

# Study on Tourism Service Quality Evaluation based on Cultural Perception Effect

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**Abstract:** Based on the deep integration of cultural tourism as the historical backdrop of this study, and aiming to address the inadequacies in the evaluation of tourism service quality, we propose an evaluation perspective centered on cultural perception. We introduce the DiD (Difference-in-Differences, dual differential analysis) analysis method to construct an evaluation model based on the impact of cultural perception. This model considers both direct satisfaction feedback from tourism consumption and the indirect value-added effects of cultural products. By evaluating these dimensions, we aim to enhance the assessment framework for tourism service quality within the context of cultural and tourism integration. This approach provides theoretical research support to better advance cultural tourism integration and highlight its significant impact.

**Keywords:** Tourism Service Quality Evaluation; Cultural Perception Effect; DiD Analysis Method.

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## 1. Introduction

As China enters the mid-term of its "14th Five-Year Plan," the tourism industry is poised for a new era of high-quality development. Guided by new developmental philosophies, the nation's aspiration to become culturally strong drives the integration of culture and tourism, advocating for "cultivating tourism through culture" and "highlighting culture via tourism." Tourism, serving as a vital conduit for preserving and promoting Chinese cultural heritage, must leverage its role in disseminating Chinese culture, showcasing achievements in Chinese-style modernization, and fostering socialist core values. Concurrently, China's tourism sector has embraced mass and international tourism, emphasizing the establishment of "happiness industries," "specialty industries," and "brand industries" as hallmarks of its high-quality development strategy. The ultimate aim of tourism consumption is satisfaction, with consumer perceptions and satisfaction regarding tourism services serving as critical indicators of the cultural and tourism industries' developmental essence. Against the backdrop of a culturally strong nation and enhanced cultural confidence, advocating for "cultural perception" as a core criterion in evaluating tourism service quality can significantly advance the integration of culture and tourism, accentuate cultural influence, and amplify the societal benefits derived from cultural and tourism initiatives.

## 2. Development and Research Status of Tourism Service Quality Evaluation

Evaluation serves as a potent catalyst for development. To advance the cultural and tourism industries and establish tourism as a pivotal new driver of economic growth, the Central Committee and the State Council have recently introduced a series of policies emphasizing the "evaluation of tourism service quality" and prioritizing the "establishment of a robust tourism market service quality evaluation system" as a key initiative. In March 2024, the Ministry of Culture and Tourism issued Notification (Market Development [2024] No. 43), launching pilot projects for constructing a tourism market

service quality evaluation system in 13 regions including Beijing and Inner Mongolia Autonomous Region. These efforts aim to explore safeguard mechanisms and implementation strategies, clarify data sources, summarize issues and experiences encountered during evaluations, and provide constructive recommendations for refining quality assessment models and evaluation frameworks.

In the government supervision perspective, the state technical supervision bureau defined in the quality management and quality management system elements that "tourism service quality is tourism service activities can achieve the prescribed effect and the ability and degree to meet the demand of the tourists", namely the tourism service quality is reflect the product or service to meet clear or implied the sum of the characteristics and characteristics of". In the field of operation and management, domestic and foreign scholars regard customer satisfaction as the measure of product and service quality. PARKJ class[1] determined the orientation relationship between customer satisfaction and service quality, which is the capital of customer retention and long-term development. Deng MH et al[2] empirical analysis shows that there are strong key factors between service quality and customer satisfaction, and it believe that the evaluation model, evaluation method and index system in the process of service quality evaluation are important factors. Lu XL et al[3] Taking a red scenic spot as an example, the study shows that satisfaction has a complete intermediary effect on tourism quality and tourist loyalty. In evaluation research and applications, Yuan Zhengxin [4] and Dou Ziwen [5], among others, utilize the SERVQUAL model as a framework for evaluating tourism service quality. This model primarily assesses the "perception-expectation" values of evaluation targets (tourist attractions) across five dimensions: tangibles, reliability, responsiveness, assurance, and empathy. Evaluations are based on determining the extent to which these values meet customer expectations in terms of positivity, magnitude, and fulfillment. Liu QP [6] The root theory is applied to the service quality evaluation of the tourism home stay industry, and the internal influencing factors of the three stakeholders and the service quality evaluation quality are analyzed through coding. To sum up, the industry

management of tourism service quality evaluation is clearly defined, and the relevant models are mainly hierarchical analysis method, fuzzy comprehensive evaluation and recent structure, data analysis model and the introduction of relevant theories of public management, and the support of cultural and tourism integration relationship is insufficient. The tourism service quality under the background of cultural and tourism integration should fully reflect the publicity effect of culture in tourism activities, that is, the "input-output" effect relationship between the cultural output in tourism hardcore products and the consumers' perception ability of absorption.

### 3. Definition of Cultural Perception and the Selection of Evaluation Indicators

#### 3.1. Definition and Interpretation of "Cultural Perception"

Cultural perception generally refers to the reception and feeling of relevant groups to the cultural elements provided in cultural services and cultural products. Cultural perception in the tourism industry is the thematic feedback of tourism consumers' experience, feeling and satisfaction on the cultural connotation of tourism products. Based on the higher requirements of the in-depth development of cultural and tourism integration on the quality of tourism service, especially the catalytic role of new media on cultural communication, this paper gives a new definition of the research elements of "cultural perception".

"Cultural perception" evaluation object definition: generally refers to a tourist attraction (area), such as Zhongshan scenic spot in Qianxi, Hebei. Under the background of all-region tourism and various characteristic tourism, it can also be expanded to a certain tourist city or region, such as Zibo in Shandong Province, Qinhuangdao and so on.

Definition of the evaluation subject of "cultural perception": mainly refers to tourists, namely tourism consumers who are or have completed the travel process, sometimes including potential consumers who pay attention to tourism products through new media and express clear interest and travel intention.

Time definition of "cultural perception" evaluation: generally limited to the time of tourism consumption, that is, the service evaluation ends with the completion of the travel itinerary. Because the hardware services of tourism products basically end with the end of the trip, while the local cultural products and services are not limited by time and space, and can be permanently existing under the action of the current new media. Therefore, the start time of the "cultural perception" evaluation in this paper starts from when the tourists accept the cultural tourism products and services provided by the evaluation object, with no end time.

To sum up, the definition of the evaluation subject and time of "cultural perception" has a larger range of time and space extension than the evaluation of traditional tourism service quality. The evaluation of tourism service quality under the integration of cultural and tourism should fully reflect the cultural output effect after a large amount of cultural input. From the perspective of cultural perception, we should consider the diffusion, derivative and value-added properties of "culture" beyond the simple tourism products or services.

#### 3.2. Classification of "Culture" Category and Perception Indicators in the Evaluation of "Cultural Perception"

"Culture" and "civilization" are synonymous. Culture in the broad sense consists of material, institutional, customs, spiritual and other aspects. In the narrow sense, culture mainly refers to human spiritual activities and their achievements. In Marxism, "culture" is defined as "a certain culture is the ideological reflection of the politics and economy of a certain society". Therefore, in the development concept and implementation path of "integration of culture and tourism" put forward by China, all kinds of spiritual activities and their achievements in line with the socialist core values, serving and meeting the interests of the people can be included in the research and practice category of "cultural perception". According to the definition of tourism service quality in Quality Management and Quality Management System elements, the evaluation of "cultural perception" can be expounded as the degree of tourism consumers (including potential) feeling and accepting the "cultural awareness" provided and accepted in tourism products and services in tourism activities or projects, and the satisfaction of "cultural products".

Under the definition of the research elements and evaluation category of "cultural perception", In this paper, the evaluation index of "cultural perception" of a specific scenic spot (point, region) is divided into two categories: one is the direct category index, Mainly refers to the satisfaction with the cultural products and cultural connotation reflected in tourism activities of consumers who actually accept and are receiving (just completed) their tourism products and services; Second, the indirect type of indicators, Potential consumers who clearly express the cultural communication interest and travel intention through the collection channels (new media, etc.), And after the completion of the actual tourism activities, consumers continue to spread the connotation and quality information of the media on the effective platform.

### 4. Evaluation Model and Application Description of Tourism Service Quality based on "DiD-cultural Perception Effect"

DiD (Difference-in-Differences, dual differential analysis) is an economic research method, mainly used to evaluate the effect of policies or other interventions. This paper takes this method as the basic principle to build a basic model of tourism service quality evaluation based on tourists' cultural perception under the integration of culture and tourism. The goal of the evaluation is the acceptance and satisfaction feedback of the cultural connotation of the products before and after the launch of cultural and tourism integration products (projects, activities, policies, hardware facilities, etc.). The results of the evaluation are used to show the social benefits of the input and output of cultural tourism products from the perspective of consumer cultural perception, namely the cultural perception effect. The basic formula based on "DiD-cultural perception effect" is expressed as follows:

$$\text{DiDCultural perception estimator} = (Y_{\text{After, direct}} - Y_{\text{Before, directly}}) + (Y_{\text{After, indirectly}} - Y_{\text{Before, indirectly}})$$

among:

$Y_{\text{After, direct}}$  and  $Y_{\text{Before, directly}}$  Before and after the launch of a cultural product in the scenic spot, the tourism consumers' cultural perception feedback of the tourism project, that is, the evaluation value change of the satisfaction index of relevant cultural products and services.

$Y_{\text{After, indirectly}}$  and  $Y_{\text{Before, indirectly}}$  Before and after the launch of a cultural product in the scenic spot, the increase (range) of potential tourists collected by the designated official media or hot media, as well as the added value of mass cultural recognition and continuous publicity heat, and the increase of transmission, etc.

Through the calculation of the estimator of DiD cultural perception, the output effect of cultural products can be obtained from more dimensions from the perspective of tourism consumers' cultural perception, so as to represent the value of cultural input. At the same time, the direct effect comes from the direct feedback of consumers, which is the reliable basis for product input and perfect policy formulation. The unpredictability of the sustainable development of the indirect effect is the opportunity and challenge for relevant departments to expand cultural appreciation.

In the context of cultural and tourism integration, consumer cultural perception is prioritized, with culture identified as a core element driving the development of cultural tourism industries. This study breaks through existing bottlenecks in tourism service quality indicators, providing definitions and explanations for "culture," "cultural perception," and "cultural perception effects." Employing the DiD method, the study constructs an evaluation model based on "cultural perception effects" to quantitatively analyze the social benefits of relevant cultural tourism products. This framework aims to support the implementation and continuous improvement of

cultural products. At its current stage, the paper primarily addresses theoretical aspects, with plans for ongoing practical and quantitative analysis in future research.

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## References

- [1] PARK J, LEE B K. An opinion-driven decision support framework for benchmarking hotel service[J]. *Omega*, 2021, 103: 102415.
- [2] Deng MH, Liang RT, He LW. Review of tourism service quality evaluation research [J]. *Tourism Overview*, *Tourism Overview*, 2022, (17): 18-20.
- [3] Lu XI, Fu G. Research on red tourism quality, satisfaction and tourist loyalty: Take Jinggangshan Scenic spot as an example [J]. *Management Review*, 2018 (2): 127-135.
- [4] Yuan ZX, Zhou X. Research on the evaluation of forest ecotourism service quality based on SERVQUAL model -- takes Wulingyuan World Natural Heritage Site as an example [J]. *Tourism and Photography*, 2023, (18): 89-91.
- [5] Dou ZW. Evaluation of tourism service quality in shenhou ancient town based on the AHP-SERVQUAL model [J]. *Journal of Xuchang College*, 2024,43 (01): 132-137.
- [6] Liu QP. Research on the quality evaluation of tourist homestay service in Yangshuo County based on grounded theory [D]. *Guilin University of Technology*, 2023.