrutiny (2012-2022), as it is during this period did the global problematic situation break into the life of wellness service providers, and other tourism suppliers, which hastened quick, innovative, and sustainable solutions. Several sources mention sustainable, innovative, and digital solutions or even the possibilities offered by virtual tourism as a solution. The keyword analysis and the content analysis highlight the present and maybe future research trends: competitiveness, revealing the demands of customers, and emphasizing sustainable development.

Regarding to the last research question about the presence of management topic as part of future wellness tourism researches, there are several researches published in the past few years, occupying how management and competitiveness are related, as well as how knowledge, relationship and destination management has to create new solutions which are capable of responding quickly to current problems and to maintain the success for long term.

Overall, the examined period, the examined topic, the databases serving as sources and the applied analysis methods are what distinguish this research from the similar studies mentioned in literature.

The present research has limitations, and the contents of the article also point the way to future research directions, which may even lead to a deeper exploration of individual clusters and new future research areas. In this regard, the exploration of 21st century solutions to 21st century problems could be a very interesting topic, which could include digitization, sustainability or just the exploration of such management and marketing tools.

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