

Construction and Empirical Research on the Value Dimension of Tourists' Experience in Urban Heritage Parks

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Abstract: With the simultaneous growth of cultural heritage activation and urban renewal needs, urban heritage parks are increasingly becoming important carriers for the integrated development of historical heritage protection and public space utilization. This article focuses on the construction of measurement dimensions of tourist experience value in urban heritage parks. Based on the theoretical frameworks of flow theory and experience value theory, combined with literature analysis and UGC text mining, it initially constructs an emotional, cultural, and functional three-dimensional index system. Through text analysis of 970 online reviews of Chongqing Kaifa Heritage Park, social value is identified as a potential new dimension. Subsequently, this article adopts exploratory and confirmatory factor analysis methods to verify the structural validity and reliability of the evaluation model with four dimensions and eighteen indicators, confirming that tourist experience value consists of four dimensions: emotional, cultural, functional, and social. The research not only fills the empirical research gap on social interaction value in cultural heritage tourism spaces, but also provides a quantifiable evaluation tool and evidence-based basis for the operation, management, and experience optimization of heritage parks, which has certain theoretical innovation significance and practical guidance value.

Keywords: Urban Heritage Parks; Tourists' experience; Evaluation index system; Cultural heritage activation

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1. Introduction

A heritage park is a planning model that combines site protection with park functions, and has become an important practical direction for the protective development of historical and cultural heritage at home and abroad. As an innovative model for the revitalization and utilization of cultural heritage, urban heritage parks combine the functions of site protection and public space. They are not only important platforms for the protection and display of heritage sites, but also effective ways to improve the management system of large heritage sites and realize their social value. Historical architectural relics, as an important component of urban cultural capital, have dual value dimensions in their protection and revitalization: on the one hand, as physical carriers of collective memory, they maintain the continuity of the city's cultural context; on the other hand, as cultural consumption spaces, they

promote regional economic development through the creation of tourism experience value. This dual attribute requires a paradigm shift in heritage protection from physical restoration to value transmission. The urban heritage park model integrates site protection with functions such as public education and leisure recreation through spatial narrative reconstruction, providing a practical path to solve the governance dilemma of “protective destruction” and “developmental idleness.”

With the advent of the experience economy era, tourist demand has shifted from basic sightseeing to immersive experiences. The experience demands of tourists in cultural heritage sites have evolved from superficial functional needs (accessibility, facility completeness) to intermediate cultural cognitive needs (historical information acquisition, place spirit perception), and deep emotional resonance needs (cultural identity, self-actualization). This evolution in demand structure poses new challenges to the experience value supply system of heritage parks.

Based on the flow theory and experiential value theory, this study initially constructs a tourist experience evaluation system that includes three dimensions: emotional, cultural, and functional. Through topic mining of online review texts for Chongqing Kaifa Site Park, a potential value dimension of social value is identified. Subsequently, based on the identified dimensions and observation indicators, a structured questionnaire is designed, and a tourist survey is conducted. Exploratory factor analysis is used to empirically test the data, and finally, a tourist experience evaluation model for city heritage parks is constructed and validated, including four dimensions: emotional, cultural, functional, and social interaction.

2. Literature review

2.1. Urban heritage parks

In the 1970s, Japan took the lead in developing the city heritage park model to address the destruction of precious historical relics during urbanization. While protecting heritage, typical cases of appropriately restoring the ancient human living environment have satisfied the public’s strong desire to return to nature. The success of Hiroshima Peace Memorial Park and Nara Heritage Park has promoted the development of heritage parks globally. In 1983, the planning and construction of China’s Yuanmingyuan Heritage Park marked the formal integration of the “heritage park” concept with cultural heritage management ^[1]. The emergence of city heritage parks coincided with the expansion and improvement of the heritage museum concept. Peng Li defines city heritage parks in his research as urban parks established on the basis of heritage sites within the current or planned construction areas of the city ^[2]. Yao Lang et al. verified the mechanism of cultural implantation to enhance tourism value through the case of Xi’an Daming Palace, while Li Yue constructed a spatial narrative theoretical model based on Jinyang Ancient City, elucidating the synergistic effect of field continuity design on cultural dissemination ^[3, 4]. The Qujiang Heritage Park and Ming Palace project explored collaborative paths for protection and development from the perspectives of economic balance and micro-renewal strategies, respectively ^[5, 6]. Contemporary research further reveals that as a “cultural-ecological-social” three-dimensional complex, it undertakes multiple functions such as heritage protection, public education, and leisure recreation, becoming a medium for transforming the social value of large heritage site management.

2.2. Tourists’ experience

In the field of research on measuring dimensions of experience value, the five-dimensional framework proposed by Sheth and others is widely regarded as a classic, including five dimensions: functional, social, emotional, epistemic, and situational ^[7]. Zhang *et al.* further validated the rationality and scientific nature of Sheth’s research

by dividing customer experience value into five dimensions: functional, situational, emotional, epistemic, and social ^[8]. Additionally, Pine and Gilmore classified people's experiences into four dimensions: entertainment, education, esthetics, and escapism, constructing the famous "4E" experience theory model, which provides another important perspective for the study of experience value ^[9].

As the main body of tourism, visitors have a crucial impact on the development of the tourism industry. Visitor experience not only has the characteristics of participation, interaction, and comprehensiveness, but also carries a strong personal color. Through multidimensional theoretical exploration and practical verification, the study of visitor experience value has gradually formed a systematic cognitive framework. At the level of value attributes, the academic community has revealed the multiple connotations of experience value from perspectives such as basic services, interactive learning, composite characteristics, and cultural dissemination, highlighting its dual characteristics of functional practicality and cultural constructiveness ^[10–13]. Dimensional deconstruction research presents methodological innovations. The four-dimensional model proposed by Yang and the three-dimensional framework of Ma *et al.* expand analytical perspectives from value types and experience levels, respectively, while Ross's subject-object dichotomy provides a theoretical tool for cross-contextual comparison ^[14–16]. In the field of practical application, scholars have verified the field dependence and dynamic complexity of visitor experience value evaluation through the 28-factor model of museum scenes and the emotional-cognitive pathway research of performing arts scenes ^[17, 18].

Despite significant progress in research, there are still certain limitations in existing achievements: Firstly, specific research on the experience value of city site parks has not formed an independent system; secondly, it is difficult for static questionnaire-led evaluation methods to capture real-time experience feedback implicit in online comment data. This paper constructs a four-dimensional evaluation model specific to city site parks by integrating theoretical deduction and text mining, and conducts empirical testing to provide a new paradigm for the sustainable challenge of "protection-utilization-inheritance" of city site parks, as well as a new analytical framework and practical path for the study of experience value in cultural heritage sites.

3. Construction of indicator system

3.1. Initial establishment of theoretically guided indicators

Compared to other forms of tourism, urban heritage parks not only satisfy visitors' entertainment needs but also serve important functions such as architectural heritage protection, science popularization education, and cultural inheritance. Through a systematic review and analysis of relevant literature, this study primarily draws on the basis for dividing the structural dimensions of tourism experience and indicator selection methods from scholars such as Pi *et al.*, Fan, Na, Li, Bai, Li, Li, Liu, and Bai ^[19–25]. Taking into account the unique attributes of urban heritage parks, targeted adjustments were made to the indicators. On this foundation, an evaluation system model for visitor experience value in urban heritage parks was initially constructed, covering three main dimensions: emotional value, cultural value, and functional value.

3.2. Optimization of UGC text data evaluation index system

3.2.1. Data collection and processing

As a typical representative of modern China's inland trading ports, Chongqing Port Opening Memorial Park relies on the historical site of Liddell & Co. as its foundation and is a representative relic of Chongqing's port opening history. The park integrates three functional sections: a museum, a park, and a casual street, making it an important

place for urban leisure. As a city heritage park, it not only undertakes cultural tourism functions but also serves as a city park for daily leisure activities for local residents, targeting not only foreign tourists but also local residents. Therefore, this study chose text data from Dianping platform as the source. As a local life service platform, Dianping provides a comprehensive service including ratings and reviews for businesses, with core businesses such as check-in and recommendation functions. Tampermonkey plugin was used to manage Greasemonkey scripts, converting text data from tourist reviews on Dianping since the park opened in batches. Finally, 970 original review texts since the park opened (as of January 2025) were obtained, and 839 valid data were retained after deduplication and cleaning.

3.2.2. Experience value identification

Through the extraction and coding of review indicators from the review texts of Chongqing Open Port Heritage Park, the initially constructed evaluation index system for the park was optimized and improved. Four new observation indicators were identified for the functional value measurement dimension, including transportation convenience, leisure and entertainment facilities, service quality, and historical and cultural facilities. Additionally, a new measurement dimension of social value and its two observation indicators were identified, specifically, photo-taking and check-in, and social experience. Finally, an evaluation index system for tourist experience value in Chongqing Open Port Heritage Park was formed, as shown in **Table 1**:

Table 1. Evaluation index system for tourist experience in city heritage parks

Dimension	Code	Indicator	Explanation
A. Emotional value	A1	Pleasurable experience	Tourists' positive emotional experiences and satisfaction gained in the park
	A2	Attractiveness	The park's appeal to tourists, including visual and emotional attraction
	A3	Engagement	The degree of tourists' active participation in park activities and resulting immersion
	A4	Distinctive perception	Tourists' awareness and recognition of the park's unique cultural experiences
B. Cultural value	B1	Knowledge acquisition	Tourists' evaluation of educational experiences and new knowledge gained
	B2	Behavioral identity	Tourists' sense of identification with the park as a cultural landmark and willingness to recommend
	B3	Heritage revitalization	Tourists' perception of innovative conservation and adaptive reuse of historical buildings
	B4	Cultural confidence	Tourists' sense of pride in Chongqing's unique cultural charm during visits
C. Functional value	C1	Food & accommodation	Tourists' evaluation of dining and hotel service quality
	C2	Cultural creative products	Assessment of product diversity and quality (e.g., "Kaiwu" brand)
	C3	Performance activities	Attractiveness of cultural events and performances
	C4	Environmental landscape	Integration effect of natural scenery and historic architecture
	C5	Transportation accessibility	Perceived convenience of park access
	C6	Recreational facilities	Comprehensive evaluation of entertainment facilities' fun and recreational value
	C7	Service quality	Perception of staff attitude, service level and infrastructure
	C8	Historical facilities	Evaluation of cultural display effectiveness and historical facilities
D. Social value	D1	Photo sharing	Tourists' photo-taking and social media sharing behavior
	D2	Social interaction	Quality of social experiences with companions in the park

4. Empirical analysis

4.1. Questionnaire design and data collection

Based on the evaluation system constructed in the previous section, and after two rounds of expert reviews and pre-surveys (with a total of 50 questionnaires and 37 valid questionnaires), this study formed a complete questionnaire consisting of 5 basic information questions, 6 questions about tourist behavior characteristics, 18 scale questions, and 1 open-ended question.

Through a combination of online and offline methods, online data was collected through the Questionnaire Star website, while offline data was collected during different time periods on weekdays and holidays. A total of 259 questionnaires were collected, with 237 valid questionnaires. Among the surveyed population, 40.1% were male respondents and 59.90% were female respondents. In terms of age, the majority of respondents were between 26 and 35 years old (38.4%). Regarding education level, the majority of respondents had a bachelor's degree (43.5%). In terms of occupation, the majority were students (22.4%) and corporate employees (38.0%).

4.2. Exploratory factor analysis

This study chose exploratory factor analysis. Before applying the factor model analysis, a factor model suitability analysis was first conducted on the scale data. The analysis results showed that the KMO value was $0.912 > 0.6$, and it passed the Bartlett's test of sphericity with a significance level of 0.05 ($P = 0.000 < 0.05$), indicating that the data set met the conditions for factor analysis. Factor analysis was performed on the data set, and the factor loading values for each item were obtained using the varimax orthogonal rotation method, as shown in **Table 2**. From the rotated factor loading matrix table, it can be seen that the 18 items of the scale only had loadings higher than 0.6 on one dimension, indicating good structural validity of the scale items and initially verifying the reliability of the evaluation index system for tourist experience value in city heritage parks.

Table 2. Rotated component matrix

Item No.	Item description	Component			
		Functional value	Emotional value	Cultural value	Social value
C7	Service quality	0.782			
C3	Performance activities	0.771			
C5	Transportation accessibility	0.768			
C8	Historical facilities	0.761			
C2	Cultural creative products	0.747			
C6	Recreational facilities	0.732			
C1	Food & accommodation	0.724			
C4	Environmental landscape	0.683			
A1	Pleasurable experience		0.820		
A4	Distinctive perception		0.810		
A2	Attractiveness		0.775		
A3	Engagement		0.775		
B3	Heritage revitalization			0.800	
B4	Cultural confidence			0.795	
B2	Behavioral identity			0.779	
B1	Knowledge acquisition			0.741	
D1	Photo sharing				0.871
D2	Social interaction				0.829

Analysis Method: Principal Component Analysis

Rotation Method: Kaiser Normalization with Varimax Rotation. A rotation converged after 5 iterations.

4.3. Confirmatory factor analysis

Based on exploratory factor analysis, confirmatory factor analysis was used to further validate the evaluation model. The research results showed that the factor loadings on all items of the evaluation model, including 18 observation indicators and 4 measurement dimensions, were greater than 0.40 (**Figure 1**), indicating that the scale items were reasonably set. According to the analysis results of the model fitting indicators: $\chi^2/df=1.161 < 3$, GFI=0.936, CFI=0.990, both exceeding 0.9, RMSEA=0.026 < 0.05, SRMR=0.033 < 0.05, indicating that the overall performance of the model was good and the fitting accuracy of the data was high. As can be seen from Table 3, the square root of AVE of each measurement dimension is greater than the absolute value of the correlation coefficient between factors, which means that it has good discriminant validity. The discriminant validity of the evaluation model of tourist experience value in city site parks is ideal.

In addition, the Cronbach's Alpha values of the emotional value, cultural value, functional value, and social value scales ranged from 0.858 to 0.909, greater than 0.8, and the composite reliability (CR) values ranged from 0.810 to 0.90, all higher than 0.7, indicating good reliability of the evaluation model (**Table 3**). In summary, the evaluation model of tourist experience value in city site parks has passed the reliability and validity tests.

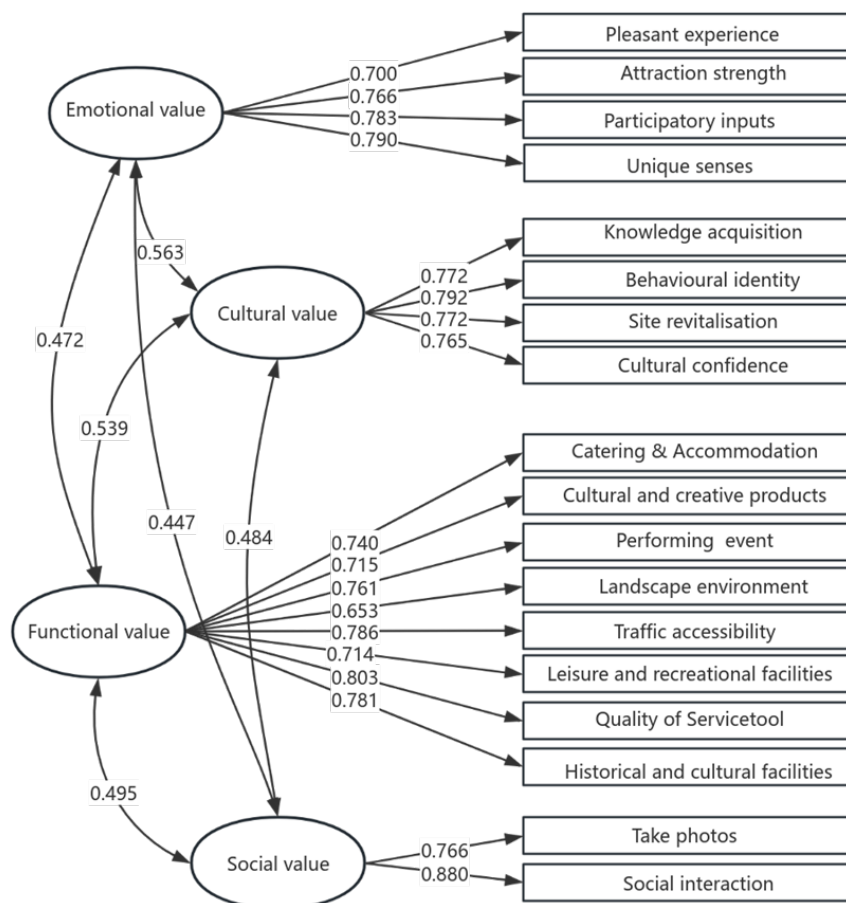


Figure 1. Confirmatory factor analysis model of Urban Heritage Park

Table 3. Pearson Correlation and AVE square root values

	Emotional value	Cultural value	Functional value	Social value
Emotional value	0.782			
Cultural value	0.485	0.775		
Functional value	0.421	0.472	0.746	
Social value	0.377	0.412	0.417	0.825

Note: The bold numbers on the diagonal are the square root values of AVE.

5. Management suggestions

Based on the four-dimensional evaluation model of tourist experience value in city heritage parks constructed and validated in this study, the Chongqing Open Port Heritage Park demonstrates certain advantages in emotional, cultural, functional, and social dimensions, but there is still room for improvement. To better unleash the dual value of cultural dissemination and public service in city heritage parks, the following management suggestions are proposed:

- (1) Optimize the cultural narrative system and strengthen the transmission of cultural value. It is necessary to deepen the historical interpretation of the heritage site itself, combining the background of the city's opening and regional culture to construct a coherent spatial narrative chain. Strengthen cultural exhibitions and interactive education links, so that tourists can "understand, remember, and be willing to share".
- (2) Enhance spatial functional configuration and enrich functional experience content. It is recommended to improve the traffic guidance system, optimize route design, and enhance tourists' participation and satisfaction in the entire chain of "seeing, playing, and shopping".
- (3) Focus on emotional awakening mechanisms and deepen the creation of emotional value. Introduce multi-sensory experience elements (sound, scent, touch), set up immersive experience devices, create an emotionally evocative visiting path, promote emotional connections between tourists and the place, and enhance overall satisfaction and word-of-mouth dissemination.
- (4) Establish a closed-loop experience feedback system and promote dynamic management mechanisms. Based on the experience value evaluation scale proposed in this study, build an online and offline integrated tourist feedback system to achieve precise matching and continuous optimization between tourist needs and park management.

6. Conclusion

While preserving historical heritage, urban heritage parks also provide places for the public to get close to nature and understand history. In the research perspective of urban heritage parks, issues such as the protection and development of urban heritage, tourism product design, heritage and urban development occupy a dominant position, and there is relatively little research on the subject experience of tourists after long-term operation. As the most direct experiencers and evaluators, the needs and feedback of tourists deserve more attention and importance. Therefore, based on the theoretical framework of tourist experience and flow theory, this study collected 970 online reviews of Chongqing Kaiport Heritage Park. Through text mining combined with exploratory and confirmatory factor analysis, a four-dimensional evaluation system for tourist experience value in urban heritage

parks was constructed and validated. The study found that:

Emotional value, cultural value, functional value, and social value constitute the core dimensions of experience value. Among them, cultural value, as the core characteristic of heritage parks, strengthens tourists' cultural identity and enhances cultural confidence through the path of "historical knowledge acquisition - perception of heritage activation - behavioral identity". The newly identified dimension of social value reveals the impact of digital imaging social networking (photo-taking and checking in) and interactive experiences on the tourism experience in the digital age.

The study further identified four key observation indicators of functional value: transportation convenience and service quality constitute the basic experience guarantee; entertainment facilities and historical and cultural facilities are superimposed through interesting and educational functions, realizing the upgrading of the "integration of tourism and education" experience, and improving the depth of the experience.

Based on this, an 18-item scale for tourist experience value has been developed, providing urban ruins park operators with technical tools for dynamically monitoring tourist experiences and decision-making basis for optimizing resource allocation. At the same time, it can quantitatively evaluate the effectiveness of cultural activation, thus providing methodological support for the sustainable development of urban ruins parks.

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