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Service quality integration – a case study of Qiandao Lake Scenic Spot, China

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Abstract

In the Yangtze River Delta region of China, the Qiandao Lake Scenic Spot stands as a 5A-rated tourist attraction, both nationally and internationally recognized. However, despite its acclaim, the service quality at this destination has not yet reached satisfactory levels, particularly in light of the significant increase in tourists after the COVID-19 pandemic. Furthermore, the existing service quality dimensions fail to adequately address a crucial aspect: cultural integration for enhancing customer satisfaction. Consequently, this study aims to comprehensively explore service quality integration at the Qiandao Lake Scenic Spot. We developed a six-dimensional Service Quality scale, which was then administered to tourists visiting the destination. An Expectation-Performance Analysis revealed that the largest gap between expectations and actual performance lies in the 'assurance' dimension, closely followed by 'tangibility.' This highlights tourists' heightened concern for both 'assurance' and 'tangibility' aspects.

1. Introduction

The merging of China's Ministry of Culture and National Tourism Administration to form the Ministry of Culture and Tourism in 2018 has ushered in a new era of cultural and tourism integration. This institutional development is of great significance to China's tourism industry. Culture is the soul of tourism, and tourism is the carrier of culture. Tourism without culture loses its charm, and culture without tourism lacks vitality. Both culture and tourism are interrelated and important. Both elements should coexist to speed up tourism development (Hu, 2022; Zhong et al., 2023). Through this, a win-win situation exists when a bigger social and economic impact is achieved. The integration is expected to heighten and enhance tourists' sense of experience and increase tourists' satisfaction with the quality of tourism services. The local tourism is expected to be more culturally rich and the tourism industry will develop better as tourists can have a close experience of the local culture.

Qiandao Lake Scenic Spot, located in the Yangtze River Delta region, has China's most active economy and densest population. Qiandao Lake Scenic Spot, known as the world's three thousand island lakes, is a 5A-level tourist attraction in China and an internationally renowned tourist

attraction. The total area of the Qiandao Lake Scenic Area is 982 square kilometres, of which the lake area is 573 square kilometres. It is named after 1078 islands in the lake (ChinaDiscovery, 2024).

Post COVID-19, the scenic spot is now receiving a large number of tourists, and the tourism industry is expecting exponential growth. According to statistics, just the 7-day Spring Festival holiday in 2023, the Qiandao Lake Scenic Area received 96,100 tourists, the highest record since the scenic area was completed and opened (ChinaDiscovery, 2024). Despite the booming tourism industry, the service quality of the destination remains questionable. Moreover, the cultural aspects of the destination have been overlooked and are yet to be thoroughly studied (Furrer et al., 2000). Hence, the purpose of this study is two-fold: first, to integrate cultural dimension in an assessment of service quality to better understand its impact on tourists' satisfaction level; second, to identify the gap between the expectation and performance of the dimensions of service quality. Therefore, the research questions were formed as follows:

RQ1: What are the cultural integration factors that will affect tourists' satisfaction level at Qiandao Lake scenic spot?

RQ2: What are the gaps between the tourists' expectations and performance of these service quality factors?

2. Literature review

In order to balance the quality differences between different services, Parasuraman et al. (Parasuraman et al., 1985) proposed the SERVQUAL model. They set service standards in five dimensions for this analytical model: assurance, reliability, responsiveness, tangibility, and empathy. This model was initially used in the financial sector, and then it was gradually and widely used in the service quality evaluation of other industries, such as medical facilities, clinics, libraries, the information industry, and public service departments (Souca, 2011; Stevens, 1995; Ueltschy et al., 2007; Varki & Colgate, 2001). The SERVQUAL model is also used in marketing and has been recognized by marketing experts as an essential tool for evaluating the quality of various services (Stevens, 1995; Ueltschy et al., 2007; Varki & Colgate, 2001). Urdang and Howey (2001) focused on the quality of service when conducting research on travel agencies and advocated the use of the SERVQUAL model as a tool for customer satisfaction surveys for managers of travel agencies. On the other hand, Reichel et al. (2000) conducted a study and research on 23 entrepreneurs and 206 tourists who travelled to Israel and found the gap between expected value and perceived value by using the SERVQUAL model. Throughout the long period of studies and investigation, the SERVQUAL gap analysis model is mainly used in other industries.

In China, the SERVQUAL model was used as a reference for research on service quality, mainly involving the hotel industry, travel agencies, and scenic spots (Shi & Shang, 2020; Souca, 2011). Domestic scholars draw on the SERVQUAL model and combine China's basic national conditions to make a research paradigm suitable for use in China's context (Shi & Shang, 2020; Souca, 2011; Ueltschy et al., 2007; Yu, 2021). Researchers used the SERVQUAL model to make a quality evaluation scale for the service quality of scenic spots from seven aspects: safety, tangibility, aesthetics, empathy, sensitivity, environment, and assurance (Ma, 2010; Wu & Dong, 2023).

SERVQUAL is a widely used assessment tool. It helps managers to understand the expectations of tourists, find the causes for service quality problems in the scenic spot environment, and assist managers in finding directions and methods to improve service quality, put forward suggestions to reduce service quality and solve service quality problems and provide a basis for managers to improve the service quality of scenic spots (López-Toro et al., 2010; Parasuraman et al., 1985; Sharpley & Forster, 2003; Souca, 2011; Stevens, 1995; Ueltschy et al., 2007; Wu & Dong, 2023).

2.1 Tourism service quality
The use of SEVQUAL for the tourism industry has been previously explored. Over the years, tourism elements have been incorporated into the SEVQUAL model. O'Neill et al. (1999) have discussed the quality of tourism services and explored the conceptualization and measurement of service quality and the relationships between service quality, customer satisfaction, and repeat visitation at events. Their findings highlighted essential service quality features, including site features, staff features and other operational features.

In Urdang and Howey (2001), the SERVQUAL model was improved for travel agencies by including factors such as targeted improvements. Landscape, catering, and accommodation have been incorporated into SERVQUAL by Fuchs et al. (2002), who studied the factors that influence the quality of tourism service, such as cultural atmosphere and purchasing power. Chand (2010) also used the SERVQUAL scale model to evaluate the quality of tourism services in India. Wang et al. (2007) believed that the participation of tourists can affect the evaluation of the service quality of tourist attractions. Lin et al. (2021) believed that in tourism enterprises, the attention and management of managers in enterprises will directly affect the service quality.

Sharpley and Forster (2003) and Sharpley and Forster (2003) emphasized that, in a market with high price sensitivity, strong substitutability and fierce competition, the service providers need to learn from successful tourism companies, gain and accumulate experience, and adopt appropriate quality measures to improve the quality of their services. López-Toro et al. (2010) proposed further improvements to the service quality of Spain's famous landscape attractions in terms of environmental quality, service quality, and enterprise accessibility.

2.2 Cultural integration
The rise of the concept of all-for-one tourism and China's implementation of the rural revitalization plan has provided a broader space for integrating culture and tourism while putting forward new tests for creating unique cultural and tourism integration projects. The development of cultural tourism can create substantial economic and social benefits, improve the living standards of residents, enhance the social image (Bachleitner & Zins, 1999), create differentiated tourism products, and attract domestic and foreign tourists (Ondimu, 2002), and helped the country establish a good international image while broadening the product market (Vogt & Fesenmaier, 1995). Some scholars have emphasized that cultural tourism can increase the added value of tourism products, promote the sustainable development of cities, and realize the social and educational value of tourism (Moira, 2018; Wang, M. et al., 2007).

Domestic scholars believe that cultural heritage tourism can enhance the cultural environment and improve the quality of life, and the integrated development of culture and tourism can enhance the local economic value, aesthetic value and ecological value (Jin et al., 2022; Lin et al., 2024; Zhang et al., 2022). Cultural tourism also has an innovation function, integration function and structure optimization function to enhance industrial competitiveness (Zhang et al., 2022), manifested explicitly as the birth of new products and new markets, the promotion of value-added industrial chains, the promotion of organizational innovation and management innovation, and the extension of industrial competitiveness.

Other scholars have focussed on the research of tourism-led integration cases and paid more attention to the integration of cultural heritage and urban tourism, the integration of regional characteristic culture and rural tourism, and discussed the development of cultural resources from the perspective of heritage inheritance and cross-cultural communication (Loulanskia & Loulanski, 2011; Souca, 2011; Ueltschy et al., 2007). The impact of improvements in tourism products; domestic scholars have discussed the promotion of the integration of culture and

tourism on various elements of industrial competitiveness (Wu & Dong, 2023; Zeng et al., 2023; Zhong et al., 2023).

In a cultural industry, the sub-industries, such as cultural heritage, performances, festivals, and exhibitions, are further expanded when integrated with tourism. The introduction of culture and creativity is conducive to the construction and development of local tourism brands (Wang et al., 2023). Therefore, considering the quality of tourism services, tourists' perspectives should be given the most attention. Moreover, cultural performing arts programmes have reaped the growth of the creative economy and experience economy (Zhong et al., 2023). Thus, it is imperative that the SERVQUAL model is integrated with the cultural and tourism elements to examine the service quality at Qiandao Lake Scenic Spot adequately.

3. Study methods

The SERVQUAL service quality model generally divides service quality into five dimensions: tangibility, reliability, assurance, responsiveness, and empathy (Chand, 2010; López-Toro et al., 2010; Ma, 2010; Parasuraman et al., 1985; Wu & Dong, 2023). For the purposes of this study, the sixth dimension, 'integration', was added, as the integration of cultural heritage and tourism is critical for the sustainable development of a heritage destination (Furrer et al., 2000; Loulanskia & Loulanski, 2011). A measurement of 24 indicators was designed.

The data was collected through a questionnaire survey. The questionnaire was designed based on the SERVQUAL service quality model. Section 1 of the questionnaire elicits demographic data, including gender, age, education, annual income, and the respondents' origins. Section 2 assesses the tourism service quality, including tangibility, reliability, responsiveness, assurance, empathy, and integration. Respondents were required to indicate their expectations before arriving at the scenic spot and the perceived value after the tour on a 5-point response scale. Section 3 requires respondents to evaluate the importance of the six service quality dimensions, with the response scale ranging from 1, unimportant, to 5, extremely important. Section 4 elicits data on the overall evaluation of the service quality of the Qiandao Lake Scenic Area. Respondents were asked whether they would recommend Qiandao Lake Scenic Area to relatives and friends, and whether they would return to visit the site. The overall evaluation of the service quality of Qiandao Lake Scenic Area was divided into five response points, namely very good, relatively good, average, relatively poor, and very poor.

3.1 Data collection
A pilot test was carried out in mid-May 2023. The Chun'an County Culture Department, Radio, Television, Tourism and Sports Bureau, and the industry authority of the Qiandao Lake Scenic Area were contacted to assist with the distribution of the pilot questionnaires. In addition, a travel agency guide who brought tourists to visit the Qiandao Lake Scenic Area was entrusted to distribute the questionnaire survey. After the pilot test, the questionnaire was revised and improved. A brief description of the 'expectation value' and 'performance value' was added in Section 2. The response scale was also revised.

Data collection was carried out by a team of trained research assistants led by the main researchers in the Qiandao Lake Scenic Area. After two days of on-site research, a total of 240 questionnaires were distributed, and 235 were retrieved, of which 227 were valid questionnaires and 8 invalid questionnaires (missing data), with a rate of 97.9% and an effective collection rate of 94.6%.

3.2 Demographic profile

Table 1 summarises the respondents' background information. Men accounted for 54.6% of the respondents, and women accounted for 45.4%. The largest group is those aged below 30 years old, followed by 31 to 40 years old. Tourists under the age of 40 accounted for nearly half (48.5%) of the crowd. The majority also have some form of tertiary education. Income-wise, the middle-income level accounts for the largest proportion. Most of the tourists came from Zhejiang Province, Shanghai, Jiangsu, Anhui and other Yangtze River Delta regions.

Table 1: Respondents' profile

Variables	Categories	Number of People	Percentage (%)
Gender	Male	124	54.6
	Female	103	45.4
Age	30 years old and below	57	25.1
	31-40 years old	53	23.4
	41-50 years old	42	18.5
	51-60 years old	45	19.8
	60 years old and above	30	13.2
Academic Background	High school and below	66	29.1
	Junior college	75	33.0
	Undergraduate	77	33.9
	Master's degree and above	9	4.0
Annual Income	Below 100,000 Yuan	88	38.8
	100,000-300,000 Yuan	65	28.6
	300,000-500,000 Yuan	67	29.5
	More than 500,000 Yuan	7	3.1
Origins	Qiandao Lake Local	11	4.8
	Zhejiang Province	66	29.1
	Yangtze River Delta Region	100	44.1
	Other Areas in China	49	21.6
	Outside the Country	1	0.4

3.3 Overall evaluation

Data for the overall evaluation is shown in Table 2. 31.7% of the respondents agreed that the service quality of Qiandao Lake Scenic Spot is very good, 63.0% rated the service quality as relatively good, and 5.3% of tourists rated the service quality of Qiandao Lake Scenic Spot is average. It shows that the overall service quality of Qiandao Lake Scenic Area is good, but the number of tourists who rated relatively good and average accounts for 68.8%, which means there is still room for improvement in service quality.

Table 2: Data analysis of the overall evaluation.

Evaluation items	Rating	Frequency	Percentage (%)
Overall evaluation of the service quality of Qiandao Lake Scenic Area	Very good	72	31.7
	Good	143	63.0
	Normal	12	5.3
	Bad	0	0
	Very bad	0	0
Would you recommend Qiandao Lake Scenic Area to relatives and friends?	I will	195	85.9
	I won't	11	4.8
	Depends	21	9.3
Will you come to Qiandao Lake Scenic Area again?	I will	147	64.8
	I won't	21	9.2
	Depends	59	26.0

85.9% of the respondents would recommend the Qiandao Lake scenic spot to their relatives and friends, and 4.8% of the tourists would not recommend it to their relatives and friends. 9.3% of the tourists were indecisive about recommending the Qiandao Lake scenic spot to their relatives or friends. 64.8% of tourists indicated they would come to the Qiandao Lake Scenic Area again, but 9.2% of tourists would not, and 26.0% were indecisive.

4. Data analysis and findings

This section focuses on the analysis of the tourism service quality evaluation of the SERVQUAL scale and evaluates the importance of the six dimensions. Pair-wise t-test was used to analyze these dimensions.

4.1 Overall tourism service quality evaluation

The average expected value, the average perceived value and the average. The value of the 'expectation-performance' gap for each index of tourism service quality in the six dimensions was analyzed, as shown in Table 3. 'Tangibility' has the highest expected average value, which was 4.610, followed by 'integration' and 'reliability', which were 4.573 and 4.514 respectively. 'Responsiveness' and 'assurance' were average, with the lowest expectation of 'empathy'.

'Assurance' has the lowest score of performance, which is 3.858. The largest 'expectation-performance' gap was 'assurance', followed by 'tangibility', which were -0.604 and -0.593, respectively, which shows that tourists care most about 'assurance' and 'tangibility'. The 'integration' scored relatively well from the tourists' perception, although there is still room for improvement.

Table 3: Expectation vs. performance values

Dimensions	Expectation Mean	Perceptual Mean	Mean difference	Pair-wise t-test
Tangibility	4.610	4.017	-0.593***	-11.945
Reliability	4.514	3.943	-0.571***	-10.877
Responsiveness	4.476	4.021	-0.455***	-8.649
Assurance	4.462	4.108	-0.354***	-7.902
Empathy	4.414	4.040	-0.374***	-8.089
Integration	4.573	4.202	-0.371***	-7.295

Note: *** indicates significance at the 1% level .

4.2 Analysis of each element's mean differences

The tourism service quality expectations, performances, and the mean difference of each indicator are sorted and shown in Table 4. It was found that the expected value of all 24 indicators was above 4 points, indicating that tourists have high expectations for the Qiandao Lake Scenic Area, and the comprehensive expected value reaches 4.508 points. There are 15 indicators of performance value above 4 points, and the performance value of 9 indicators is between 3 points and 4 points. The comprehensive perceived value is 4.013 points, but the Gap of 'expectation-performance' has reached 0.495, which shows that there is still a certain gap between performance and expectation. The mean differences are statistically significant at 1% level.

Table 4: Tourism service quality expectation, performance, and gap of each index

Index	Expectation	Performance	Mean difference	Pair-wise *t*-test
Tangibility				
A1 The scenic area has complete infrastructure	4.687	4.000	-0.687***	-10.475
A2 The appearance of the staff in the scenic spot is neat and clean	4.546	4.115	-0.431***	-8.521
A3 Scenic Area has complete transportation facilities and convenient access	4.595	3.991	-0.604***	-8.892
A4 Scenic spot ticket price is reasonable	4.612	3.960	-0.652***	-8.929
Reliability				
B1 The service content promised by the scenic spot to tourists can be completed in a timely and comprehensive manner	4.595	4.062	-0.533***	-8.747
B2 The promotional content of the scenic spot is consistent with the actual experience	4.533	3.695	-0.838***	-9.954
B3 The facilities in the scenic area make you satisfied	4.493	4.013	-0.480***	-6.982
B4 Scenic spots are well preserved and maintained	4.436	4.000	-0.436***	-6.381
Responsiveness				
C1 Scenic staff are very prompt when providing basic services	4.520	4.093	-0.427***	-6.562
C2 Scenic staff can quickly meet the individual requirements of tourists	4.405	3.969	-0.436***	-6.128
C3 The service staff of the scenic spot will not ignore your request because of being busy	4.513	4.137	-0.376***	-5.524
C4 Customers can conveniently book tickets, meals and other services	4.467	3.885	-0.582***	-8.551
Assurance				
D1 All kinds of index signs in the scenic spot are clear and accurate	4.551	4.145	-0.406***	-5.600
D2 Scenic service staff are always friendly and enthusiastic to you	4.436	4.344	-0.093**	-2.006
D3 Service personnel in scenic spots have mature and professional service skills	4.537	3.982	-0.555***	-7.407
D4 Scenic spots have standardized services and no fraudulent tourists	4.322	3.960	-0.362***	-5.299
Empathy				
E1 Scenic personnel always put the interests of customers first	4.401	4.106	-0.295***	-4.644
E2 Scenic spot staff can take the initiative to understand your needs	4.427	4.088	-0.339***	-4.276
E3 The staff of the scenic spot will care about the troubles you encounter	4.370	4.115	-0.255***	-4.558
E4 Scenic spots can provide special service equipment for disabled tourists	4.458	3.850	-0.608***	-8.707
Integration				
F1 Scenic spot has distinctive cultural characteristics and a high degree of integration of culture and tourism	4.687	4.229	-0.458***	-6.897
F2 Scenic Spot fully presents its historical culture, ecological culture, regional culture, etc.	4.573	4.198	-0.375***	-5.395
F3 Scenic spot staff will take the initiative to introduce local folk culture	4.555	4.264	-0.291***	-4.536
F4 The integration of culture and tourism in scenic spots increases the sense of tourism experience	4.476	4.115	-0.361***	-4.904
Composite Score	**4.508**	**4.055**	**-0.453*****	-13.329

Note: *** and ** indicate significance at the 1% and 5% level respectively.

The five biggest indicators of the 'expectation-performance' gap are 'D2 The scenic spot service personnel are always friendly and enthusiastic to you', 'B2 The scenic spot's promotional content is consistent with the actual experience', 'A1 The scenic spot has complete infrastructure', 'A4 The ticket price of scenic spot is reasonable', and, 'E4 The scenic spot can provide special service equipment for disabled tourists', which shows that there is still room for improvement especially in these five aspects. Among them, the gap value of 'expectation-performance' of the indicator 'D2 scenic spot service personnel is always friendly and enthusiastic to you' reached -1.093, indicating that the service attitude of scenic spots was relatively poor, and the quality and service level of scenic spot service personnel need to be greatly improved.

The expected and perceived values are further analyzed with Expectation-Performance Analysis, as shown in Figure 1.
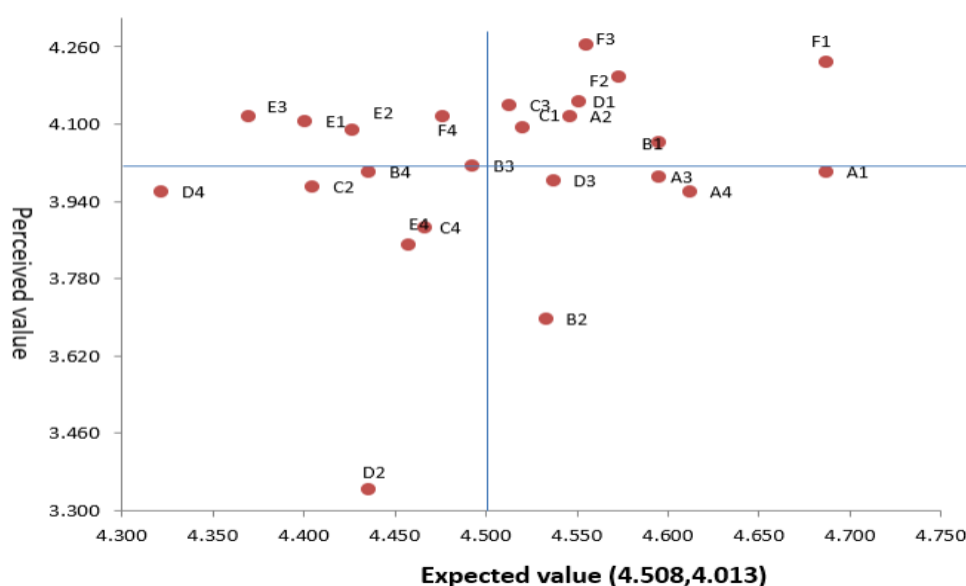

Figure 1: Expectation-Performance Analysis

In terms of indicator distribution, there are 8 indicators with high expectation and high-performance value, which should be maintained; 5 indicators with low expectation and high-performance value, which is generally good; 6 indicators of low expectation and low performance, which do not need to be paid too much attention.

Among all 24 indicators, the 5 indicators with the highest expected value are 'A1 scenic spot has complete infrastructure', 'F1 The scenic spot has distinctive cultural characteristics and a high degree of integration of culture and tourism', 'A4 The scenic spot has reasonable ticket prices', 'A3 The scenic spot has complete transportation facilities, convenience of entry and exit', and 'B1 The scenic spot can complete the service content promised to tourists in a timely and comprehensive way', with the expected score above 4.595, indicating that these 5 indicators are also the aspects that tourists pay most attention to; the 5 indicators with the worst perceived value are 'D2 The service personnel in scenic spots are always friendly and enthusiastic to you', 'B2 The promotional content of scenic spots is consistent with the actual experience', 'E4 The scenic spots can provide special service equipment for disabled tourists', 'C4 The customers can conveniently book tickets, meals, etc. Service', and 'A4 The scenic spot ticket price is reasonable', which shows that the scenic spot was doing poorly in these 5 aspects.

5. Discussion and implications

Based on the survey conducted, there is a gap in the quality of tourism services in the Qiandao Lake Scenic Area, and targeted improvement measures are proposed. Moreover, via the open-ended questions, some of the respondents commented that there are too many businesses in the scenic spot, too many products/services need to be charged, too many marketing chaos, inconvenience of transport in the scenic spot, lack of facilities such as water dispenser room, insufficient supporting facilities, high catering fees in scenic spots, and potential safety hazards on boarding decks.

The expected value of all 24 indicators in the questionnaire score an average of 4 points and above, indicating that tourists have high expectations on the Qiandao Lake scenic spot, and the comprehensive expected value reaches 4.508 points. The five indicators with the highest expected value are 'A1 scenic spot has complete infrastructure', 'F1 scenic spot has distinctive cultural characteristics and a high degree of cultural and tourism integration', 'A4 scenic spot has reasonable ticket price', 'A3 scenic spot has complete transportation facilities and convenient access' and 'B1 scenic spot The service content promised to tourists can be completed in a timely and comprehensive manner', with an expected score of 4.595 and above.

The five indicators with the worst performance value of tourists are 'D2 scenic spot service personnel are always friendly and enthusiastic to you', 'B2 scenic spot's promotion content is consistent with the actual experience', 'E4 scenic spot can provide special services for tourists with disabilities', 'C4 Customers can conveniently book tickets, catering and other services', 'A4 Scenic Spots are reasonably priced', which shows that the Qiandao Lake Scenic Spot was doing relatively poorly in these 5 aspects.

The 'expectation-performance' gap has 9 indicators above 0.5. The largest 5 indicators include 'D2 scenic spot service personnel are always friendly and enthusiastic to you', 'B2 scenic spot's promotional content is consistent with the actual experience', 'A1 scenic spot has complete infrastructure', 'A4 scenic spot has reasonable ticket price', and 'E4 scenic spot can provide special service equipment for disabled tourists', which shows that there is still a lot of room for improvement in these five aspects. Among them, the 'expectation-performance' gap of the indicator 'D2 scenic spot service personnel is always friendly and enthusiastic to you' reached -1.093, indicating that the service attitude of scenic spots was poor, and the quality and service level of scenic spot service personnel needed to be greatly improved.

It is necessary to increase the dimension of 'cultural integration'. This study finds that 'cultural integration' is a critical factor that tourists expect high but are perceived as not up to their expectations. The 4 indicators of cultural integration are 'Scenic spot has distinctive cultural characteristics and a high degree of integration of culture and tourism', 'Scenic Spot fully presents its historical culture, ecological culture, regional culture, etc.', 'Scenic spot staff will take the initiative to introduce local folk culture', and 'The integration of culture and tourism in scenic spots increases the sense of tourism experience'.

Through the analysis of the gaps in tourism service quality in each dimension of the SERVQUAL scale, it is found that tourists are expecting high but perceived low on the indicators of 'tangibility', followed by the indicators of 'integration'. Theoretically, this study extended a small step forward by identifying 'cultural integration', a dimension which has an impact on tourists' satisfaction. Practically, the practitioners can clearly know what problems exist in the service quality of Qiandao Lake Scenic Area and minimize the gaps between the 'expectation' and 'performance' of these different factors.

6. Implications

6.1 Improve the infrastructure of scenic spots (tangibility)

The expectation-performance gap of the tangible indicators was pointing that 'A1 scenic spot has complete infrastructure', 'A3 scenic spot has complete transportation facilities and convenient access' and 'A4 scenic spot has reasonable ticket price' were all above 0.6. 'A1 scenic spots with complete infrastructure' also ranks third largest gap among the 24 indicators. Therefore, the Qiandao Lake Scenic Area should focus on improving infrastructure.

Combined with the opinions put forward by the on-site survey tourists, the Qiandao Lake Scenic Area should be improved in the following aspects. First, the primary means of transportation in and out of the scenic spot are cruise ships or speedboats, and the decks of upstream and downstream ships must be reinforced to ensure the safety of tourists. Second, hot water dispenser facilities should be increased in scenic spots for the convenience of visitors. Third, the operations of the cruise ships should be improved to reduce the waiting time.

6.2 Optimize the publicity and promotion of scenic spots (reliability)

Tourists in the Qiandao Lake Scenic Area have relatively large perceived gaps in the reliability indicators such as 'B2 the promotional content of the scenic spot is consistent with the actual experience' and 'B1 the service content promised by the scenic spot to tourists can be completed in a timely and comprehensive manner', which were -0.838 and -0.533 respectively. The main reason was that the Qiandao Lake Scenic Spot has a high reputation, and the best time for a visit was often publicized and promoted. 'Qiandao' in Chinese means thousands of islands, and these different islands have been grouped and designed under eleven themes which target different tourists. When tourists visit these spots, they might be disappointed because their expectations and reality differ. It is recommended that the best viewing spots be marked with signboards, etc., or that the tourists be presented with the best viewing effects through the use of modern technology such as VR experience.

In addition, if there were to be any scenic spots or service content promised to the public through promotion, it should be completed in a comprehensive manner to gain the affirmation of tourists and enhance the image of the scenic spot.

6.3 Pay attention to the individual needs of tourists (responsiveness)

In terms of responsiveness indicators, 'C4 Customers can conveniently book tickets, catering and other services', showed a relatively higher gap, which was -0.582, and the other three indicators were generally good. However, whether the needs of tourists were paid attention to and met is an essential basis for tourists to evaluate the scenic spot. When tourists receive immediate help, it could boost them favourably towards the scenic spot. First, tourists' tickets and meal reservation information must be provided promptly. Second, the staff should not only pay attention to standardized and process-oriented tourism services but also to the individual needs of tourists and provide related services.

6.4 Strengthen the training of personnel in scenic spots (assurance)

Relatively larger expectation-performance gaps in the assurance indicators include 'D2 service personnel are always friendly' and 'D3 scenic spot service personnel have matured and professional service skills', which scored -1.093 and -0.555, respectively. Among the 24 indicators, the performance gap of 'D2 service personnel are always friendly' was the largest,

indicating that the attitude and service skills of service personnel in Qiandao Lake scenic spot need to improve. This can be achieved via three methods. First is training to increase competencies in delivering services and communication. Second is managing employees via codes of conduct, employee feedback systems, and a clear reward and punishment system. The third method is to develop a harmonious work environment that is comfortable and pleasant.

6.5 Concern About Special Service Equipment (empathy)

'E4 scenic spots can provide special service equipment for disabled tourists' had the largest expectation-performance gap, which was -0.608, and the performance of the other three indicators was generally good. Qiandao Lake Scenic Area should equip public places with relevant facilities and equipment for special groups such as disabled tourists, pregnant women and the elderly for their convenience and support.

6.6 Excavate the integration elements of culture and tourism

The expectation-performance gap of 'F1 scenic spot has distinctive cultural characteristics and a high degree of integration of culture and tourism' is relatively larger, at -0.458. This showed that there is still room for further improvement in integrating culture and tourism in the Qiandao Lake Scenic Area. First, the Qiandao Lake Scenic Area can further excavate the local historical culture, ecological culture, regional culture, folk culture, etc., and integrate them with the scenic spot projects or activities to endow tourism activities with rich cultural connotations. Second, it will strengthen the training of guides in the scenic spot. More local cultural content should be introduced so that tourists can have a better understanding of the local culture of Qiandao Lake and enhance their experience. Third, to excavate and develop potential tourism resources, increase cultural experience items, and effectively create the functions of cultural experience, folk experience, sightseeing and leisure in scenic spots so that tourists can change from 'sightseeing tourism' to 'participatory experience' tourism, and enrich tourist experience.

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