



# Research hotspots and trends of high-quality tourism development

-- Based on CiteSpace knowledge graph analysis

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**Abstract.** The high-quality development of tourism is not only an important requirement to build tourism into a happy industry, but also a realistic choice based on years of experience in tourism construction, which is of great significance to the people's pursuit of a better life. CiteSpace software is used to draw the knowledge graph such as the number of published documents and keywords, and visually analyze the published documents, hot topics and academic frontiers in the research field. The results show that: (1) In the field of high-quality development of domestic tourism, the number of articles is on the rise; (2) The hot topics in the study of high-quality development of domestic tourism mainly focus on theoretical interpretation, empirical measurement and high-quality development of specific formats or regions. In the future, the research can be expanded from the evaluation method, evaluation dimension and influencing factors of high-quality tourism development.

**Keywords:** High-quality development of tourism; Citespace; knowledge graph; research hotspots;

## 1 Introduction

With the evolution and progression of the economy, the pursuit of high-quality development has swiftly emerged as the foremost imperative in the comprehensive construction of a modern socialist nation<sup>[1]</sup>. From the vantage point of industrial evolution, orienting towards high-quality development shall serve as the guiding principle, instigating reforms in the quality and efficiency of industrial development, and adhering to the concept of "quality first, efficiency first" will become the key focus of the future development of major industries. Implicitly, this also signifies China's commitment to the augmentation of quality and efficiency, further propelling the elevation of industrial development<sup>[2]</sup>.

Tourism stands as a pivotal pillar within the national economy, its developmental zenith serving as a salient metric for gauging the echelons of productivity, social refinement, and the advancement of a nation or region <sup>[3]</sup>. However, with the rapid development of tourism, we must also face some key problems. For example, the exces-

sive emphasis of tourism in the pursuit of economic benefits has led to the neglect of environmental protection and intensive development, making the development mode of tourism extensive, and the problems of resource consumption and ecological damage gradually prominent [4]. In addition, at present, China's tourism industry is faced with problems such as low supply efficiency, repeated construction projects, profound ecological degradation, and asymmetrical regional progress. These issues pose substantial impediments to the realization of the aspiration for top-tier tourism advancement. This, indeed, is the quintessential pathway to resolve the conundrums embedded within the tourism industry and to orchestrate the veneration of sustainable progression.

The high-quality advancement of the tourism sector embodies a comprehensive elevation of tourism quality and efficacy, characterized by a deeper adherence to the ethos of sustainable development, heightened proclivity for innovation, superior industrial composition, enhanced supply quality, and augmented holistic efficacy [5]. Essentially, it underscores the amelioration of citizens' livelihoods, the augmentation of their well-being, and the gratification of their yearnings for a superlative travel experience. It is not only an important requirement to build tourism into a happy industry, but also a realistic choice based on years of experience in tourism construction, which is of great significance to the people's pursuit of a better life. In this milieu, the scholarly realm has engendered a plethora of deliberations concerning the high-quality progression of tourism, yielding a plethora of research findings that bear significant import for steering and inspiration in the pursuit of tourism's high-quality evolution. This paper employs the CiteSpace software to conduct a knowledge graph analysis of multiple literature samples, delving into the research focal points and cutting-edge aspects within the high-quality development of the tourism industry, in order to grasp the comprehensive landscape and trajectory of high-quality tourism development research in China, and provide reference and enlightenment for subsequent researchers.

## **2 Data sources and research methods**

### **2.1 Data sources**

In line with the mandate for high-quality development articulated in the report of the 19th CPC National Congress in 2017, the literatures selected in this paper are from the bibliotheca of CNKI, and the search time is up to June 30, 2023. In the CNKI periodical database, the subject search was adopted, the search theme word was "tourism + high-quality development", the search scope was limited to CSSCI, CSCD, Peking University core journals. The search results were de-duplicated, and 433 valid catalog data were obtained.

### **2.2 Research methods**

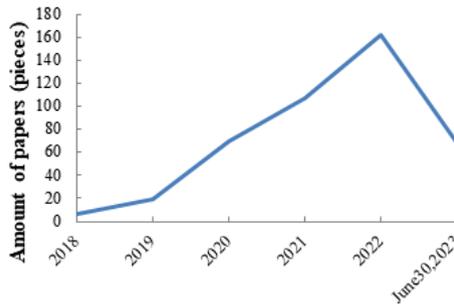
CiteSpace is a scientific literature analysis software, its function is to explore the potential knowledge from the scientific literatures [6]. The software can analyze the research hotspots, research frontiers, knowledge bases (important documents) and important authors and institutions in a certain research field to help researchers better

understand the research status in the field. Simultaneously, CiteSpace can also prognosticate the forthcoming developmental trajectory of a specific research domain, furnishing advantageous guidance for the investigative pursuits of scholars [7]. As the pursuit of high-quality progress within the tourism industry has only come under widespread scrutiny in recent years, there exists a scarcity of investigations concerning the visual knowledge graph pertaining to the high-caliber development of this sector, with the majority of extant studies culminating in 2021. Based on this, the search date of this paper is up to June 30, 2023, and the visual econometric analysis method is used to perspective the research focal points and emergent trends in high-quality tourism development, aiming to extract its core content and knowledge structure.

### 2.3 Publication volume analysis

Through statistical analysis of the literature statistics of high-quality tourism development collected in CNKI database from 2018 to 2023, we can roughly understand the stages, changes in popularity and attention of high-quality tourism development.

As evident from Figure 1, the number of published literature on high-quality tourism development shows a rapid rising trend in general, albeit with a reduction in the volume of publications from 2022 to 2023 because the retrieval time of this study is June 30, 2023, so the number of retrieved literatures in 2023 is small. As of June 30, 2023, the number of published papers is 69, serving as a testament to the escalating scholarly focus on the high-quality development of tourism from 2018 to 2023.



**Fig. 1.** The trend of the number of literature publications on high-quality tourism development research

## 3 Analysis of hot research areas and trends of high-quality tourism development

### 3.1 Research hotspots of high-quality tourism development: key word frequency analysis

Keywords serve as emblematic terms encapsulating the fundamental essence of a scholarly work, and the recurrent co-occurrence of such keywords bears witness to the concentration of research efforts within a specific domain [8] This paper makes use of

the characteristics of high generalization of keywords to conduct keyword frequency analysis and cluster examination, aimed at ascertaining the focal points in the realm of high-quality tourism development research.

In CiteSpace, take "Keyword" as the running node type to obtain co-occurrence network map of high-quality tourism development keywords, marked as Figure 2. The co-occurrence network graph unveils a tapestry of 192 nodes interlinked by 279 connections, with a network density of 0.0152. This alludes to the presence of numerous interrelations among the keywords within the realm of high-quality tourism development research, yet the aggregate connectivity is not characterized by an intimate proximity.



**Fig. 2.** Co-occurrence of keywords of high-quality tourism development research

In the knowledge graph of keyword co-occurrence, the dimensions of the nodes align with their centrality, and the keywords with high frequency receive more attention and research in the co-occurrence network, while the keywords with high centrality make greater contributions to the co-occurrence network. The top 10 keywords are selected and sorted according to their frequency, as shown in Table 1. Specifically, tourism ranked highest (45 times), followed by rural tourism (36 times), cultural and tourism integration (33 times), rural revitalization (32 times), etc. Tourism is the most important research direction, with a centrality of 0.33. This is followed by rural tourism, cultural and tourism integration and rural revitalization, with the centrality of 0.25, 0.15 and 0.28 respectively.

**Table 1.** High-frequency keywords and centrality

Serial Number	Frequency	Centrality	Year	Keywords
1	45	0.33	2018	Tourism
2	36	0.25	2018	Rural tourism
3	33	0.15	2019	Cultural and tourism integration
4	32	0.28	2019	Rural revitalization

5	17	0.21	2020	Yellow River basin
6	16	0.07	2019	Cultural industry
7	14	0.12	2020	Sports industry
8	13	0.07	2019	Tourism industry
9	11	0.14	2020	High Quality
10	11	0.12	2021	Red Tourism

### 3.2 Research content of tourism high-quality development: keyword cluster analysis

In an endeavor to holistically investigate the pinnacles of research activity within the sphere of high-quality tourism development, this paper employs the log-likelihood ratio (LLR) methodology to congregate keywords of elevated frequency, iteratively calibrating the clustering threshold<sup>[9]</sup>. In this way, the keyword clustering maps are finally obtained. Based on CNKI database, a total of 8 clusters are obtained through the knowledge graph, which are: #0 tourism, #1 cultural and tourism integration, #2 ice and snow industry, #3 rural tourism, #4 rural revitalization, #5 high quality, #6 cultural and tourism industry and #7 global tourism.

Summarizing the hot spots and frontiers of major research at home and abroad mainly includes three parts: theoretical interpretation, empirical measurement and high-quality development of specific formats or regions.

#### (1) Theoretical explanation of high-quality development of tourism industry

In the realm of literature dedicated to the theoretical elucidation of high-quality tourism development, scholars mainly use a variety of opinion-publishing qualitative paradigm to conduct an all-round analysis of the realistic predicament, main tasks and promotion direction of high-quality development of tourism. To exemplify, Li and Wei, in conjunction with the current landscape of China's tourism progression, have conducted an in-depth exploration into the core significance, pathways to realization, and the mechanisms ensuring the high-quality development of tourism<sup>[2]</sup>.

#### (2) Empirical measurement of high-quality tourism development

In terms of the literature on measuring the high-quality development of tourism, scholars mainly construct evaluation systems from different perspectives to quantitatively analyze the high-quality development level of tourism in different regions. To exemplify, Lu meticulously curated a selection of 11 secondary indices and 28 tertiary indices, drawn from the four facets to gauge the pinnacle of excellence in the tourism sector's development<sup>[3]</sup>.

#### (3) High-quality development of specific forms or regions of tourism

In the realm of literature concerning the high-quality development of specific sectors or regions within the tourism industry, scholars mainly focus on the specific sectors of the tourism sector, such as rural tourism, red tourism, sports tourism, etc., or the paths of high-quality development of specific regions, such as the Yangtze River Delta, Xinjiang, etc. For instance, Tang delves into the spatial implications of the digital economy on the high-quality tourism development in the Yangtze River Delta and the underlying mechanisms of its influence<sup>[10]</sup>.

### 3.3 Research trends of high-quality tourism development: keyword emergence analysis

CiteSpace software has the function of keyword emergence detection, which can judge the research frontier in the field of high-quality tourism according to the degree of keyword emergence, such as the trend of sudden increase and decrease<sup>[11]</sup>. Table 2 show the emergence list of high-quality tourism development keywords generated by CiteSpace software. The top 5 keywords in terms of prominence intensity are red tourism, tourism resources, high quality, path and cultural industry respectively, and their prominence intensity is 2.41, 1.79, 1.28, 1.28 and 1.28 successively (Table 2).

**Table 2.** Emerging words of high-quality tourism development research

Keywords	Year	Strength	Begin	End
Tourism resources	2019	1.79	2019	2019
Cultural industry	2019	1.28	2019	2020
Path	2020	1.28	2020	2020
High quality	2020	1.28	2020	2021
Tourist attractions	2020	1.07	2020	2020
Leisure Agriculture	2020	1.07	2020	2020
Travel experience	2020	1.07	2020	2020
Ecological civilization	2020	1.07	2020	2020
Policy	2020	1.07	2020	2020
Red tourism	2021	2.41	2021	2021

## 4 Conclusion and trend outlook

### 4.1 Conclusion

This paper takes 433 literature published in the field of high-quality tourism development from 2018 to June 30, 2023 as research objects, and forms a scientific knowledge map with CiteSpace software. Drawing insights from the attributes of high-quality tourism development literature, keyword co-occurrence patterns, emerging themes, research frontiers, and visual analyses of trends, the ensuing conclusions are drawn.

First, with regard to the volume of publications, high-quality development research has gradually become a field of wide concern in the academic community since 2018. On the whole, the number of published related research articles continues to increase, indicating that the research heat in this field continues to rise.

Second, in terms of research hotspots, high-quality development receives the most attention and is a sustainable hotspot under the guidance of policy. In addition, cultural and tourism integration, cultural industry, rural tourism and ice and snow industry are also research focal points within the domain of high-quality rural tourism development in recent years.

Third, within the sphere of research frontiers, red tourism shows a high degree of emergence, becoming a more influential research frontier. In terms of the time of emergence, the start of emergence of the four thematic terms of science and technology innovation, practice path, tourist place and ice and snow tourism is 2022, and continues to strengthen. This signifies that the determinants of quality advancement in tourism and technology-enabled tourism quality development are at the forefront of today's research.

## 4.2 Research trend outlook

The high-caliber advancement of the tourism sector is attuned to the harmonious orchestration of the economic and industrial facets of tourism, emphasizes on improving the quality of tourism development through supply-side structural reform, institutional and technological innovation, and is a dynamic process of pursuing sustainable progress, harmonizing the triad of economy, culture, and the environment, which is of utmost importance for people's pursuit of a better life. However, according to relevant research, there is still much room for in-depth thinking and discussion about the high-quality development of tourism. Future studies should build upon the current research results to improve the research on high-quality tourism development through multiple perspectives.

First, the evaluation dimension of high-quality tourism development. Presently, the appraisal of high-quality tourism development predominantly centers on coordination and efficiency, engendering a relatively singular evaluative dimension. Future research directions should consider the high-quality development of tourism from different perspectives, so as to explore and establish a more comprehensive and multi-dimensional evaluation dimension system.

Second, research methods of high-quality development of tourism industry. The 'ignition' for research into the development of quality tourism has been kindled, yet it awaits the 'blazing' transformation. Currently, qualitative research methods dominate the landscape in the realm of high-quality tourism development. In the future, quantitative research should be strengthened to provide objectivity for research based on data statistics, models and mathematical analysis.

Third, the influence mechanism of high-quality tourism development. Within academic circles, the exploration of high-quality tourism development is deeply ingrained within three dimensions: its essence, the underlying mechanisms, and the pathways to realization. When we amalgamate keywords and emerging terms, the driving forces behind high-quality tourism development emerge as a pivotal avenue of future inquiry. Scrutinizing the elements that shape the ascent of tourism quality shall redound to the refinement and bolstering of China's tourism industry. Going forward, it is imperative to delve deeper into the contributory factors of high-quality tourism development, including but not limited to the digital economy, and to expound the intricate ways in which these factors impact the elevation of tourism quality.

## Acknowledgment

This research is supported by the National Social Science Found of China (Grant No.20BMZ128).

## References

1. Wang G, Ye L. Spatial-Temporal Pattern of Mismatch Degree of High-Quality Tourism Development and Its Formation Mechanism in Taihu Lake Basin, China. *Sustainability*, 2022, 14(8): 4812.
2. Li Shuhao, Wei Min. High-quality development of tourism industry in China: Core requirements, realization approaches and guarantee mechanisms. *Journal of Yunnan Minzu University (Philosophy and Social Sciences Edition)*, 2023, 40(01):152-160.
3. Lu Y. The measurement of high-quality development level of tourism: Based on the perspective of industrial integration. *Sustainability*, 2022, 14(6): 3355.
4. Godovykh M, Hacikara A, Baker C, et al. Measuring the perceived impacts of tourism: a scale development study[J]. *Current Issues in Tourism*, 2023: 1-17.
5. Fan Jie, Wang Yafei, Wang Yixuan. High quality regional development research based on geographical units: Discuss on the difference in development conditions and priorities of the Yellow River Basin compared to the Yangtze River Basin. *Economic Geography*, 2020, 40(01): 1-11.
6. Azam A, Ahmed A, Kamran M S, et al. Knowledge structuring for enhancing mechanical energy harvesting (MEH): An in-depth review from 2000 to 2020 using CiteSpace[J]. *Renewable and Sustainable Energy Reviews*, 2021, 150: 111460.
7. Chen C, et al. Emerging trends in regenerative medicine: a scientometric analysis in CiteSpace. *Expert opinion on biological therapy*, 2012, 12(5): 593-608.
8. Bicheng D, et al. Evolution and hotspots of peer instruction: a visualized analysis using CiteSpace. *Education and Information Technologies*, 2023, 28(2): 2245-2262.
9. Şahin A, Yılmaz G. Local food research: a bibliometric review using Citespace II (1970–2020) [J]. *Library Hi Tech*, 2022, 40(3): 848-870.
10. Tang R. A study of the effects and mechanisms of the digital economy on high-quality tourism development: evidence from the Yangtze River Delta in China. *Asia Pacific Journal of Tourism Research*, 2022, 27(11): 1217-1232.
11. Yan Youbing, Hu Huanhuan. Evaluation and analysis of obstacle factors of the high-quality development of tourism in the east of China. *Journal of Huaqiao University (Philosophy & Social Sciences)*, 2022.

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