

Article

Research on Customer Satisfaction in Marine Cultural and Sustainable Tourism—A Case Study of Shanghai

Yuxiang Zheng ¹, Jiaying Wang ¹, Sang-Bing Tsai ^{2,3,4,*}, Guodong Li ^{3,*}, Jiangtao Wang ^{2,*} and Jie Zhou ^{5,*}

¹ School of Economics & Management, Shanghai Maritime University, Shanghai 201306, China; yxzheng@shmtu.edu.cn (Y.Z.); 201210731007@stu.shmtu.edu.cn (J.W.)

² Zhongshan Institute, University of Electronic Science and Technology of China, Zhongshan 528400, China

³ Economics and Management College, Civil Aviation University of China, Tianjin 300300, China

⁴ Law School, Nankai University, Tianjin 300071, China

⁵ College of Tourism and Service Management, Nankai University, Tianjin 300071, China

* Correspondence: sangbing@hotmail.com (S.-B.T.); gdli@cauc.edu.cn (G.L.); jiangtao-w@foxmail.com (J.W.); zhousjie_1980@126.com (J.Z.)

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Abstract: In recent years, marine cultural tourism, an emerging tourism mode, has become more and more popular among tourists, and demonstrates broad market prospects. However, Chinese marine cultural tourism is still in the development and growth stage, and the level of customer satisfaction is uneven. The improvement of the customer satisfaction level is conducive to meeting customers' demands in marine cultural tourism and enhancing the competitiveness of Chinese marine cultural tourism. Based on theoretical research and the practical situation of marine cultural tourism, this paper implements empirical investigation and research into customer satisfaction in marine cultural tourism in Shanghai, China. According to the research results, it proposes improving the level of customer satisfaction in Chinese marine cultural tourism from the perspectives of ocean culture tourism promotion, customer satisfaction evaluation, service level management and environment construction of scenic spots, tourism branding and the marine cultural accomplishments of tourists, so as to promote the sustainable development of marine cultural tourism.

Keywords: marine cultural tourism; customer satisfaction; sustainable development; green tourism; sustainable tourism

1. Introduction

In recent years, with the rapid economic and social development in China, national income has gradually improved, and people's consumption concept is constantly updating. The traditional tourism form can no longer meet people's diverse demands on tourism. As a result, diversified tourism modes, such as coastal tourism and marine tourism, have attracted much attention, and better meet people's demands on tourism. According to information announced by the World Tourism Organization the number of global tourists was up to 1.2 billion in 2016, with an annual growth rate of 4%. The data show that the tourism industry has developed into one of the industries with the largest scale and most powerful development momentum in the global economy. This shows that as an emerging tourism mode, marine cultural tourism has become an indispensable pioneer and driving force for the development of the current and future tourism industry.

The theoretical research and development of marine cultural tourism in China is still in the growth stage, and needs to be further improved. Furthermore, the study of customer satisfaction of marine cultural tourism is an important subject that combines theory and practice. This paper takes Shanghai

as an example to analyze customer satisfaction in order to study the customer satisfaction of marine cultural tourism, so as to combine theory and practice organically.

2. Literature Review

Research concerning marine cultural tourism has developed in recent years. Dong Zhiwen and Zhang Guanghai [1] pointed out that it was necessary to deeply excavate the characteristics and connotations of marine culture, and emphasize the cultural heritage of tourism products in the development process of marine cultural tourism. Zhang Yanqing, Ma Bo, and Fan Yingjie [2] believed that the increasingly developed domestic economy and the continuously improved level of living consumption make people pay more attention to the relaxation and vacation properties of tourism. Therefore, an increasing number of Chinese tourists have turned their attention to the well-developed field of cruise tourism as an attractive emerging tourism mode at home and abroad. Xu Zhaocheng and Zhang Jing [3] studied the on the development mode of marine cultural tourism and how to promote its development in China. They argued that the overall development of the Chinese marine cultural tourism industry should be prompted through an integrated development mode [3].

In the meantime, some scholars have deeply studied the status of marine cultural tourism in different regions. Han Zhiqiang and Zheng Yaoxing (2007) discussed the development status of marine cultural tourism in Fujian Province. They pointed out problems in the development process of marine cultural tourism resources in Fujian Province, and put forward suggestions for accelerating the development of marine cultural tourism [4]. Su Yongjun (2007) studied the connotations and value of marine culture in Ningbo, and further investigated how to promote the development of tourism in Ningbo [5]. Liu Yong (2015) studied the development status of marine cultural tourism on the Shandong Peninsula. He pointed out factors restricting the development of marine cultural tourism in Shandong Province, and put forward some improvement suggestions [6]. Liu Yumei (2013) researched the development of marine cultural tourism in Shanghai, and argued that marine cultural tourism could be developed from multiple aspects, such as institution and education [7].

In regard to customer satisfaction, Cardozo applied the concept of satisfaction to the field of marketing for the first time in 1965 [8]. He mentioned that customer satisfaction was conducive to promoting customers' consumption behaviors. Pizam (1978) pointed out that customer satisfaction can be distinguished by comparing expectation to the actual experiences of customers [9]. If tourists were quite satisfied with the results, they would be prone to generate satisfactory emotions. Otherwise, they would generate dissatisfactory emotions. Bigne and Martinez (2003) investigated customer satisfaction with travel agencies, and obtained five dimensions of service quality suitable for customer satisfaction with travel agencies [10]. Dong Guanzhi et al. [11], Gu et al. [12], and Qu et al. [13] studied the influence of various factors of customer satisfaction by establishing a satisfaction evaluation system. On this basis, more professional measures were taken to enhance customer satisfaction [11–13].

Therefore, customer satisfaction refers to people's evaluation of whether they are satisfied with the products they purchase and the services they enjoy [14–17]. The feedback of this evaluation indicates whether they will purchase the products or services again, to some extent [18–21]. The level of customer satisfaction depends on the relationship between their expectations of the products and their actual experiences after consumption [21–25]. If their expectations are significantly higher than the quality of their experiences, customers are more likely to have lower satisfaction; namely, dissatisfaction. If the quality of customers' actual experiences is equal to or higher than their expectations before purchase, they are prone to have a more satisfactory response; namely, satisfaction [26–29].

Research on customer satisfaction of marine cultural tourism is an important subject about theory and practice. The study of customer satisfaction in marine cultural tourism in China is relatively recent, and its development time has been short. There is not so much research on this aspect, and there is less research into representative tourism destinations in China.

3. Methods: Empirical Research on Customer Satisfaction on Marine Cultural Tourism

The purpose of this paper is to deeply explore customer satisfaction in marine cultural tourism, and to make a positive analysis, taking Shanghai as an example. The analysis can not only enrich domestic marine cultural tourism, but also provide our government and enterprises a comprehensive and systematic reference for the sustainable development of cultural tourism.

The reason why Shanghai was chosen as the research destination lies in its unique location and extensive human economic activities, which has resulted in the rich marine characteristics of the tourism resources in the region, and has formed unique developmental advantages in its development process for the last several thousand years, including excellent location conditions and convenient transportation, rich marine cultural tourism resources, strong economic conditions and strong government support. In 2016, the Shanghai Municipal Government issued the 13th Five-Year Plan of Shanghai Tourism Reform and Development, in order to promote the sustainable development of tourism in Shanghai and to provide policy support. Therefore, Shanghai, as a typical area of Chinese marine cultural tourism, has representative research significance.

During the study of the existing literature, the authors found that the study methods for marine cultural tourism have mainly been literature research and case studies. Questionnaires, as a normative social science research method, can not only effectively save time in obtaining first-hand data, but are also easy to quantify and use for carrying out statistical analysis. Therefore, this study uses the questionnaire method to do the positive analysis on customer satisfaction in marine cultural tourism. The questionnaire consists of four parts: the first part is an introduction to marine cultural tourism, which helps the respondents to understand the form of tourism form when filling out the questionnaire. The second part is basic information about the respondents, including gender, age, education level, travel mode and travel form, and degree of understanding of marine cultural tourism. The third part is a survey of the respondents' satisfaction with the status of resources, diet, accommodation, entertainment, tourism products, infrastructure, management and service of marine cultural tourism, as well as the overall satisfaction of marine cultural tourism measurement; and the importance that respondents placed on each of these aspects. The fourth part is the measurement of customer loyalty.

The scope of the research was mainly concentrated on Shanghai's marine cultural tourism resource enrichment areas, such as Shanghai Ocean Aquarium, Nanhui Tourist and Holiday Resort, the Bund of Shanghai, the Maritime Museum, and Drip Lake. Investigations are into those who have had or are engaged in a marine cultural tourism experience. A total of 360 questionnaires were distributed, and 313 questionnaires were collected, representing a collection rate of 86.94%. After screening, 301 questionnaires were valid, representing a validity rate for the collected questionnaires of 96.17%. Based on analysis on the data in the valid questionnaires, we statistically analyzed the reliability, validity, regression and correlation, and obtained results as follows.

3.1. Descriptive Analysis

Based on the statistics of the questionnaire, a descriptive analysis was made to comprehensively analyze the customer information in marine cultural tourism in terms of the aspects of gender, age, education level, travel mode, travel form, understanding of marine culture and tourist information access channels.

In terms of gender, the number of female tourists was 166, accounting for 55.15%; the number of male visitors was 135, accounting for 44.85%. From the gender ratio, the proportion of tourists to the marine cultural tourism is relatively balanced, female tourists than male tourists.

In terms of age structure, the age range for marine cultural tourism is mainly concentrated around 26–35 years old, with a total of 122, accounting for 40.53% of the total number of samples. Customers within this age range are young and energetic, and normally have strong purchasing power. The number of people from the age ranges of 18–25 years old and 36–50 years old was 85 and 58, representing proportions of 28.24% and 19.27%, respectively. There were 19 tourists under the age of

18, representing a proportion of 6.32%; and there were 17 tourists over 50 years old, representing a proportion of 5.64%.

In terms of education level, there were 83.39% of tourists with college education or higher, of which the number of specialists was 173, accounting for 57.48%. The number with a master's degree or higher was 78, accounting for 25.91%, indicating that marine cultural tourism customers reflect a high level of culture. The number of high school leaver tourists was 19, representing a proportion of 6.31%; and the number of junior high school tourists was 31, representing a proportion of 10.30%.

In terms of means of travel, there were 179 people who chose to take the subway or bus, representing a proportion of 59.47%, which also reflects the convenience of public transport system in Shanghai; 94 people chose to travel by car, representing a proportion of 31.23%; 13 people chose taxi travel, accounting for about 4.32%; and there were 15 people who chose other modes of transport, such as bicycles, walking and so on, representing a proportion of 4.98%.

In terms of the form of travel, marine cultural tourism customers mostly traveled with others; with 152 people who traveled with their families, accounting for 50.50%, and 127 people who traveled with friends, accounting for 42.19%, which also reflects to a certain extent that marine tourism has the characteristics of a group. Twelve people chose to travel alone, accounting for 3.99%; and 10 people chose to travel with a group, accounting for 3.32%.

In terms of the degree of understanding, only 9 people know a lot about marine cultural tourism among 301 people, accounting for about 2.99%; 25 people had a general understanding about marine cultural tourism, accounting for 8.31%; 159 people had only heard of marine cultural tourism, accounting for 52.82%; and there were 108 people who had not heard of marine cultural tourism, accounting for 35.88%. Through the survey, the authors found that many tourists did not understand marine cultural tourism. Although some people had had or were engaged in marine cultural tourism experiences, they were not aware of their own marine cultural tourism behavior; the spread of marine cultural tourism knowledge is not wide enough.

In terms of channel, most visitors learned about it through the recommendation of friends and family, which accounted for 62.13%, with a total number of 187; there were 61 people who obtained tourism information through television, newspapers and other media, accounting for 20.27%; there were 43 people who obtained information through the network, accounting for 14.29%; 7 people who obtained tourist information through travel agencies, accounting for 2.32%; and 3 people who obtained it through other means, accounting for 0.99%. Clearly, marine cultural tourism tourists are more frequently recommended by trusted acquaintances, so the development of marine cultural tourism should pay attention to the construction of positive suggestion, in order to make positive word-of-mouth for the image of marine cultural tourism.

3.2. Reliability Analysis and Validity Analysis

3.2.1. Reliability Analysis

After collecting the questionnaires, reliability analysis is important to measure reliability and validity. Reliability tests mainly measure whether the data is stable or not, and are not necessarily related to the correctness of the measurement results. Generally speaking, the reliability of the test is in direct proportion to the credibility of the test results. The Cronbach α coefficient is widely utilized as a method of reliability analysis.

According to Table 1, the Cronbach α coefficients of sightseeing, food and drink, traffic, entertainment, shopping and customer loyalty are all greater than 0.5. This indicates the high reliability of the questionnaire, which conforms to the research standard.

Table 1. Cronbach α coefficients.

	Cronbach α Coefficient	Number of Items
Sightseeing	0.713	2
Food and Drink	0.574	2
Traffic	0.631	2
Entertainment	0.648	2
Shopping	0.751	2
Customer Loyalty	0.817	2

3.2.2. Validity Test

The common factor variances of natural scenery, human scenery, food and drink, accommodation, traffic, entertainment, tourism product, pricing, management and service level, overall satisfaction, intention to revisit, and intention to recommend are all greater than 0.5, which indicates that these variables can be extracted to describe the components is shown in Table 2.

Table 2. Factor analysis: Communalities.

Items	Initial Data	Extraction
Natural scenery	1.000	0.618
Human scenery	1.000	0.517
Taste and distinguishing features of food and drink in scenic spots	1.000	0.588
Food environment and sanitary condition in scenic spots	1.000	0.567
Accommodation conditions near the scenic spot	1.000	0.780
Traffic convenience to the scenic spot	1.000	0.594
Completeness of traffic facilities in scenic spots	1.000	0.537
Diversity of entertainment activities	1.000	0.583
Participation of entertainment activities	1.000	0.578
Characteristics of tourism products	1.000	0.633
Diversity of tourism products	1.000	0.597
Supporting facilities in scenic spots	1.000	0.707
Rationality of pricing of the scenic spot	1.000	0.602
Management and service level	1.000	0.691
Overall satisfaction	1.000	0.753
Intention to revisit	1.000	0.829
Intention to recommend	1.000	0.861

Note: Extraction method: principal component analysis.

3.2.3. Structural Validity Factor Analysis

Kaiser-Meyer-Olkin (hereinafter referred to as KMO) test statistics are an index used to compare the simple correlation coefficients and partial correlation coefficients between variables.

As shown in Table 3, the KMO value of this research is 0.718, which is greater than 0.7. Significance probability of the sphericity test of Bartlett in the table is 0.000, which is greater than 0.01. Therefore, the analysis is in line with the research requirements, and is suitable for factor analysis.

Table 3. KMO and Bartlett test

Sample Enough Degree Of Kaiser-Meyer-Olkin Measurement	0.718	
Bartlett	Approximate chi-square	755.780
Sphericity test of Bartlett	Df.	136
	Sig.	0.000

3.3. Regression Analysis

A multiple regression analysis was implemented by taking the five major influence factors of satisfaction as independent variables, and the overall satisfaction as a dependent variable. The use of multiple regression analysis is conducive to understanding the significant role of different variables in determining the overall satisfaction of tourists.

Table 4 shows the results of the test of goodness of fit. This table examines the explanation degree of the five factors influencing customer satisfaction in terms of overall satisfaction. In Table 4, the correlation coefficient $R = 0.690$, determination coefficient R^2 is 0.477, and adjustment determination coefficient R^2 is 0.731. This shows a high goodness of fit. In addition, the significance levels of the five independent variables and constants influencing customer satisfaction are lower than 0.05, which indicates that these five factors can better explain the degree of overall satisfaction, and the fitting results of the regression equation are good. Therefore, the standard regression equation can be obtained from the regression analysis in Table 4:

Table 4. Regression coefficient and significance coefficient test.

Model	Regression Coefficient and <i>t</i> -Test	
	B	<i>t</i>
(Constant)	0.917	2.884 ***
Natural scenery	0.203	3.994 ***
Human scenery	0.212	4.758 ***
Taste and distinguishing features of food and drink in scenic spots	0.513	9.577 ***
Completeness of traffic facilities in scenic spots	0.171	2.727 ***
Characteristics of tourism products	0.149	2.088 **
F	36.055 ***	
R	0.690	
R ²	0.477	
Adjusted R ²	0.731	

Note: Sign *** ≤ 0.01 ; ** $0.01 < p \leq 0.05$. a. Predictor variables: (constant), characteristics of tourism products, completeness of traffic facilities in scenic spots, natural scenery, human scenery, taste and distinguishing features of food and drink in scenic spots. b. Dependent variable: overall satisfaction.

Overall satisfaction = $0.917 + 0.203 \times \text{Natural scenery} + 0.212 \times \text{Human scenery} + 0.513 \times \text{Taste and distinguishing features of food and drink in scenic spots} + 0.171 \times \text{Completeness of traffic facilities in scenic spots} + 0.149 \times \text{Characteristics of tourism products}$.

The regression analysis results indicate that natural scenery, human scenery, taste and distinguishing features of food and drink in scenic spots, completeness of traffic facilities in scenic spots, characteristics of tourism products have significant linear regression relation with the overall satisfaction.

3.4. Correlation Analysis

Analysis of the correlation between marine tourism resources and customer satisfaction suggests that natural scenery and cultural scenery of marine cultural tourism are significantly related with customer satisfaction. In other words, customer satisfaction in marine cultural tourism is influenced by natural resources and human resources of marine cultural tourism. Abundant natural resources and human resources are beneficial to improving customer satisfaction in marine cultural tourism. Thus the locals can take full advantage of the existing natural and human resources advantages and actively develop more innovative marine cultural tourism resources to improve the overall satisfaction of tourists and attract potential tourists.

Analysis of the correlation between drink in scenic spots and overall customer satisfaction suggests that taste and distinguishing features of food and drink in scenic spots are significantly related with customer satisfaction. In contrast, food environment and sanitary condition in scenic spots are not closely related with overall satisfaction. It shows that taste and distinguishing features of food and drink in scenic spots has a more significant influence on the customer satisfaction. Therefore, overall customer satisfaction in marine cultural tourism can be improved by enhancing the taste and distinguishing features of food and drink, such as by increasing the variety of seafood products and developing the new taste of seafood products.

Analysis of the correlation between traffic facilities and overall customer satisfaction suggests that completeness of traffic facilities in scenic spots is significantly related with customer satisfaction, while traffic convenience for scenic spots is not closely related with overall satisfaction. Therefore, it

could be possible to improve overall customer satisfaction in marine cultural tourism by perfecting the convenience and completeness of traffic in scenic spots, such as providing enough parking spaces and increasing the number of sightseeing vehicles in scenic spots.

Analysis of the correlation between entertainment and overall customer satisfaction suggests that neither the diversity nor the participation of entertainment activities is significantly related with customer satisfaction. Therefore, overall satisfaction will not be obviously affected by enhancing the diversity of and participation in entertainment activities in scenic spots. Scenic spots should focus on the main factors affecting the satisfaction of tourists to improve the status of marine cultural tourism.

Analysis of the correlation between tourism products and overall customer satisfaction suggests that the questionnaire data collected in this research indicate that characteristics of tourism products do not significantly affect the overall satisfaction. Therefore, in the process of studying how to improve overall satisfaction, research on tourism products can be attached with less attention so as to avoid inefficiency.

Analysis of the correlation between customer loyalty and overall customer satisfaction suggests that customers' intentions to revisit and recommend are significantly related with the overall satisfaction. That is, customers with higher overall satisfaction will have stronger intentions to revisit. Meanwhile, they will be willing to recommend their tourist experiences to others. In turn, customers' intentions to revisit and recommend reflect customer loyalty. Therefore, continuous improvement of customer satisfaction is conducive to enhancing customer loyalty is shown in Table 5.

Table 5. Correlations.

	Overall Satisfaction	Natural Scenery	Human Scenery
Correlations between marine tourism resources and customer satisfaction	Overall satisfaction	1.000	0.250 **
	Natural scenery	0.250 **	1.000
	Human scenery	0.336 **	−0.077
Correlations between drink in scenic spots and customer overall satisfaction	Overall satisfaction	1.000	0.626 **
	Taste and distinguishing features of food and drink in scenic spots	0.626 **	1.000
	Food environment and sanitary condition in scenic spots	0.063	0.089
Correlations between traffic facilities and customer overall satisfaction	Overall satisfaction	1.000	0.156 *
	Traffic convenience to the scenic spot	0.000	1.000
	Completeness of traffic facilities in scenic spots	0.156 *	0.002
Correlations between entertainment and customer overall satisfaction	Overall satisfaction	1.000	−0.017
	Diversity of entertainment activities	0.136	1.000
	Participation of entertainment activities	−0.017	0.068

Table 5. Cont.

Correlation between tourism products and customer overall satisfaction	Overall satisfaction	1.000	0.028	–0.004
	Characteristics of tourism products	0.028	1.000	0.081
	Diversity of tourism products	–0.004	0.081	1.000
Correlation between customer loyalty and customer overall satisfaction	Overall satisfaction	1.000	0.390 **	0.395 **
	Intention to revisit	0.390 **	1.000	0.910 **
	Intention to recommend	0.395 **	0.910 **	1.000

Note: ** When the confidence coefficient (bilateral) is 0.01, the correlation is significant; * When the confidence coefficient (bilateral) is 0.05, the correlation is significant.

4. Discussion and Suggestions

4.1. Pay Attention to Publicity to Enhance the Popularity and Reputation of Marine Culture

The development of marine cultural tourism cannot be separated from the participation and support of public tourists, the premise of which is that the public have must understand what marine cultural tourism is. Marine cultural tourism is an emerging tourism mode. Statistical analysis though the questionnaire found that many tourists do not understand or have never heard of marine cultural tourism. If tourists do not have a clear understanding of marine cultural tourism, it is impossible to improve customer satisfaction with marine cultural tourism, and development of marine cultural tourism will be promoted slowly.

On the one hand, the government should place an emphasis on marine cultural tourism. Shanghai and other coastal cities should exploit their geographical advantages, vigorously promote their own marine cultural resources, strive to build the image of the city of the ocean, strengthen publicity, and display marine characteristics. On the other hand, scenic spots can show the marine culture and popularize the universal knowledge of marine cultural tourism through television media and WeChat public numbers, etc. This can arouse the public's interest in marine cultural tourism and strengthen the public's recognition of marine culture. At the same time, the government can also cooperate with marine cultural scenic spots to hold large-scale marine cultural tourism festivals, which can not only widely publicize the marine culture, but also produce certain economic effects.

4.2. Evaluate Customer Satisfaction on Marine Cultural Tourism at Regular Intervals

Customer satisfaction evaluation methods such as this questionnaire are an effective way to measure customer satisfaction. Regular evaluation of customer satisfaction is of great significance for promoting the development of marine cultural tourism. Firstly, regular customer satisfaction evaluation is conducive to better grasping the customer market for marine cultural tourism. Secondly, regular evaluation of customer satisfaction enables scenic spots to find problems in time, prepare emergency plans, and enhance overall competitiveness.

In order to improve the efficiency and accuracy of customer satisfaction evaluation, regular evaluation of customer satisfaction in marine cultural tourism should emphasize the following questions: First, the questionnaire should be designed comprehensively and scientifically. The questionnaire content should reflect the level of customer satisfaction on the marine cultural tourism from multiple dimensions. Second, the respondents should be selected reasonably. The respondents should be selected from among customers with experience of marine cultural tourism, so as to guarantee that the survey data is scientific and valid.

4.3. Emphasize the Construction of Scenic Spot Management Service Level

As a tertiary industry, marine cultural tourism should emphasize high levels of management efficiency, and high levels of service quality. Reasonable handling of customer complaints plays an important role in enhancing customer loyalty. Through the analysis of customer satisfaction questionnaires in marine cultural tourism, we find that customer loyalty has a significant influence on overall satisfaction. Therefore, the scenic spot must pay serious attention to the customer complaints. The problems should be solved in a timely and normative manner to ensure that the customers' complaints can be resolved within the prescribed time. Also, solutions and improvement suggestions should be fed back to customers without delay. In marine cultural tourism, the proper resolution of customers' complaints will improve the level of customer satisfaction, which will help to further build customer loyalty.

In addition to properly handling customer complaints, scenic spots should actively explore ways of improving the level of management to form a systemic management service mode. Because of the intrinsic characteristics, the peak season of marine cultural tourism is summer and autumn, during which there will inevitably be a large number of tourists visiting the scenic spots. Scenic spots should prepare contingency plans based on different situations, and pay attention to service quality. Also, it is necessary to take into consideration the bearing capacity and reception capacity of the scenic spots. It is inadvisable to target profit regardless of bearing capacity and service quality. Meanwhile, management departments of scenic spots need to strengthen the training of professional skills and professional quality which can further enhance customer satisfaction.

4.4. Strengthen and Perfect the Environmental Construction of Scenic Spots

According to the analysis of the customer satisfaction questionnaire for marine cultural tourism, completeness of facilities in scenic spots is positively related to overall satisfaction. Therefore, the relevant government departments must strengthen marine cultural tourism scenic environment construction, and support and rectify the market environment to provide favorable external conditions for the development of marine cultural tourism. Firstly, tourism departments should increase investment and construct infrastructure for marine cultural tourism, such as parks, toilets, and accommodation conditions of scenic spots. The construction and completion of this infrastructure not only promotes the development of marine cultural tourism, but also improves customer satisfaction. Secondly, different functional departments should strengthen cooperation and develop a scientific and rigorous theoretical development framework for marine cultural tourism according to the current situation and characteristics of marine culture, so as to guide the scientific development of marine cultural tourism. Finally, tourism management departments should give full regard to the role of guidance and supervision, strengthen the protection of marine cultural tourism resources, and improve the laws and regulations of developing marine cultural tourism.

4.5. Enhance the Public's Marine Cultural Appreciation Ability

According to the survey, Chinese people's awareness of marine culture is weak, and their marine culture level is relatively low. Through the analysis on the questionnaire of customer satisfaction on marine cultural tourism, it can be seen that many people have no idea about the concept of marine cultural tourism, even if they have experienced or are experiencing marine cultural tourism. Therefore, it is necessary to improve the public's knowledge of marine culture and enhance their awareness of marine culture in the current development situation. Talents are an important reserve force for sustainable development. The development of marine cultural tourism and the improvement of public awareness of marine culture are also inseparable from the support of marine talents. On the one hand, it is necessary to start from scratch, that is, the basic knowledge and culture of marine shall be popularized among the public through the public media. In this way, the public could have a certain understanding on marine culture, and they will turn attention to marine cultural tourism,

which can further enrich the marine cultural tourism market. On the other hand, investment to marine institutions such as Shanghai Maritime University and Shanghai Ocean University shall be further strengthened to improve the scientific research level of marine colleges and universities and deliver more talents for the development of marine tourism in China.

5. Conclusions

This paper takes Shanghai as an example in order to study the customer satisfaction of marine cultural tourism. The study collects a large amount of raw data of customer satisfaction of marine cultural tourism through a questionnaire, and carries out a statistical analysis of the data through statistical analysis methods. Furthermore, it analyzes the influence of various factors of marine cultural tourism on customer satisfaction from different aspects. We thus find three conclusions as follows:

- (1) Natural scenery, human scenery, taste and distinguishing features of food and drink in scenic spots, completeness of traffic facilities in scenic spots and characteristics of tourism products have a positive influence on overall satisfaction.
- (2) Food environment and sanitary conditions in scenic spots, participation of entertainment activities and diversity of tourism products have no relationship with overall satisfaction.
- (3) Tourists' intention to revisit and recommend is positively related to overall satisfaction.

Due to the limited time and knowledge level, this study will inevitably have some limitations. Specifically, we only conducted a questionnaire survey on tourists near Shanghai's marine culture tourist area. The scope of the survey was not wide enough and the collection of survey data was not comprehensive. This may have a negative impact on the promotional value of the research results. In addition, the design of the questionnaire was not wide enough to cover the full extent of marine culture customer satisfaction from all angles, and it is necessary to further revise and improve the comprehensiveness of the investigation through practice.

Therefore, in future studies, we can extract samples from a wider range to improve the comprehensiveness of data collection. We can also use a variety of statistical methods to analyze data more comprehensively from different perspectives and to increase the appropriate case study. Improve the accuracy and scientific conclusion of the conclusion.

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