

WELLNESS TOURISM SERVICES INNOVATION: A BIBLIOMETRIC REVIEW AND FUTURE RESEARCH AGENDA

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Abstract

This research analyzes 657 studies in the Web of Science (WOS) and 288 studies in the China National Knowledge Infrastructure (CNKI) database from 2010 to 2023. This research employs the scientific quantitative knowledge graph method to analyze literature characteristics, core author, institution network, hotspots, and trends. The CiteSpace software analysis results show that the number of published papers is rising but fluctuates slightly. A core group of authors has not yet formed in this field, and the cooperation density between authors and institutions is low. Their distribution spreads in space with significant regional differences, mainly in European and Asian countries. The causes, impacts, and solutions of multi-actor engagement in service innovation are the focus of WOS and CNKI literature. However, scholars discuss the enterprise supply side, customer demand side, and government policy side in WOS, while scholars mainly discuss the interaction between variables in CNKI. A lack of an evaluation system for service innovation in wellness tourism restricts further research on service innovation. There is an essential potential for topics such as multi-actor engagement in the wellness tourism service innovation, digital technology, knowledge management, service innovation ecosystem performances, and wellness tourism development in developing countries. This study promotes an overview and reference for future scholars' research of service innovation in the wellness tourism industry.

Keywords: service innovation, wellness tourism, scientific quantitative knowledge graph method, research evolution

JEL Classification: M10

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1. Introduction

Wellness tourism remains the fourth largest sector in the wellness economy, accounting for 11.6% of all global wellness spending in 2022 (Global Wellness Institute, 2023). Wellness tourism innovation nowadays is a political issue worldwide, and many scholars pay attention to it (Li et al., 2021). Goodrich (1993) started service innovation activities for all process initiatives to address the tourism industry's development issues and define the health tourism concept. "Healthy China 2030" Planning Outline issued the plan for developing the wellness tourism industry with a silver economy, emphasizing the construction of a healthy service system until 2030. In 2017, "common prosperity" was designated to ensure everyone could access modern health services and significantly increase well-being. This plan will fully play a role in ensuring a healthy China in the New Era with wellness tourism service innovation.

In 2019, following the outbreak of the epidemic worldwide, the international wellness tourism industry encountered a historical cliff. Some European countries restarted short-distance wellness tourism programs and actively sought to use the visa-free policy to reduce the recovery cost of the tourism industry. However, the continued tension in international relations further increases the complexity of the industry recovery situation.

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This paper aims to help understand the problem of service innovation in the wellness tourism industry, analyze the evolution trends, and grasp research hotspots on service innovation. Many scholars have explored wellness tourism service innovation from various perspectives, such as different concepts and influence factors of service innovation, antecedent variables, outcome variables, and influence solutions. However, some issues still need to be further researched. This research employed the scientific quantitative knowledge graph method to systematically analyse the literature on the service innovation problem in the wellness tourism industry. First, the meaning and boundaries of service innovation are becoming increasingly blurred. Some scholars believe wellness and healthy tourism are the same research topic. Additionally, no literature exists on measuring service innovation in the wellness tourism industry, except for literature from other perspectives (Lee et al., 2020; Martín et al., 2017; Wang et al., 2023).

Moreover, much literature has analyzed its causes or influencing factors to explore its critical antecedent variables (Yoo et al., 2022; Mahmood et al., 2019). Many scholars analyze the impact of macro and micro factors on service innovation (Yoo et al., 2022). However, there is a lack of systematic sorting of the research on service innovation, especially exploring the contents and level of service innovation literature. For example, multi-actor engagement will drive Open Service Innovation Systems to more complex dynamics. This study employed CiteSpace software (6.2.R2) to explore the evolution of service innovation literature in the WOS and CNKI from 2010 to 2023. This study promotes an overview and reference for future scholars' research of service innovation in the wellness tourism industry.

2. Research Methods and Data Source

2.1 Research Method

Literature searches often employ knowledge graphs. It displays the complex relationship among numerous information units (Song et al., 2023). This paper employs the visualization tool CiteSpace for analysis. CiteSpace is a tool developed by Chen Chaomei in 2004 based on co-occurrence, co-citation analysis theory, and path-finding network algorithm to measure literature in a specific field. Potential dynamic mechanism analysis and frontier detection of discipline development are suitable for macro, overall, global, and comprehensive analysis (Xiao et al., 2013).

2.2 Data Source

The WOS and CNKI databases are the literature source. Web of Science is the largest and internationally recognized comprehensive academic information resource library that reflects the level of scientific research and covers most disciplines worldwide. Therefore, this paper chose this database to analyze data from sources other than China. This paper searched for "*Service innovation in wellness tourism.*" The core collection includes SCI, SCI-E and SSCI.

CNKI, as the source of Chinese literature, contains integrated periodicals, doctoral dissertations, master dissertations, conference dissertations, and other resources. This paper chooses CSSCI journals and core journals in the CNKI database and then searches for the topic "*service innovation in wellness tourism.*" With few studies about wellness tourism service innovation before 2010, the earliest publication date for retrieved papers was set to 2010. The period was set from January 2010 to December 2023, with a time slice of one year. The final analysis included 657 WOS papers and 288 CNKI papers.

3. Analysis of Literature Characteristics

3.1 Quantitative Characteristics of the Literature

Figure 1 shows the steady increase in scholars' research on service innovation, regardless of quantity and quality. There are three stages in WOS literature on service innovation based on the papers published each year. From 2010 to 2013, it was in the early stages, with a low volume of studies on service innovation in wellness tourism. The number of papers published has steadily grown from 2014 to 2018, from 20 in 2014 to 40 in 2018. Meanwhile, 2019 revealed a tendency to rise rapidly- from 60 papers published in 2019 to 160 papers published in 2022.

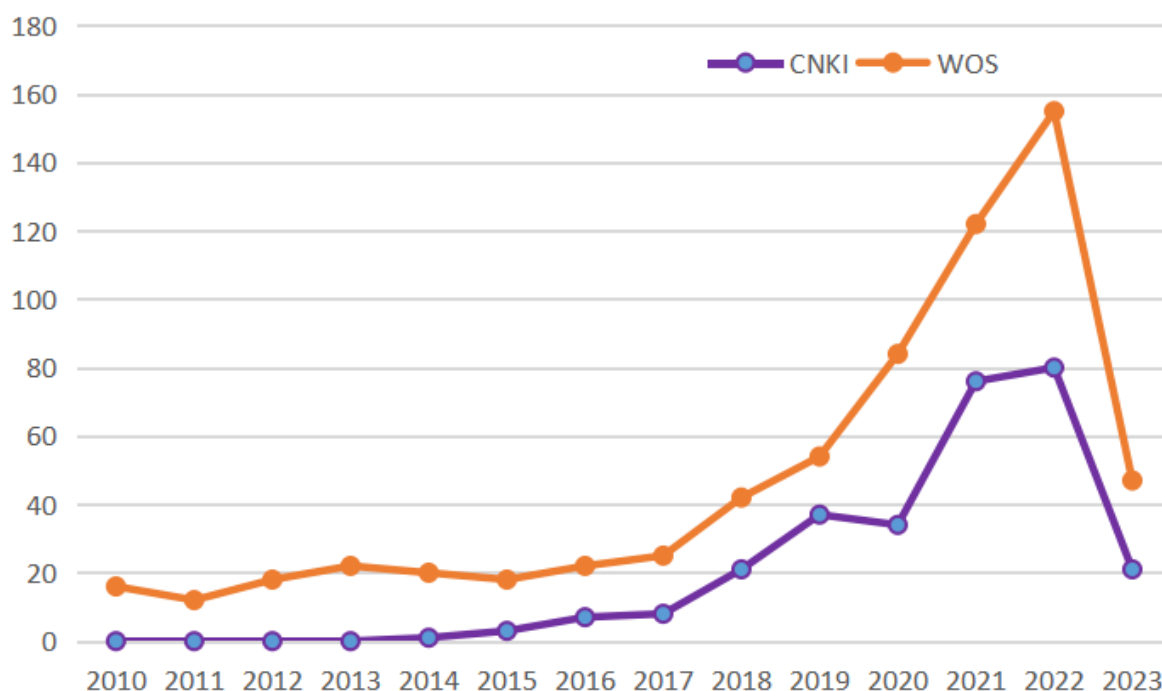


Figure 1. Annual distribution of service innovation literature published, 2010 to 2023

Source: Developed by the author

CNKI research on wellness tourism service innovation started in 2014, and 288 papers were published. There is a significant gap between WOS and CNKI. Due to the Chinese government's rapid development of the tourism industry, research findings on service innovation in CNKI literature increased rapidly.

There are significant gaps in WOS and CNKI literature research. This phenomenon may be because the development models of wellness tourism in developed and developing countries are different. Wellness tourism in developed countries is driven by market demand, while wellness tourism in developing countries is resource-supply matching (Liu and Zhang, 2022). When developing countries face redundant tourism resources, multi-field service innovation and development issues may receive more attention, while innovation research on a single field will tend to be stable.

3.2 Core author analysis

The core authors are scholars who have been paying attention to a specific research field for a long time and played a role in promoting its development. This paper uses CiteSpace software to count the number of articles published by the authors. Arakawa, Masashi ranks first, with a total of 20 articles. Refer to the core author certification formula $M = 0.749\sqrt{N_{max}}$ Of Price's law (where N_{max} is the author with the most articles, and M is the minimum number of papers published by the core author) (Liu, 2004), M is 3.348, so authors who have published more than three papers in this field is core author candidates. According to statistics, 38 authors have published more than three papers, and a total of 226 papers have been published, accounting for 36% of the total number of papers published in WOS literature, which is less than half of the total, indicating that the core author group has not yet formed in this research field.

From the core authors' network map analysis result, the bigger the node size, the more papers the author published. The denser the lines between nodes represent the author's cooperative relationship. In the WOS literature analysis, there were 444 nodes in the atlas, 690 connections, and a network density of 0.007. Some authors cooperate closely, but the overall connection is lacking. The countries of core authors are Japan, Malaysia, South Korea, Saudi Arabia, Spain, Cyprus, and Thailand. The top three core authors include Arakawa, Masashi (20 times), Jan, Amin (13 times), Patwary, and Atau Karim (10 times).

Arakawa studied the complexity of public health, healthy food, diet therapy, etc. He offered a framework for wellness tourism food service, health and nutrition, diet education in the wellness tourism industry, food security, and risk management.

In addition, the relationship between banking sustainability, government corporations, and tourism firms' financial performance are some of Amin's areas of research interest.

Patwary focused on Malaysia's measures and paths to tourism sustainability, including customers' psychosocial factors, organization risk management, policy measures, tourism students' education, nutritional knowledge, intention, environmental efficiency, etc. He discussed the importance of government policy change for the sustainability of wellness tourism. He also analyzed the influence of tourists' nutritional knowledge on customer engagement in the wellness tourism service innovation.

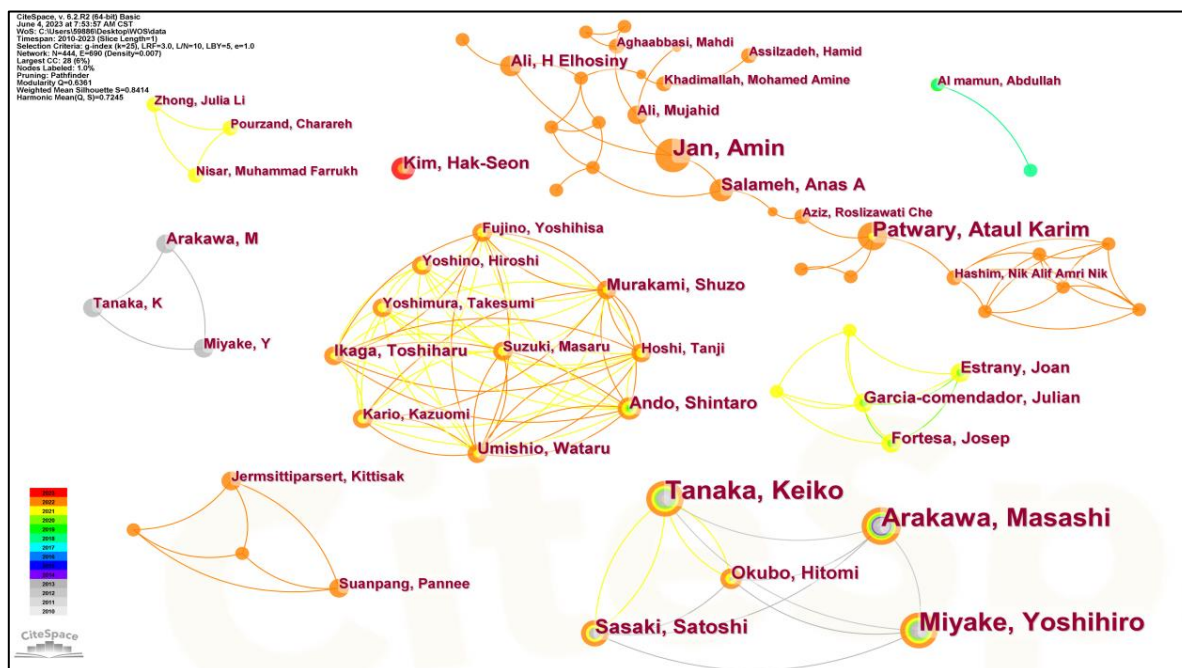


Figure 2. The core authors' network map in WOS literature

Source: Developed by the author

Figure 3 analyzes the core author network of the CNKI literature. Authors who have published over two papers in this field can be considered core author candidates. According to statistics, 25 authors have published more than two papers, and a total of 70 papers have been published, accounting for 29% of the total number of papers published in CNKI literature, which is less than half of the total, indicating that the core author group has not yet formed in this research field. Otherwise, there were 191 nodes in the atlas, 81 connections, and a network density of 0.0045, and the overall distribution is relatively scattered.

The core CNKI literature author about wellness tourism service innovation was Professor Xuejun Chen (10 times) from the School of Tourism and Media of Chongqing Jiaotong University in China. We found that associate Prof. Mang He et al., Sun Yat-sen University, first examined the residents' engagement in wellness tourism research. They built a foundation for studying wellness tourism service innovation. They established a framework for research on multi-actor engagement in service innovation, construction a foundation for research on service innovation in CNKI literature (He et al., 2022).

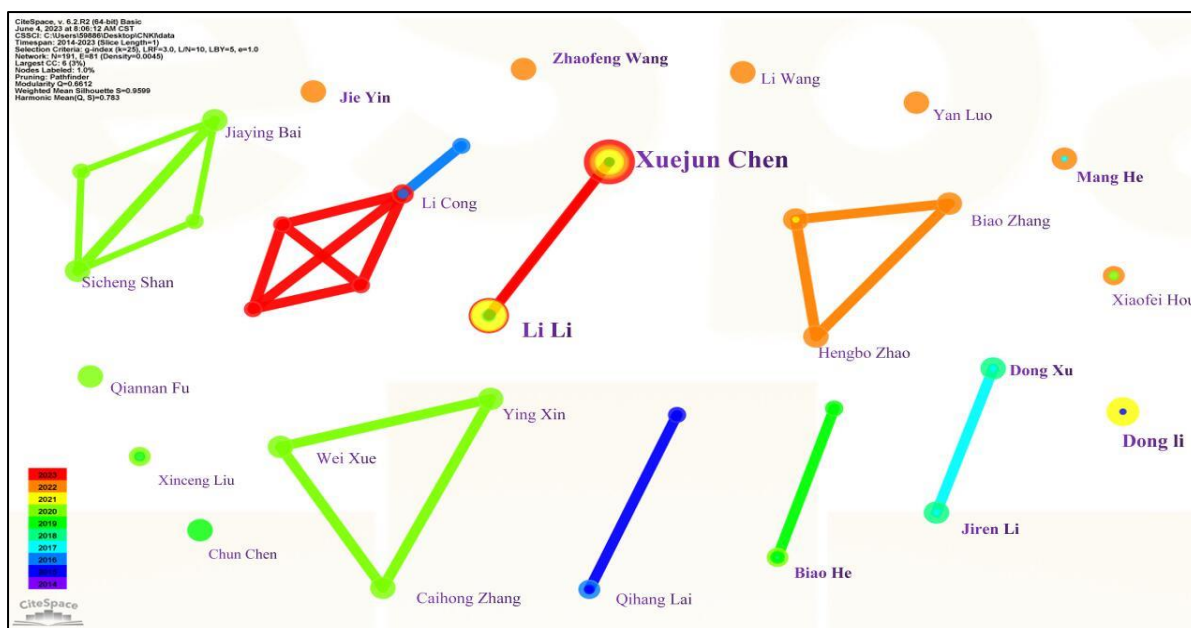


Figure 3. Network map of the core authors in CNKI

Source: Developed by the author

3.3 Research Institution Analysis

This paper employed the network diagram to analyze research institutions. As shown in Figure 4, the map has 402 nodes and 799 connections. From the institutions' network map analysis result, the bigger the node size, the more institution-published papers. The lines between the nodes represent the cooperative relationship between research institutions. Researchers with more than ten publications included Universiti Malaysia Kelantan (30 times), RLUK- Research Libraries UK (29 times), Chinese Academy of Sciences (22 times), University of the Ryukyus (21 times), Fukuoka University (15 times), Consejo Superior de Investigaciones Cientificas (CSIC) (13 times), N8 Research Partnership (12 times), Prince Sattam Bin Abdulaziz University (11 times), Egyptian Knowledge Bank (EKB) (11 times), and Centre National de la Recherche Scientifique (CNRS) (10 times). These institutions are in five countries: Malaysia, the United Kingdom, China, Japan, and Spain, respectively. The density of the map is 0.0099, which indicates that institutions cooperate a lot.

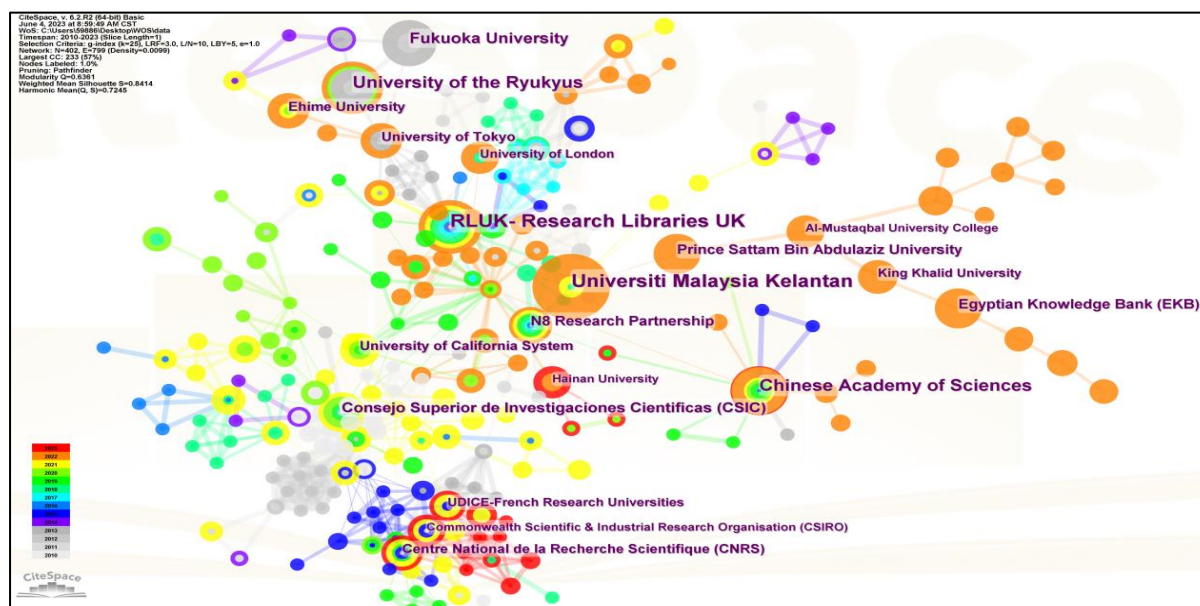


Figure 4. Institutional cooperation network for WOS literature

Source: Developed by the author

The publishing institutions' network map in the CNKI literature generates 179 nodes and 62 links. The Northeast Forestry University published 11 times, Panzihua University published ten times, Chongqing Jiaotong University published eight times, Chongqing University of Education published six times, and Hunan Normal University published six times (Figure 5). The cooperation network density of research institutions is 0.0039, with a weak cooperation relationship in the CNKI literature.

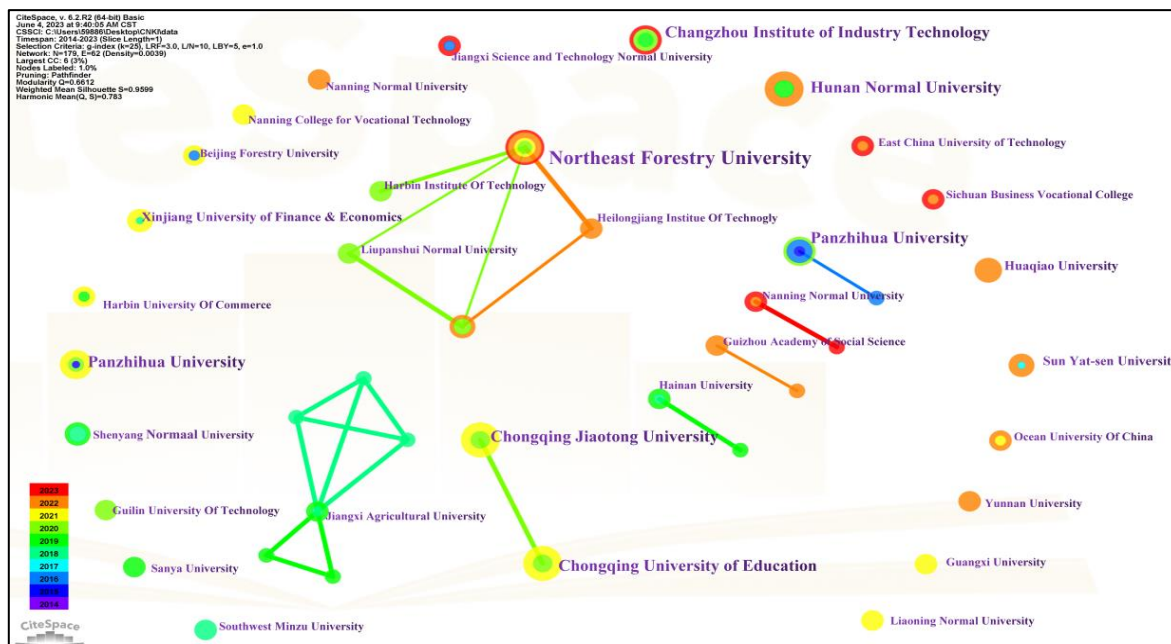


Figure 5. Institutional cooperation network for CNKI literature

Source: Developed by the author

From the perspective of institutional analysis, the most significant number of publications in the WOS literature concentrates on the past three years. It indicates that the epidemic has prompted the public to re-examine the pursuit of a healthy life. The institutions are mainly in European and Asian countries. It may be because these countries have an endowment of wellness tourism resources, and the aging trend is noticeable. Among these countries, Malaysia's aging rate over 65 reached 6.7%, the United Kingdom's aging rate over 65 reached 19%, China's aging rate over 65 reached 13.5%, Japan's aging rate over 65 reached 29.1%, and Spain's aging rate over 65 reached 19.77%. There is a strong demand for the development of the wellness tourism market. At the same time, the most significant number of publications in the CNKI literature are from 2017 to 2023. That is because the CNKI literature mainly focuses on the 12 provinces in western China, and each province has its characteristics of wellness tourism resources and economic development. It may be because of the Chinese government's Policy of the 14th Five-Year Plan.

4. Analysis of Research Hotspots

This paper employs keywords, citation frequencies, and other indicators to analyze and judge a field's research hotspots and frontier. Keywords are the condensed content of an article, and the co-occurrence of high-frequency keywords in stages is of great significance for grasping the evolution of topics in a field. Therefore, this study employs a keyword co-occurrence network to analyze research hotspots.

4.1 WOS Literature Research Hotspot

The generated keyword network map had 465 nodes, 1193 connections, and a network density 0.0111. "Management" (71 times), "tourism" (53 times), "ecosystem services" (40 times), and "performance" (35 times) are the top six highest-frequency keywords. "Innovation", "quality", "behavior", "satisfaction", and "wellness tourism" ranked fifth, sixth, seventh, and eighth with 34, 25, 24, 24, and 22, respectively.

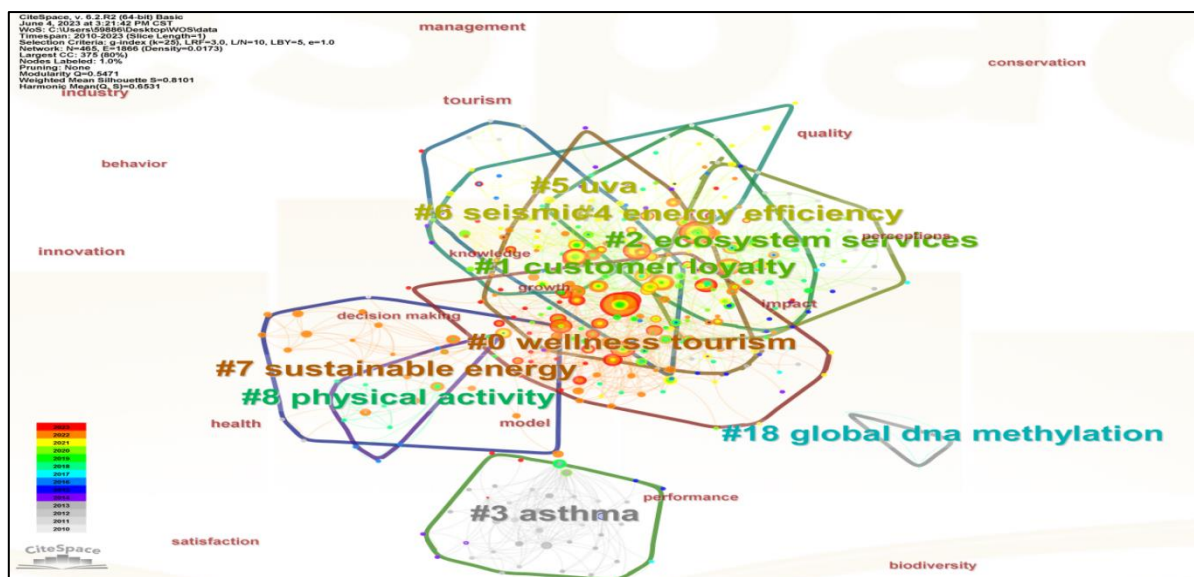


Figure 6. Keyword clustering for WOS literature
 Source: Developed by the author

CiteSpace provides two indexes of module value (Q value) and average contour value (S value). Clustering is significant when the Q value is greater than 0.3. Clustering is efficient and convincing when the S value is 0.7 (Chen et al., 2015). The keyword Q value in WOS was 0.6361 (Figure 7), while the S value was 0.7245, which means significant and reasonable. The keywords conclude twelve categories: #0 for ecosystem service, #1 for wellness tourism, #2 for urbanization, #3 for renewable energy, #4 for text mining, #5 for uva, #6 for athlete wellness, #7 for cross-sectional studies, #8 for Japanese women, #9 for seismic, #10 for sustainable energy, #12 for indoor temperature. According to the previous analysis, the service innovation research hotspots in WOS literature include three categories.

4.1.1 Wellness Tourism

The first topic is "wellness tourism," including keywords such as "ecosystem services," "semantic network analysis," "sentiment analysis," and "big data," etc.

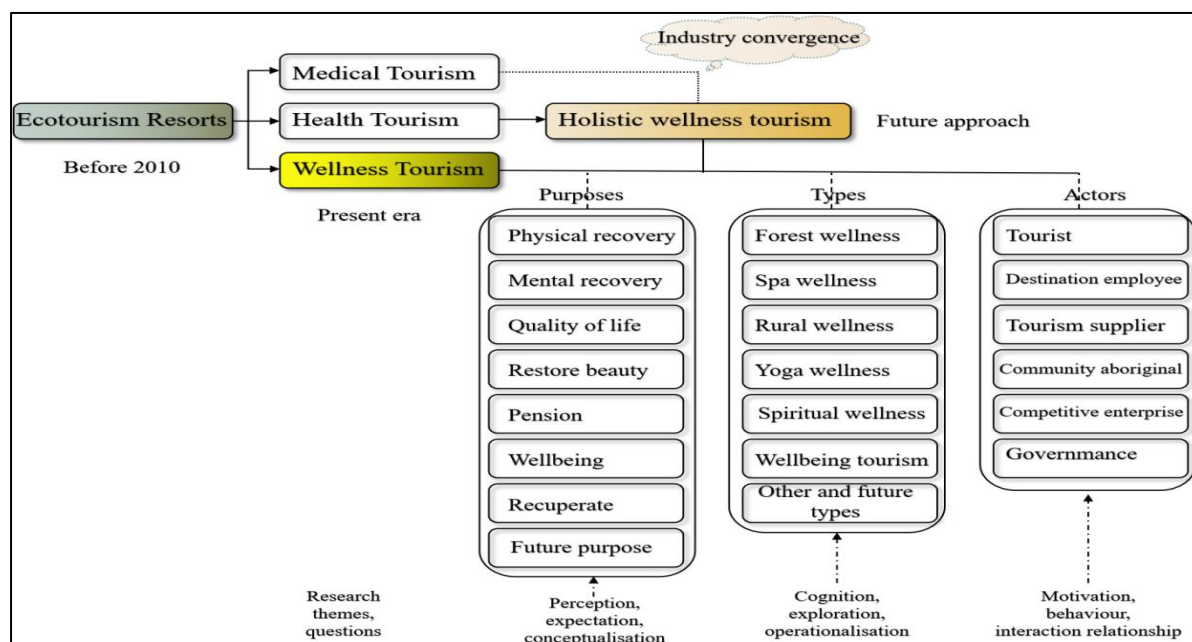


Figure 7. Network map of wellness tourism
 Source: Developed by the author

According to the existing literature, tourist satisfaction is the focus of scholars' research. Regardless of the quality of the hotel, tourists generally prefer to choose ecological hotels with elegant environments. The environmental values, cognitive image, and low-carbon knowledge will significantly impact the overall positive image of eco-hotels (Salem, 2022). Regarding improving customer satisfaction, some scholars pointed out that different behavioral intentions will lead to different wellness tourism types, including forest, spring, spa, and spiritual wellness. Especially after the epidemic, tourists rely on forest wellness tourism to promote health and well-being (Labib et al., 2022). In addition, applying digital technology, such as social media and mobile location analysis tools, will promote the flow of information between customers and enterprises, which develops branding strategies and increases customer loyalty and business performance (Varelas et al., 2021).

Nevertheless, tourism needs vigorous promotion by the subjective departments of the government. The government should build a top-level design framework based on clear principles, promoting the sharing of technological innovation achievements, and construct a regional healthcare cloud computing center to improve the overall quality of healthcare services and reduce the economic burden of wellness tourism development (Raghavan et al., 2021). Furthermore, multi-actor engagement in the flow of knowledge in wellness tourism service innovation should be paid more attention. The research conclusions of Gürlek were consistent with this statement, and making a study of the relationship between knowledge-oriented leadership, knowledge management capability, innovation performance, and organizational performance in the context of digital technology (Gürlek and Cemberci, 2020), which is on the knowledge theory, leadership contingency theory, social learning theory, and a resource-based view.

4.1.2 Customer Loyalty

The second topic is "customer loyalty". Some keywords include "content analysis," "service innovation," "hospitality," etc. Customer loyalty may influence service innovation, and service innovation may further deepen the active effect of customer loyalty's impacts. The balance between service experience perception and expectations mainly causes customer loyalty. Various elements cause customer loyalty from the customer perspective and connect with wellness tourism enterprises. Therefore, intervention measures for poor service quality can analyze customer loyalty (Li et al., 2019). Environmental safety leads to customer loyalty. Some scholars found that environmental pollution and wildlife unsafe in the forest exacerbate customer dissatisfaction and that customer loyalty will decline when dissatisfied with wellness tourism destinations (Li et al., 2019; Shapiro et al., 2021). Therefore, policies targeting ecological sustainability and safety may apply to wellness tourism service innovation when formulating wellness tourism development policies. In addition, the diversified travel service products provided by OTA can also affect customer loyalty. The number of travel service product packages provided by OTAs, product quality, cost-effective packages, updated degree, platform reputation, etc., will affect customer loyalty (He et al., 2019). Due to the difference between the OTA's promoted service quality and the tourists' perception, tourists will suffer more significant adverse impacts. Therefore, government policy analysis needs to balance economic benefit and social responsibility and standardize the behavior of market operators. Some scholars use the three socio-ecological factors of GDP per capita, income inequality, and annual average temperature as the outcome variables to analyze the "common future" of service innovation (Thorn et al., 2021).

4.1.3 Physical Activity

The third topic is "physical activity", including the keywords of "chronic pain", "quantitative sensory testing", "burnout", and "wellness programs", etc. Physical health is related to a country's well-being at the macro level. Based on physical health, we should consider the degree of physical fitness in different age groups to create a suitable physical activity system (SPA) (Miller et al., 2018). From the micro-impact level, physical activity can alleviate chronic pain and improve tourists' well-being. Meanwhile, some scholars seek solutions from the wellness service systems with an experimental technology perspective. For example, some scholars suggest that the self-evaluation of physical health before and after participating in the wellness project can help to improve the service innovation of tourists participating in the wellness program (Smiley et al., 2020). Optimizing service facilities mainly reflects physical activity with the social responsibility of wellness tourism enterprises. Some scholars

emphasize the role of the natural forest environment in psychophysiological restoration. Lee has found that forest trails and safety aids in the natural forest environment have effectively increased the frequency of residents' participation in physical activity, improving the public's sleep and emotional quality (Lee et al., 2023). Yun supports the above point of view and suggests that investment in a multidimensional health approach in workplace health and wellness (WHW) programs was associated with less absenteeism (Yun et al., 2016).

4.2 Research Hotspots of CNKI Literature

The number of nodes about the CNKI literature keyword is 225, the connections are 393, and the network density is 0.0156. "wellness tourism"(152 times) and "forest wellness"(33 times) are the top two keywords with the highest frequencies. "Rural revitalization", "development path", and "healthy China"(11 times) are for third place. The q value of CNKI clustering was 0.5972, and the S value was 0.9423, which means the clustering structure is significant and reasonable. From the frontier analysis, the CNKI literature can be divided into two topics. There are ten clusters: #0 for wellness tourism, #1 for forest wellness, #2 for tourism, #3 for the wellness industry, #4 for healthy China, #5 for development path, #6 for supply chain, #7 for tourism industry, #8 for industry sharing, #9 for strategy.

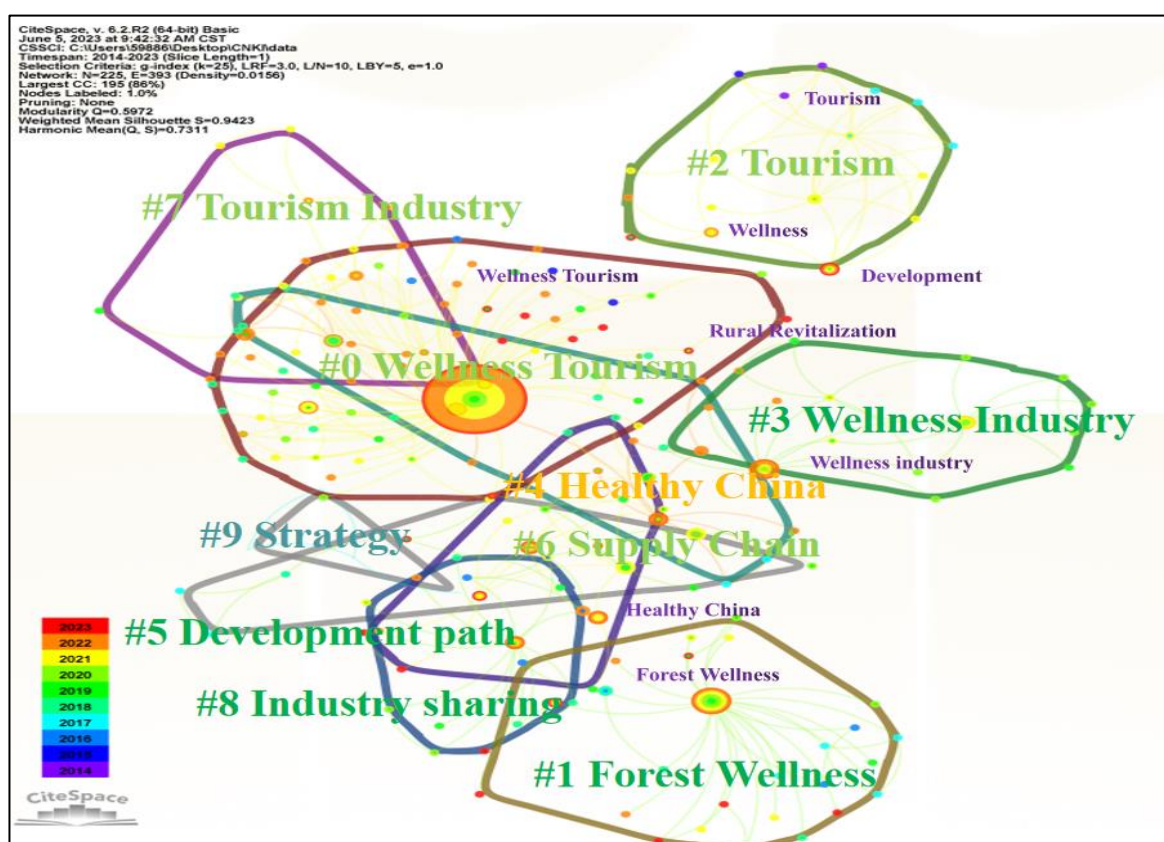


Figure 8. Keyword clustering for CNKI literature

Source: The author arranges according to the literature

The first topic is "wellness tourism", including "wellness tourism", "forest wellness", "wellness industry", "high-quality development", "development path", and other keywords. First, the wellness tourism industry may conclude forest wellness, spa wellness, countryside wellness, traditional Chinese medicine wellness, and health culture spiritual wellness (Li, 2022). However, wellness tourism service innovation will mitigate the improvement of wellness products. Li divided Chinese wellness tourism into five development models, such as "agricultural-tourism integration", "forest-tourism integration", "medical-tourism integration", "sports-tourism integration", and "cultural tourism integration" (Meng et al., 2022; Wang, 2022).

The second topic is "cause of wellness tourism service innovation", including "ecological resources", "customer needs", "industry integration", "stakeholder participation", and other keywords. First, factors

of production are the basis for service innovation in the wellness tourism industry. The region's natural resources, infrastructure, human resource structure, capital resource structure, and knowledge resource structure have a significant impact (Ding, 2022; Meng et al., 2022; Shao and Wang, 2022; Huang and Zhao, 2023). In addition, market demand drives the innovation of wellness tourism services. Tourists with different travel experiences, incomes, health conditions, and educational backgrounds have different demands on the quality of wellness tourism services (Huang and Zhao, 2023; Wang et al., 2023). Furthermore, the level of political stability in the region, the government's industrial policies to encourage enterprises to invest, the level of information technology development, the promotion of the wellness industry, the governance capacity of the regional government, the business environment in the region, the carrying capacity of the development of tourism in the region, the competition of similar enterprises, tourism infrastructure, the degree of aggregation of supporting industries, and the degree of support of residents in wellness tourism destinations, etc. will affect the service innovation of the wellness tourism industry (Chen and Li, 2021; He et al., 2022; Wang, 2022).

4.3 Evaluation Index of Wellness Tourism Service Innovation

The analysis of each hot topic involves the evaluation or measurement of wellness tourism service innovation. The service innovation performance index is significant for research on service innovation. However, developed and developing countries employ different indexes for service innovation in wellness tourism research. It became a hot issue to research on the indexes. There are three categories: single indicators, series of indicators, and composite indicators. The single indicator measures a particular aspect of service innovation, such as the suitability evaluation of wellness tourism resources development. A series of indicators is a collection of non-summary indicators that reflect the factors of wellness tourism service innovation in a country, region, or industry. International organizations such as the Global Wellness Institute primarily develop the complete set of indicators. The composite indicators combined with personal characteristics and a series of indicators. Service innovation indicators are explored from multi-actor engagement and service innovation performance (Song et al., 2020). There are systematically three types of service innovation indicators, as shown in the Figure below (Ranke et al., 2023; Wang et al., 2020; Zhang and Huang, 2020; Meeprom and Chancharat, 2022; Vrkljan and Grazio, 2017; Patwary, 2023; Johnson, 2022).

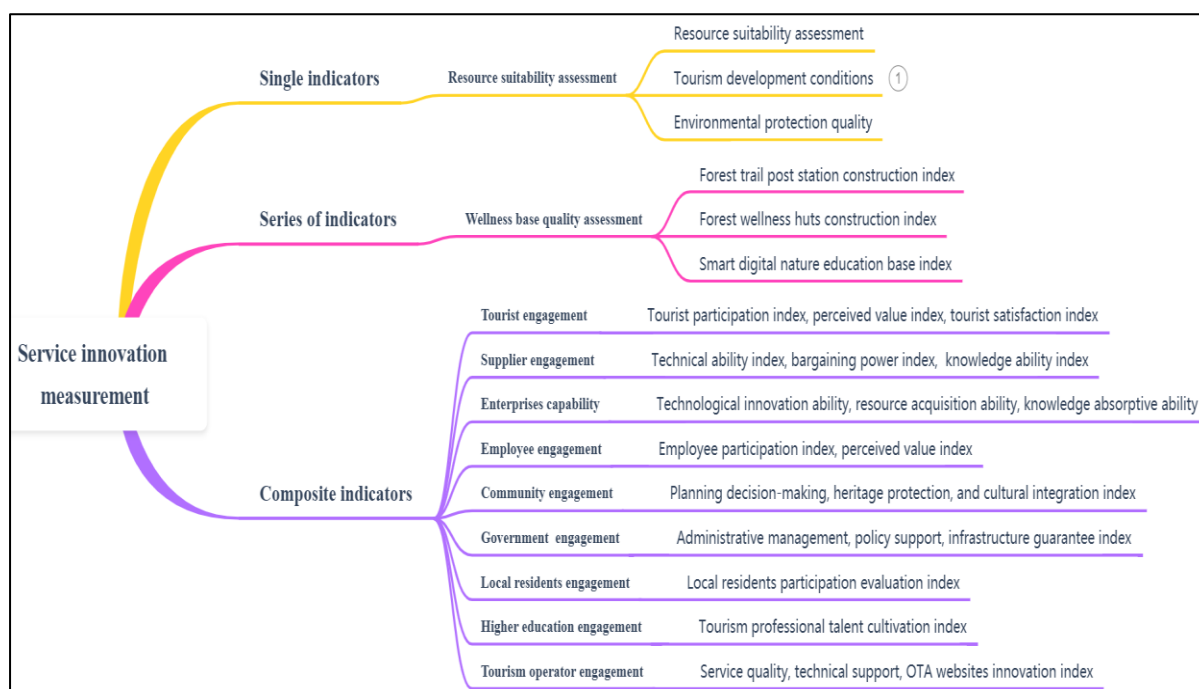


Figure 9. Service Innovation Indicators in wellness tourism

Source: The author arranges according to the literature

5. Research Trends and Frontier Analysis

5.1 Research Trends

We present the keyword clustering results of sample literature on a timeline to show the temporal changes of keywords in each category. The larger the circle, the more important the related topic. The deeper the circle, the greater the importance of the relevant topic. By analyzing the timeline of keywords in service innovation literature (Figure 10), the evolutionary path of service innovation in WOS literature includes three stages. The earliest stage was from 2010 to 2016, and scholars focused on physical activities, activity-related pain, and healthy adults. From 2017 to 2020, more and more scholars researched the service innovation ecosystem. They studied the dynamic capability, antecedents of service innovation, sustainable development of the wellness tourism industry with climate change, ecosystem service value, and wellness tourism development in rural. Multi-actor engagement, the roles of the service innovation ecosystem, and its influencing factors become an ongoing basis. Scholars paid more attention to the dynamic interaction of critical roles of service innovation, such as community, enterprise ability, district culture, and government management. From 2021 to 2023, studies on the service innovation ecosystem performance were conducted continuously. Scholars focus on the influence of digital technology on community networks to improve customer satisfaction and perceptions, then form customer loyalty in the sharing economy. Scholars pay more attention to cooperation investment, knowledge service sustainability, and employee satisfaction to improve service quality, then push urban sustainability with tourism development.

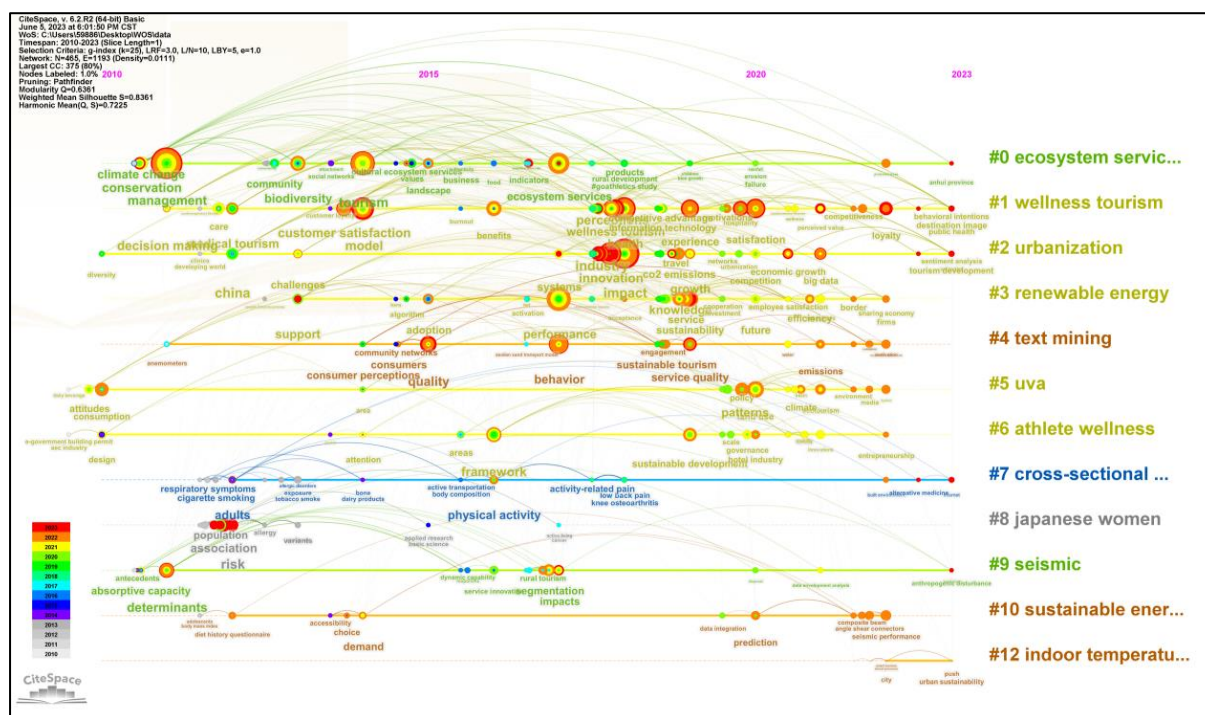


Figure 10. Timeline of keywords for WOS literature
 Source: The author arranges according to the literature

The keyword clustering timeline shows that service innovation research in CNKI wellness tourism is divided into two stages: from 2014 to 2020, wellness tourism research was in the embryonic stage, scholars' research on the resource elements, industrial development, and economic value of wellness tourism. The second stage is the development stage, which is from 2021 to 2023. Tourism supply chain, wellness towns, industrial competitiveness, integrated development of urban agglomerations, economic and social benefits of the wellness tourism industry, and talent training began to appear in this stage. Chinese scholars focus on factors of the entire industrial service ecosystem and the comprehensive impact on society.

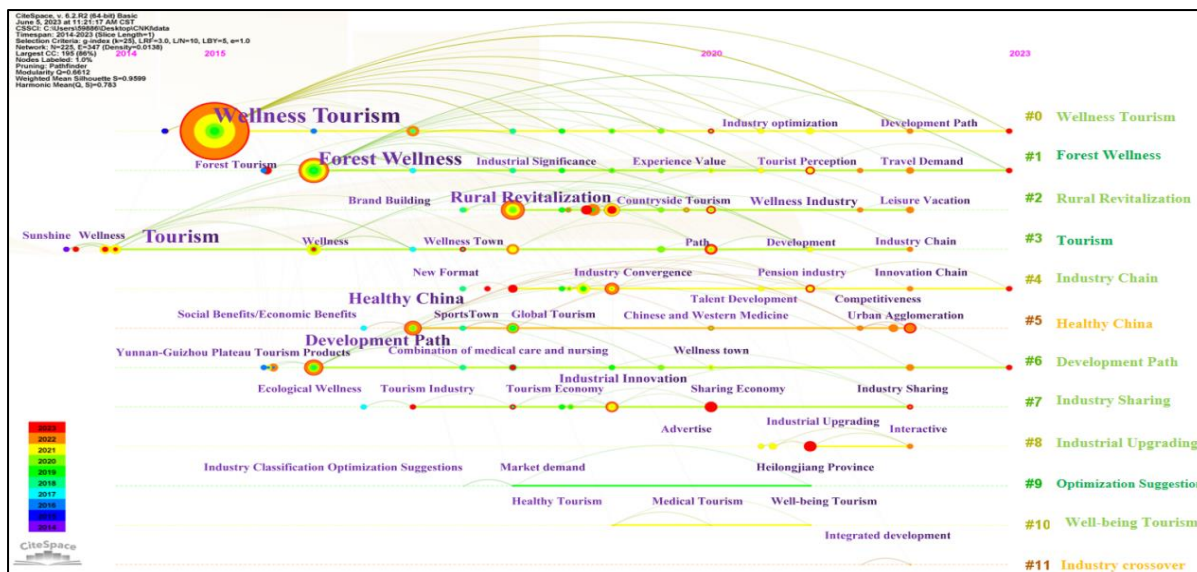


Figure 11. Timeline of keywords for CNKI literature
 Source: The author arranges according to the literature

5.2 Research Frontier Analysis

The burst words in the WOS literature, such as design, association, risk, adults, support, biodiversity, community, China, and service innovation, have been around for more than five years. In terms of experiences, they have burst intensities of more than 3. The end times of the five keywords are within three years: innovation, land use, and governance are the end of research in 2021, while the studies on big data and ecotourism are still being analyzed as of 2023. Various countries combined big data through technological change to solve the service innovation of government-side supervision, enterprise-side operation management, and tourist-side convenient services for practical information dissemination mechanisms. Some countries' digital technology policies can be obtained (Figure 13). Big data technology policies mainly focus on the legality of data acquisition and the open management of data rights. The research found that only when the threshold adjusted below 0.5 was a burst word generated about wellness tourism. The "forest wellness industry" and "tourism industry" are ongoing. It indicates that scholars will focus on research on the wellness tourism industry in CNKI.

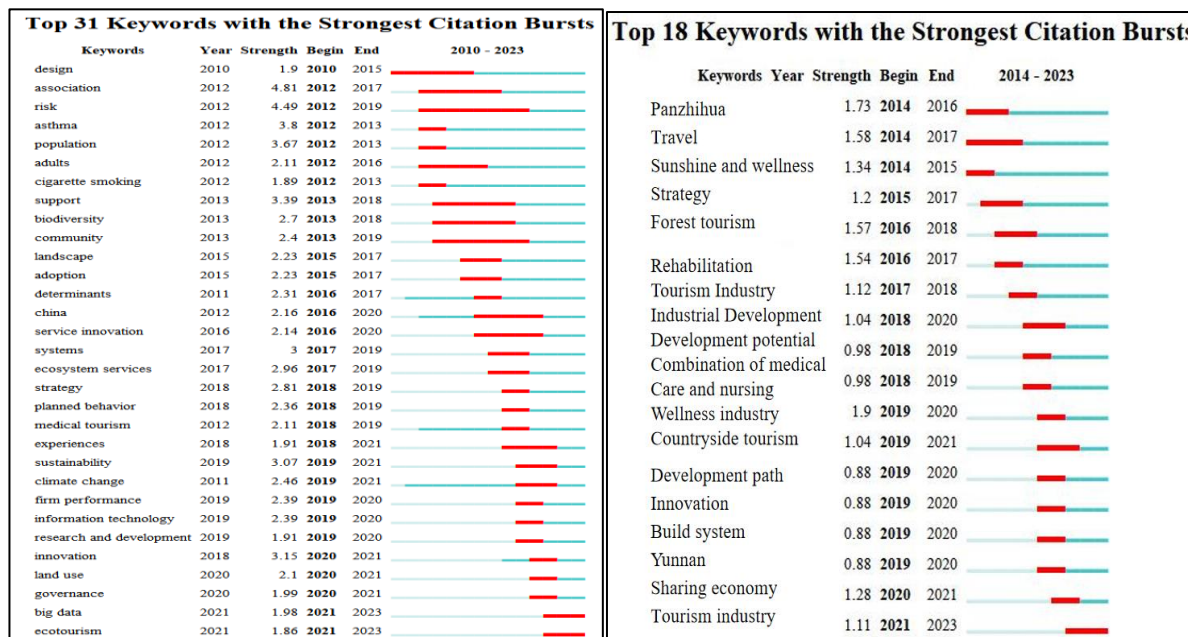


Figure 12. Top 31 keywords with the most vigorous citation bursts for WOS and CNKI
 Source: The author arranges according to the literature

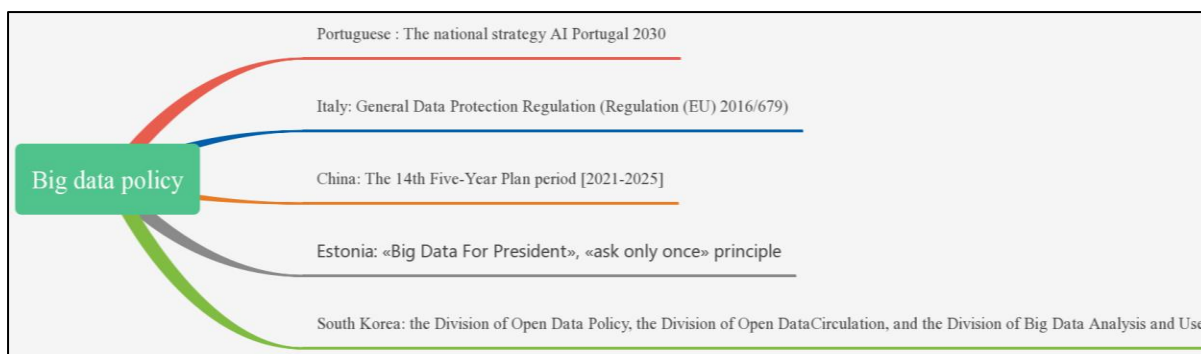


Figure 13. Some countries' big data policy addresses the service innovation problem

Source: The author arranges according to the literature

6. Research conclusions and prospect

6.1 Research Conclusion

This paper summarizes the knowledge structure and evolution law in wellness tourism service innovation through information mining and knowledge map drawing. Mainly draw four conclusions.

First, due to the influence of the aging structure and health awareness improvement, academic circles have paid more attention to the innovation of services year by year. The quantity and quality of publications in service innovation of wellness tourism have specific phased characteristics. The primary characteristics mainly include the world as a whole showing a fluctuating upward trend, and WOS can divide into three stages according to the increase rate: initial exploration (2010-2016), rapid growth (2017-2020), and slow growth (2021-2023). Policies significantly affect China, and CNKI literature is divided into two stages: the embryonic stage (2014-2020) and (2021-2023). The research objects of the CNKI literature mainly focus on the 12 provinces in western China, and each province has its characteristics of wellness tourism resources and the level of economic development.

Second, scholars mainly focus on wellness tourism, customer loyalty, physical activity, and the antecedents and impacts of the service innovation ecosystem in WOS. The scholars focus on the wellness tourism type and cause of wellness tourism service innovation in CNKI. All scholars focus on multi-actor engagement in service innovation and interaction among influencing factors. However, the causes of service innovation are different for different actors. The WOS scholars focus on enterprise, customer, and government infrastructure guarantee perspectives. The CNKI scholars mainly focus on Chinese wellness tourism development models, resource classification, and whether customer demand, enterprise investment, and government support impact the service innovation of the wellness tourism industry. Focusing on different causes may be because China's current service innovation problem is reflected more in the industry integration development. WOS literature reflects more on the degree of participation of different actors and the impact, namely the industrial supply and demand balance, to achieve sustainable development. In addition, how to evaluate or measure wellness tourism service innovation through single indicators, series of indicators, and composite indicators are essential topics.

Thirdly, the interaction between multi-actors for wellness tourism service innovation with the development of digital technology and knowledge management has become the focus. The service innovation ecosystem performs on an ongoing basis in WOS. There is no research system in CNKI. A socialist economic system and a communist distribution system, especially under the medical risks and challenges caused by the tense international situation and the epidemic, may contribute to looking for a new path to the sustainable development problem of global ecotourism. There is no standard for developing wellness tourism in developed and developing countries. It may be because of a lack of availability of wellness tourism data. For example, the international classification of wellness tourism is different from the statistical dimension of the classification of wellness tourism by the National Bureau of Statistics of China. This problem also occurs in other countries.

6.2 The focus of future research

Firstly, continuously update the object and contents of service innovation in wellness tourism. Scholars focus on developed countries such as the United Kingdom, Japan, and Spain. However, due to the endowment advantages of healthy ecological resources in developing countries, the wellness tourism market developed rapidly, and many destinations in developing countries, such as Malaysia and China, also invested in wellness tourism as an ecological compensation mechanism. Therefore, wellness tourism service innovation in developing countries should be given renewed attention, especially in developing countries where tourism is the leading industry. However, wellness tourism service innovation comprehensively reflects political, economic, etc. Therefore, there will be a higher level of discussion on the interaction among multi-actors. And the research in developing countries may contribute to the global service innovation situation.

Secondly, research on multi-actor engagement in wellness tourism service innovation should be paid close attention to. Affected by digital technology, especially with the development of information technology, the efficiency and quality of global information dissemination significantly improved. Customer needs, employee capabilities, corporate capabilities, supplier capabilities, community participation levels, aboriginal willingness, government support, and competitive enterprise capabilities jointly affect the dynamic innovation capabilities of the wellness tourism service ecosystem. How will this international service ecosystem impact the wellness tourism industry in developed and developing countries? What are the implications of tourism countries' response to the wellness tourism service innovation on other countries' tourists?

Thirdly, there is an ongoing basis for research on the impact of wellness tourism service innovation in developing countries. Wellness tourism is highly dependent on natural ecological resources. In developing resources, developing countries pay attention to ecological protection and build ecological compensation mechanisms while pursuing economic interests. These are essential guarantees for sustainable tourism development. How can we improve public wellness awareness in developing countries? How do we establish a balance between economic and ecological benefits? How do we promote the integration and development of industries? Analyzing the antecedents of service innovation under different development situations and exploring solutions to wellness tourism service innovation is the sustainable development of wellness tourism.

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