A Study on the Tourist Satisfaction of Rural Tourism Destination Based on Structural Equation Model

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Abstracts

This paper mainly studies the impact of perceived quality on tourist satisfaction in rural tourism destinations. Perceived quality and perceived value perspective, and from the visitors to Guangxi Ming Shi rural scenic area as an example, on the basis of literature analysis to participate in the Ming Shi rural scenic spot after the rural tourism of the questionnaire survey to 642 visitors to build rural tourism destination tourist satisfaction hypothesis model, using the structural equation model analysis to test the model.

This study found that: (1) The perceived quality of tourists in rural tourism has a significant positive impact on the perceived value of tourists; (2) The basic reception quality and support system quality of tourists' perceived quality have a significant positive impact on satisfaction, while characteristics experience quality has no effect on satisfaction; (3) The emotional value and functional value of tourists' perceived value have a significant positive impact on tourist satisfaction, while social value has no effect on tourist satisfaction; (4) Tourist involvement has a significant impact on emotional. There is a significant positive moderating effect among value, functional value and tourist satisfaction. Combined with the analysis of the above research results, the article puts forward suggestions and measures to improve the satisfaction of tourists in rural tourism destinations.

Keywords: Perceived Quality; Perceived Value; Tourist Satisfaction

Introduction

With the continuous acceleration of China's urbanization process and the continuous improvement of the urbanization rate, more and more people are concentrated in cities and towns, and the rhythm of work and life continues to accelerate, making more and more urban residents choose to travel away from the hustle and bustle noisy cities to get close to nature, which to a large extent promotes the rapid development of rural tourism in China. In the development of rural tourism, tourist satisfaction plays a decisive role in the development of rural tourism. To a great extent, tourist satisfaction affects tourists' loyalty to tourist destinations and their willingness to revisit. Therefore, in rural tourism research, how to improve tourist satisfaction in rural tourism destinations has become one of the urgent problems to be solved.

Tourist satisfaction in rural tourism destinations refers to the comprehensive evaluation of tourists' overall perceived performance in rural tourism destinations to meet their own needs. At present, the research on tourist satisfaction in rural tourism destinations mainly adopts the methods of Importance&Performance Analysis, Structural Equation Model Analysis and so on. Starting from the perspective of tourists' perception, this study takes tourists'

perception quality as independent variable. Tourists' perceived value was the mediating variable, tourists' involvement was the moderating variable, and tourists' satisfaction was the dependent variable. The relationship between tourist perceived quality and tourist satisfaction was studied by structural equation model analysis, and it was pointed out that tourist perceived quality had significant normal influence on tourist satisfaction.

Research Objectives

This paper mainly studies the relationship between tourist perceived quality and tourist satisfaction in rural tourism destinations, analyzes the mechanism of tourist perceived quality affecting tourist satisfaction, and explores countermeasures and measures to improve tourist satisfaction. The main objectives are as follows:

1. How to scientifically divide the dimensions of perceived quality of tourists in rural tourism destinations?

2. How does perceived quality of tourists in rural tourism destinations affect tourist satisfaction at the variable level?

3. How does the perceived quality of tourists in rural tourism destinations affect tourist satisfaction at the dimension level?

Literature Review

The research on tourist satisfaction first began in the United States in the 1970s. Scholars such as Pizam (1978 : 314-322) pointed out that tourist satisfaction is when tourists compare their own expectations of the destination with their actual feelings. Satisfied, on the contrary, tourists are dissatisfied. This research has laid the foundation for the research on tourist satisfaction. Subsequently, many scholars focused on the influencing factors of tourist satisfaction, the evaluation methods of tourist satisfaction, and the relationship between tourist satisfaction and tourist consumption behavior.

1 Literature Review of Tourist Perceived Quality

The research on the perceived quality of tourists is mainly born out of the research on the perceived quality of customers. In the 1990s, scholars applied the research on the perceived quality of customers in marketing to the field of tourism research and began to study the perceived quality of tourists. A large number of scholars have studied the relationship between tourists' perceived quality and tourists' satisfaction from their respective research fields. The main points of view are as follows: Anderson (1994 : 56) and other scholars proposed that perceived quality is the most important factor affecting tourists' satisfaction. This point of view; scholars such as Baker (2000 : 785-804) put forward the view that perceived quality has an impact on tourist satisfaction and tourist behavior motivation; scholars such as Murphy (2000 : 43-52) studied "environment-quality-relevance" for tourists visiting Victoria, Vancouver, Canada. The relationship between "tourism" and "facilities-quality-revisiting"; Bigne (2001 : 607-616) concluded that perceived quality has a positive impact on tourists' satisfaction and post-purchase behavior through research; Bian Xianhong (2005 : 84-88) Based on the data obtained from the practical investigation and research of two tourist destinations in Wuxi, the relationship between tourists' perceived quality, tourist satisfaction and tourist behavior intention was measured by constructing a conceptual model; Hui (2007 : 965-975) through the research The important hypothesis that tourist perceived quality is an important pre-variable of tourist satisfaction is verified. Although scholars have put forward some different viewpoints

from their own different perspectives, all of them have reached a consensus that the perceived quality of tourists is an important pre-variable of tourist satisfaction.

2 Literature Review of Tourist Perceived Value

The research on tourists' perceived value is introduced into tourism research from the field of marketing. The research on the relationship between tourists' perceived value and tourists' satisfaction mainly includes the following viewpoints: Oh (2000 : 58-58) proposed that the research on tourists' satisfaction must be Consider the influence of tourists' perceived value; Parasuraman and Grewal (2000 : 168-174) proposed that tourists' perceived value has an impact on tourists' choice behavior, tourist satisfaction and tourists' repurchase behavior; Lee (2007 : 204-214) proposed that tourists' perceived value includes three parts, namely functional value, overall value, and emotional value, they also pointed out that perceived value has a significant impact on tourist satisfaction; Dong Dahai (2008 : 856-861) believes that customer value is when customers purchase and use a certain value. A comparison of the utility gained and the cost paid over the course of a product. These studies all show that tourist perceived value has a significant impact on tourist satisfaction. On this basis, this study selects Guangxi Mingshi Pastoral Scenic Spot as an example, constructs a structural equation model to verify the influencing factors of tourist satisfaction in rural tourism destinations by collecting data from field research, and proposes to improve tourist satisfaction in rural tourism destinations according to the research results. recommendations and measures.

Research Methodology

1 Construction of Hypothetical Model

According to the concept of tourist satisfaction and the above analysis, it can be known that for tourist satisfaction in rural tourism destinations, the main influencing variables are tourists' perceived quality of rural tourism destinations and tourists' perceived value. In addition, tourists' understanding and familiarity with rural tourism destinations will also affect the formation of tourist satisfaction to a certain extent, and this influencing process can be represented by the variable tourist involvement. Therefore, this study combines the characteristics of rural tourism and the composition of rural tourism destination system, absorbs part of the results of the American customer satisfaction index model, draws on He Qiongfeng (2011 : 45-52) Chinese tourist satisfaction structural equation model, and introduces the adjustment variable of tourist involvement. A theoretical model of tourist satisfaction in rural tourism destinations with tourist perceived quality as the independent variable, tourist perceived value as the intermediary variable, and tourist satisfaction as the dependent variable (Figure 1), and on this basis, five hypotheses were proposed (Table 1).
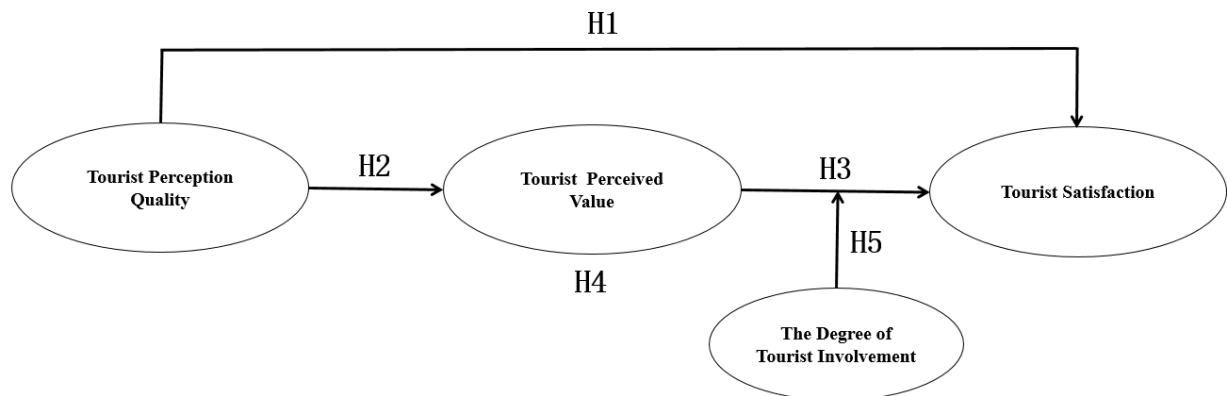
Figure 1 Theoretical model of tourist satisfaction in rural tourism destinations

Table 1 Assumptions of the theoretical model of tourist satisfaction in rural tourism destinations

Hypothesis	Assume the Content
H1	The quality of tourist perception has a positive impact on tourist satisfaction;
H2	The perceived quality of tourists has a positive impact on the perceived value of tourists;
H3	Tourist perceived value has a positive impact on tourist satisfaction;
H4	Tourist Perception Value Mediates the relationship between tourist perception quality and tourist satisfaction;
H5	Tourist involvement regulates the relationship between tourist perceived value and tourist satisfaction.

2 Research Methods

2.1 Design of tourist satisfaction evaluation indicators for rural tourism destinations

2.1.1 Tourist perceived quality

Tourist perceived quality is the key to improving tourist satisfaction, and it is also the core variable of this research. Many scholars have developed and verified the tourist perceived quality scale from their own perspectives. This study mainly refers to Zhang Xiaoyi's (2020 : 43) Tourist Perceived Quality Scale for Rural Tourism Products and He Jianying's (2012 : 54) Need-based Tourist Perceived Quality Scale for Urban Tourism Destinations, combined with the purpose of this research, to measure the reference scale. The items have been modified appropriately, and finally the items for measuring the perceived quality of tourists in rural tourism destinations in this study are formed as shown in Table 2.

Table 2 Items and sources of tourists' perceived quality measurement in rural tourism destinations

Serial Number	Measure the Question	Reference Basis
1	The farm stay is a menu	
2	Street specialty snacks	
3	Rural native products	
4	Tourist souvenirs and crafts	
5	Accommodation conditions at	
6	Hotel accommodation	
7	Fruit and vegetable picking	
8	Native product making	
9	Country special performance	
10	Other experiential activities	
11	Handicraft making experience	
12	Historical and cultural relics	
13	Great views of the countryside	Buhalis (1998 : 409-421); He Jianying (2012 : 54) ; Zhang Xiaoyi (2020 : 43)
14	Iconic landscape	
15	Rural tourism buildings	
16	Rural architectural landscape	
17	Rustic architectural decoration	
18	Travel identification system	
19	Tourist shops	
20	Other infrastructure	
21	Ease of transportation within	
22	Accessibility outside the	
23	Animal species and their	
24	Plant species and their	
25	Overall image of the	
26	Destination tourism	

2.1.2 Tourists' perceived value

The research on perceived value is a process of continuous deepening. Initially, a large number of scholars' research on customer perceived value was a single-dimensional study. After entering the 21st century, many scholars began to conduct quantitative research on customer perceived value from multiple dimensions. Cronin et al (2000 : 193-218.),

Soutar(2001 : 1-13) Lam et al (2004 : 293-311) and Lu Juan (2006 : 94-103) all conducted empirical research on customer perceived value using their respective developed customer perceived value scales. The measurement of tourists' perceived value in this study is based on the scale of Soutar(2001 : 1-13) which divides tourists' perceived value into three basic dimensions: functional value, emotional value and social value. According to the characteristics of rural tourism and the purpose of this study, the measurement items have been modified appropriately. The measurement items of tourists' perceived value in this study are shown in Table 3.

Table 3 Items and sources of tourists' perceived value measurement

Dimension	Measure the Question	Reference Basis
Functional Value	You can experience something new in the countryside that you've never seen before	Sheth et al. （1991 : 159-170）; Ruyter et al. (1997 : 53); Soutar(2001 : 1-13);Cao Yanxue (2018 : 32) ;
	The countryside makes you feel new and interesting	
	A trip to the countryside makes you feel comfortable and relaxed	
	This tour will put you in a good mood	
Emotional Value	It helps to communicate emotionally between family and friends	Soutar(2001 : 1-13) ; Sanchez et al.(2006: 394-409); Yinghua Huang and Fucai Huang (2007 : 66); Zhang Tao and Jia Shenghua (2008 : 55); Petrick (2016 : 397-407) ;
	You can get to know the local villagers or make new friends	
	You can increase the good impression that others have on you	
	This tour can arouse the interest of others	
Social Value	This rural tourist destination is a quality tourist destination	Soutar (2001 : 1-13); Choongki et al. (2007 :61-70);
	This rural tourism destination caters to your actual needs	
	This rural tourist destination can feel the strong rural cultural atmosphere	
	Good value for money to travel to this rural tourist destination	

2.1.3 Tourist satisfaction

Tourist satisfaction is a subjective judgment made by tourists after comparing their own expectations of a destination with their actual feelings. The measurement of satisfaction in this study mainly draws on Babin & Griffin (1998 : 127-136), Zeelenberg & Pieters (2004 : 445-455), Choong-Ki Lee (2004 : 61-70), Chen & Tsai (2007 : 1115-1122) and other scholars'

existing research, on the basis of drawing on the views of the above scholars, combined with the characteristics of rural tourism destinations, the existing measurement items were appropriately carried out. After modification, the measurement items of tourist satisfaction in this study are finally determined as shown in Table 4.

Table 4 Tourist Satisfaction Measurement Items and Sources

Variable	Measure the Question	Reference Basis
Tourist Satisfaction	In general, you are satisfied with the tourist attractions and tourism content of this village	Chen & Tsai (2007 : 1115-1122); This study
	Are you satisfied with this rural tour compared to your own needs?	
	Compared to the same type of rural tourism experience, are you satisfied with this experience?	
	In general, please judge whether the products and services offered by this destination are satisfactory	Zeelenberg Hotels & Peter（2004: 445-455）;Babin & Griffin（1998: 127-136）;This study
	Overall, how do you rate this rural tourism experience?	
	Please make a judgment on your experience with this rural tour	

2.1.4 Degree of Tourist Involvement
In this study, tourist involvement is defined as tourists' perception of the importance and relevance of tourism destinations, tourism activities, and tourism products based on their own needs and hobbies. For the measurement of tourism involvement, the main tourism involvement measurement scales are PII (Personal Involvement Inventory) scale, CIP (Consumer Involvement Profile) scale and EIS (Enduring Involvement Scale) scale. In this study, the degree of tourist involvement is used as a moderating variable for the influence of tourist perceived value on tourist satisfaction, in order to test the moderating effect of involvement on the relationship between tourist perceived value and tourist satisfaction. Since tourist involvement is more influenced by the subjective consciousness of tourists than by the surrounding environment, this study plans to use the PII scale of Zaichkowsky (1985 : 341-352) on the basis of previous research to measure tourist involvement in rural tourism. The tourist involvement measurement items are shown in Table 5.

Table 5 Items and sources of tourist involvement measurement

Variable	Measure the Question	Reference Basis
Degree of tourist involvement	You actively search for information about your destination	Zaichkowsky (1985: 341-352) ; This study
	Navigating rural destinations will make your life more meaningful	

	Rural tourism destinations are very attractive to you	
	It is very important for you to travel to a rural tourist destination	

2.2 Use exploratory factor analysis to explore the dimensions of tourists' perceived quality

Since there is no dimension for distinguishing variables in the measurement scale of tourists' perceived quality in this study, the reliability of the scale is tested through the data obtained from the pre-investigation, and the dimension reduction of tourists' perceived quality is carried out through factor analysis. The perceived quality of tourists is divided into three dimensions: basic reception quality, characteristic experience quality and support system quality, which lays the foundation for constructing a structural equation model.

2.3 Building a structural equation model

Combined with the results of exploratory factor analysis in the pre-investigation, a measurement model of the relationship between latent variables and observed variables was constructed, and the final structural equation model was established after the measurement model was verified. Confirmatory factor analysis was performed on the measurement model of each variable. On this basis, AMOS23.0 software was used to fit the structural equation to verify the main hypothesis of this study, and the mediating effects and regulatory effects of the model are tested.

Empirical research

1 Data Collection

1.1 Pre-investigation

In order to further discover and solve the problems that may exist in the questionnaire, improve the reliability and validity of the questionnaire, and improve the scientificity and rationality of the measurement variable items, this study firstly carried out a small-scale pre-investigation test to provide a basis for the subsequent research. The collection of large sample data provides the basis. The respondents of the pre-survey are groups who have had rural tourism experience in the last 6 months. This process starts from May 16, 2021 and ends on May 24, 2021. A total of 132 questionnaires were distributed, and valid questionnaires were obtained after excluding invalid ones. Questionnaire 114, the effective questionnaire rate was 86.36%.

1.2 Formal research

From May 29 to June 2, 2021, 510 questionnaires were distributed on-site in Mingshi Pastoral Scenic Area, Guangxi, for tourists who had finished their travel and were preparing to return, and 492 questionnaires were returned, of which 431 were valid questionnaires. The number of valid questionnaires is 431, which is in line with Shumacker (1996) that the sample is between 200 and 500, which meets the requirements of structural equation analysis. In the pre-investigation and formal investigation, the respondents were asked to describe the degree of recognition of the items of tourists' perceived quality, tourists' perceived value, tourists' satisfaction and tourists' involvement according to their impressions after participating in this rural tourism, as well as the respondents' perceptions. Personal characteristics options to make relevant selections. The measurement of the items in this survey adopts the Likert seven-point scale, and the respondents assign a grade of 1-7 according to the intensity of their own experience perception from weak to strong.

2 Analysis of sample demographic characteristics

According to the recovered valid questionnaires, SPSS26.0 software was used to analyze the demographic characteristics of the samples. The results are as follows: male tourists who participated in rural tourism accounted for 52.7%, slightly more than the number of female tourists; Mainly, accounting for 79.1%; in terms of the occupational composition of tourists, they are mainly from the party and government organs, enterprises and institutions; in terms of tourists' educational background, they are mainly university education, accounting for 79.1%; in terms of tourists' age, they are mainly young and middle-aged, 19- 44 year old tourists account for 88.2%; the income of tourists is mainly 1000-3000 yuan/month.

3 Exploratory factor analysis of model measurement dimensions

Exploratory factor analysis was used for the data collected in the pre-investigation, and KMO and Bartlett tests were performed on the perceived quality of tourists. The KMO value of the item of the tourist perceived quality scale was 0.921, and the KMO value was greater than the standard of 0.7, so it was suitable for factor analysis. The result of the Bartlett sphericity test is that the approximate chi-square is 2583.640, the df is 325, the Sig. is 0.000, and the significance level is lower than the standard of 0.005, which is suitable for factor analysis.

Use SPSS26.0 software to conduct factor analysis on the tourist perceived quality scale, select KMO and Bartlett sphericity test in descriptive statistics, select principal component analysis method for factor analysis extraction method, output component matrix after rotation, and extract based on characteristic root, Extract the eigen root whose eigenvalue is greater than 1, the maximum number of convergence is 25 times, and use the maximum variance method to rotate. The software output results are shown in Table 6:

Table 6 Interpretation table of total variance of tourists' perceived quality

Question	Initial Eigenvalue			Extract the Sum of Squares and Load			Rotate the Sum of Squares Loaded		
	Total	Square Deviation	Accumulated Frequency	Total	Square Deviation	Accumulated Frequency	Total	Square Deviation	Accumulated Frequency
1	13.8	53.352	53.35	1	53.352	53.352	6.512	25.046	25.046
2	2.23	8.582	61.93	2.	8.582	61.934	5.333	20.513	45.559
3	1.43	5.503	67.43	1.	5.503	67.437	4.547	17.490	63.049
4	1.15	4.428	71.86	1.	4.428	71.865	2.292	8.816	71.865
5	0.88	3.399	75.26						
6	0.69	2.681	77.94						
7	0.61	2.347	80.29						
8	0.57	2.209	82.50						
9	0.52	2.003	84.50						
10	0.46	1.791	86.29						
11	0.38	1.471	87.76						

12	0.37	1.459	89.22						
13	0.36	1.401	90.62						
14	0.34	1.334	91.96						
15	0.27	1.046	93.00						
16	0.25	0.989	93.99						
17	0.23	0.914	94.91						
18	0.21	0.844	95.75						
19	0.21	0.832	96.58						
20	0.17	0.669	97.25						
21	0.17	0.659	97.91						
22	0.14	0.544	98.45						
23	0.12	0.471	98.93						
24	0.11	0.447	99.37						
25	0.10	0.384	99.76						
26	0.06	0.239	100.0						

As shown in Table 6 of the interpretation of the total variance of tourists' perceived quality, there are four feature roots that are greater than 1 extracted, which are 13.871, 2.231, 1.431, and 1.151, respectively, and the variance percentages are 53.352%, 8.582%, 5.503%, and 4.428%, respectively. The cumulative variance The explanation rate is 71.865%, which is greater than the critical value of 50%, indicating that it has a good explanation ability. The principal component analysis method is used to extract, and the maximum variance analysis method is selected as the rotation method. The rotated tourist perception quality component matrix is shown in Table 7 below:

Table 7 Matrix of tourists' perceived quality components after rotation

Original Title	New Number	Question	Factor 1	Factor 2	Factor 3	Factor 4
A1	AA1	The farm stay is a menu	.387	.198	*.692*	-.019
A2	AA2	Street specialty snacks	.100	.147	*.808*	.142
A3	AA3	Rural native products	.155	.296	*.769*	.030
A4	AA4	Tourist souvenirs and crafts	.193	.129	*.721*	.362
A5	AA5	Accommodation conditions at the property	.234	.386	*.534*	.312
A7	AB1	Fruit and vegetable picking experience	.083	*.629*	.263	.332
A8	AB2	Native product making	.202	*.612*	.480	.265
A9	AB3	Country special performance activities	.280	*.604*	.462	.109

A10	AB4	Other experiential activities	.376	*.699*	.312	.094
A11	AB5	Handicraft making	.340	*.709*	.349	.103
A13	AB6	Great views of the	.154	*.781*	.191	.092
A14	AB7	Iconic landscape	.336	*.708*	.129	.209
A16	AB8	Rural architectural	.455	*.507*	.158	.426
A17	AB9	Rustic architectural	.444	*.555*	.110	.398
A12	AB10	Historical and cultural relics and special places of	.302	*.630*	.509	.100
A15	AC1	Rural tourism buildings	*.580*	.561	.114	.339
A20	AC2	Other infrastructure	*.770*	.247	.173	.309
A21	AC3	Ease of transportation within the destination	*.770*	.138	.160	.371
A22	AC4	Accessibility outside the	*.826*	.153	.362	.075
A23	AC5	Animal species and their management	*.856*	.224	.253	.101
A24	AC6	Plant species and their management	*.808*	.210	.231	.070
A25	AC7	Overall image of the	*.610*	.412	.287	-.148
A26	AC8	Destination tourism	*.679*	.401	.211	-.110
A6	AD1	Hotel accommodation	.137	.264	.525	*.663*
A18	AD2	Travel identification system	.601	.321	.108	*.560*
A19	AD3	Tourist shops	.648	.226	.159	*.522*

According to the results of rotation, factor 1 is named as the quality of rural tourism support system, in which A15 has interactive loads, so item A15 is deleted; factor 2 is named as rural tourism characteristic experience quality, in which A12 has interactive loads, so delete it A12 item; factor 3 is named as the basic reception quality of rural tourism, and there is no interactive load; A6, A18, and A19 of factor 4 have interactive loads, so three items A6, A18, and A19 are deleted. 4 does not exist anymore, and finally the perceived quality of rural tourism tourists is divided into three dimensions: the basic reception quality of rural tourism, the quality of rural tourism characteristic experience, and the quality of rural tourism support system, with a total of 21 items. The exploratory factor analysis results show that The measurement scale of tourists' perceived quality has good validity.

4 Fitting test of structural equation model

4.1 Construction of structural equation model

According to 8 latent variables and 43 measurement items formed by exploratory factor analysis, drawing on the existing research results of tourist satisfaction, and combining the characteristics of rural tourism, a structural equation model of tourist satisfaction in rural tourism destinations is constructed, as shown in Figure 2. .
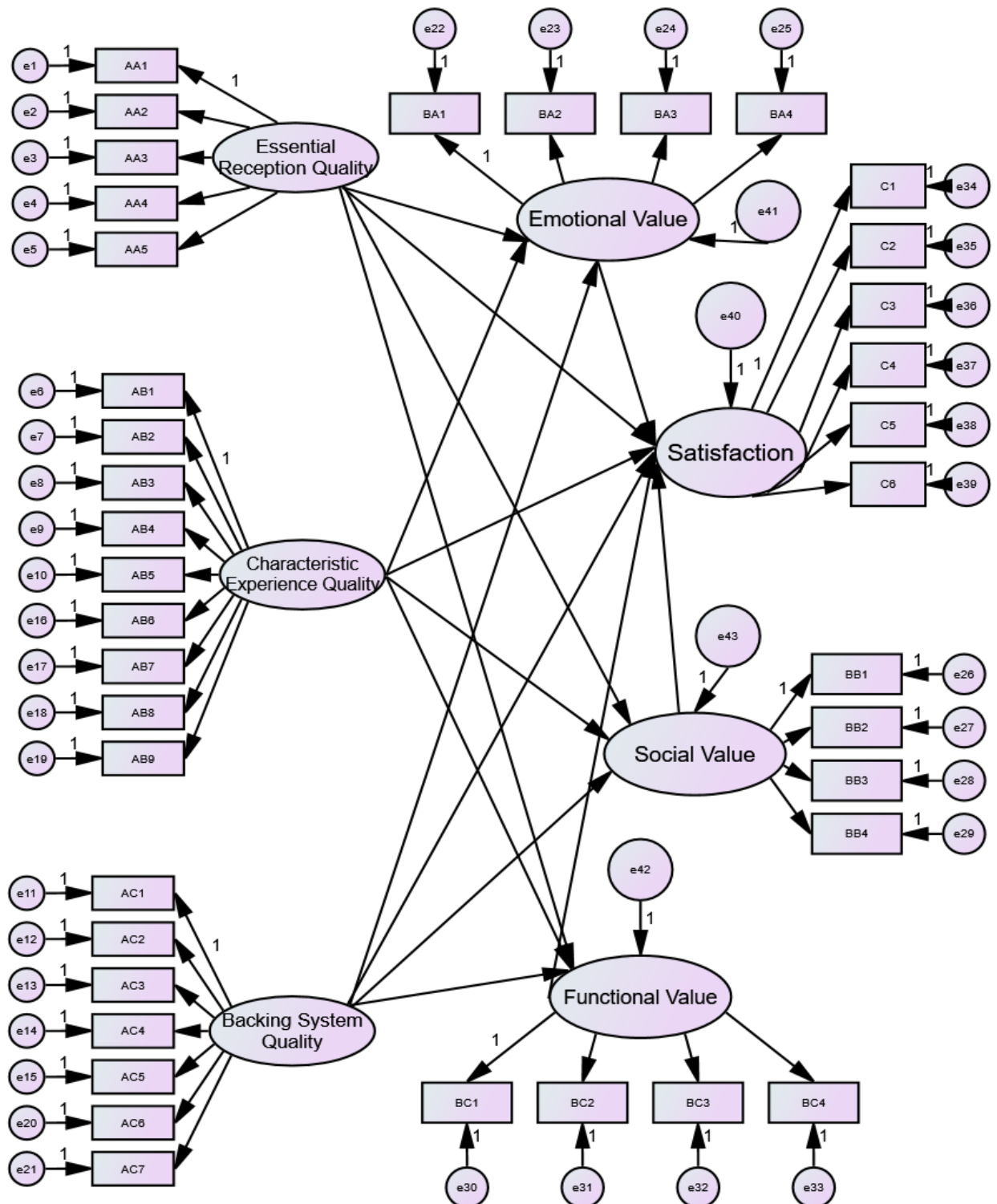
Figure 2 Initial structural model diagram of the impact of
tourists' perceived quality on satisfaction

4.2 Reliability and validity test

The reliability of the structural equation model was tested by the Cronbach'α reliability coefficient method. The Cronbach'α coefficients of each variable in this study are shown in Table 8. The Cronbach'α coefficient values of all variables are greater than 0.7, and the corrected items total correlation CITC values are all greater than 0.35, so the reliability of all scales collected in the formal survey meets the requirements of the study.

Table 8 CITC and reliability summary of each scale

Variables/Dimensions	Cronbach'α Coefficient	The Total Relevance of the Corrected term CITC	Cronbach' α Coefficient after Deleting the Term
Essential Reception Quality	0.872	0.743	0.834
		0.650	0.856
		0.736	0.835
		0.680	0.849
		0.684	0.848
Characteristic Experience Quality	0.932	0.763	0.923
		0.754	0.924
		0.753	0.924
		0.768	0.923
		0.752	0.924
		0.667	0.929
		0.732	0.925
		0.758	0.923
		0.778	0.922
Backing System Quality	0.928	0.772	0.917
		0.731	0.922
		0.773	0.917
		0.771	0.917
		0.779	0.916
		0.796	0.915
		0.787	0.916
		0.739	0.873

		0.791	0.853
Emotional Value	0.893	0.753	0.867
		0.782	0.858
		0.682	0.872
Social Value	0.882	0.791	0.831
		0.778	0.837
		0.733	0.853
		0.801	0.862
Functional Value	0.900	0.789	0.867
		0.727	0.889
		0.795	0.865
		0.862	0.919
		0.828	0.923
Satisfaction	0.937	0.773	0.930
		0.795	0.927
		0.794	0.927
		0.820	0.924
		0.761	0.823
Degree of Involvement	0.872	0.716	0.841
		0.693	0.850
		0.742	0.831

After confirmatory factor analysis, the standardized loading coefficients of all observed variables of 8 latent variables in the model (basic reception quality, characteristic experience quality, support system quality, social value, functional value, emotional value, involvement and satisfaction) were obtained. All were between 0.71-0.97, and all passed the significance test at $P<0.001$; in addition, the CR values of the eight latent variables were (0.87, 0.94, 0.92, 0.90, 0.88, 0.90, 0.97, 0.92), all of which were greater than 0.7 The standard of , the AVE values are (0.58, 0.62, 0.63, 0.69, 0.66, 0.70, 0.83, 0.75), all of which are greater than the standard of 0.5, so it can be seen that the observation indicators under the latent variables have good structural consistency The convergent validity of , so the reliability and validity of the sample are good.

4.3 Test of structural equation model

Using AMOS23.0 software to calculate the structural equation model, the operation results are shown in Table 9. It can be seen from the table that the characteristic experience quality has a negative impact on satisfaction, which is contrary to the original hypothesis, but did not pass the significance test; The influence of social value on satisfaction has not passed the significance test, and there are a total of 2 hypotheses that are inconsistent with the null

hypothesis. The test data of the model are as follows: CMIN/DF value is 3.62, RMSEA value is 0.078, CFI value is 0.88, TLI value is 0.87, NFI value is 0.84, PNFI value is 0.78, the sample size of this study is 431, and the sample size is greater than 200. Therefore, the indicators of the structural equation model in this study basically meet the reasonable requirements, and the overall fit of the model is good.

Table 9 Path coefficient and hypothesis test table of structural equation model

Assume a Path Relationship	Normalized Coefficients	Standard Error	T Value	P
Emotional value <--- basic reception quality	0.212	0.029	7.34	***
Social value <--- basic reception quality	0.227	0.028	8.224	***
Functional value <--- basic reception quality	0.117	0.025	4.656	***
Emotional value <--- characteristic quality of experience	0.398	0.035	11.367	***
Social value <--- characteristic quality of experience	0.311	0.031	9.965	***
Functional value <--- characteristic quality of experience	0.335	0.029	11.461	***
Social value <--- support system quality	0.441	0.039	11.284	***
Functional value <--- support system quality	0.595	0.04	15.387	***
Emotional value <--- support system quality	0.477	0.039	12.09	***
Satisfaction <--- basic quality of hospitality	0.131	0.0256	5.190	***
Satisfaction <--- featured quality of experience	-0.061	0.081	-0.759	0.448
Satisfaction <--- the quality of the support system	0.054	0.121	3.250	***
Satisfaction <--- emotional value	0.125	0.039	0.777	0.001
Satisfaction <--- social value	0.145	0.128	1.136	0.256
Satisfaction <--- functional value	0.778	0.131	5.939	***

Note: * means P<0.05, * means P<0.01, *** means P<0.001

5 Analysis of mediation effect

In order to further analyse the overall effect of each external variable on the dependent variable, this study calculated the estimated effect of each variable through the structural equation model, and sorted out the direct effect, indirect effect and total effect between each variable as shown in Table 10. Among them, tourists The three dimensions of perceived value have both direct and indirect effects on tourist satisfaction, and the total effect is equal to the combination of direct and indirect effects. The direct effect of basic reception quality on satisfaction is 0.165, the indirect effect is 0.118, and the total effect is 0.283; the relationship between characteristic experience quality and satisfaction has not passed the significance test;

the direct effect of support system quality on satisfaction is 0.054, The indirect effect was 0.516 and the total effect was 0.57. Therefore, the hypothesis that tourist perceived value plays a mediating role between tourist perceived quality and tourist satisfaction is supported.

Table 10 Analysis of the effect of external variables on internal variables

Effect Type	Result Variables	Basic Reception Quality	Featured Quality of Experience	Support System Quality	Emotional Value	Social Value	Funct ional Value
Direct Effect	Emotional Value	0.212	0.398	0.441	0	0	0
	Social Value	0.227	0.311	0.617	0	0	0
	Functional Value	0.117	0.335	0.477	0	0	0
	Satisfaction	0.165	-0.061	0.054	0.125	0.145	0.778
Indirect Effect	Emotional Value	0	0	0	0	0	0
	Social Value	0	0	0	0	0	0
	Functional Value	0	0	0	0	0	0
	Satisfaction	0.118	0.261	0.516	0	0	0
Total Effect	Emotional Value	0.212	0.398	0.441	0	0	0
	Social Value	0.227	0.311	0.617	0	0	0
	Functional Value	0.117	0.335	0.477	0	0	0
	Satisfaction	0.283	0.261	0.570	0.125	0.145	0.778

6 Moderating effect analysis

The moderating effect of a variable is not only affected by the moderating variable, but also affected by third-party factors. In order to accurately verify the moderating effect, the influence of the third-party factors on the moderating variable must be excluded. In this study, tourists' perceived value and tourist satisfaction will be affected by factors such as gender, occupation, education level, age, income, and the source of tourists, in addition to the

adjustment variable tourist involvement. The control variables were analysed one by one to confirm the control variables that had an impact on this study. The independent sample T test was used for binary variables, and the one-way analysis of variance was used for categorical variables. Finally, tourists' occupation, education level, and income were 3 Factors have an impact on the relationship between perceived value and satisfaction.

This research uses SPSS26.0 software to select occupation, education level and income as control variables, emotional value, social value and functional value as independent variables, involvement as moderator variables, and tourist satisfaction as dependent variables for multi-level regression analysis , build five models M1-M5, the specific situation of the model is shown in Table 11, in the model M1, the independent variables only include the control variables tourist occupation, tourist education level and tourist income, the analysis of these variables is satisfied with the dependent variable degree of influence. In the previous structural equation model analysis, the influence of social value on satisfaction did not pass the significance test, so there is no need to do the moderating effect test here. Models M2 and M4 respectively add the emotional value and functional value of tourists on the basis of model M1, model M3 adds emotional value*involvement variable on the basis of model M2, and model M5 adds functional value on the basis of model M4 Value * Involvement variable.

From the analysis results of models M3 and M5, it can be known that the regression coefficient of emotional value*satisfaction is 0.151, and it is significant at the 0.01 level, which verifies the hypothesis that tourist involvement plays a moderating role between emotional value and satisfaction. ; The regression coefficient of functional value*involvement is 0.191, and it is significant at the 0.001 level, which verifies the hypothesis that tourist involvement plays a moderating role between functional value and satisfaction. Therefore, the hypothesis 5 of this study is that tourist involvement It is verified that there is a moderating effect between perceived value and satisfaction.

Table 11 Test and analysis table of the moderating effect of involvement degree

Independent Variables	Satisfaction				
	Model 1	Model 2	Model 3	Model 4	Model
Constant	0.465^{**}	0.437^{**}	0.389^{**}	0.481^{***}	0.447^{**}
Control variables					
Professional	-0.005	-0.007	-0.009	-0.009	-0.009
Level of education	0.020	0.026^{*}	0.043^{*}	0.018	0.031
Revenue	-0.215^{*}	-0.210^{*}	-0.197^{*}	-0.213^{*}	-0.199^{*}
Independent Variables					
Emotional value		0.149^{**}	0.168^{**}		
Emotional value* Degree of Involvement			0.151^{**}		
Functional value				0.198^{***}	0.272^{**}
Functional value * Degree of involvement					0.191^{***}
R^2	0.042	0.205	0.293	0.614	0.695

Adjusted R^2	0.016	0.109	0.215	0.519	0.541
F value	1.605**	1.260**	1.463**	1.544**	1.959*
DW value	2.185	2.171	2.135	2.162	2.169

Note: N=431;*indicates that P<0.05 (double-tailed) is significantly correlated, ** indicates that P<0.01 (double-tailed) is significantly correlated, *** indicates that P<0.001 (two-tailed) is significantly correlated; the regression coefficients in the table are all standardized regression coefficients

Discussion

1 The influence of tourist perception quality on tourist satisfaction

According to the exploratory factor analysis results of tourist perceived quality in this study, tourist perceived quality can be divided into three dimensions: basic reception quality, characteristic experience quality and support system quality. The basic reception quality dimension and support system quality dimension of tourist perceived quality have significant normal influence on tourist satisfaction, while the characteristic experience quality has no significant influence on tourist satisfaction. The main reason is that the basic quality of reception quality and support system are part of the rigid demand of rural tourists, is the most basic conditions, rural tourism in every country tourist needs, the higher the basic quality of reception quality and support system, the demand of tourists satisfied degree, the better, the higher degree of satisfaction is; And characteristics for different rural tourist experience quality, because every tourist's demand is different, lead to the requirement for the quality of special experience is different also, if the characteristic quality of experience can meet the needs of tourists satisfaction is high, if special experience quality can not meet the needs of tourists satisfaction is low, Therefore, the influence of characteristic experience quality on satisfaction does not pass the significance test, which can be explained theoretically. In the field of tourism research, this conclusion is consistent with the research of Bian Xianhong (2005: 84-88), Hui (2007: 965-975) and others.

2 The mediating role of tourists' perceived value

In this paper, tourists' perceived value is introduced as a mediator variable to explore the impact of tourists' perceived quality on tourist satisfaction in rural tourism destinations, and the structural equation analysis method is adopted to verify that tourists' perceived value plays a mediating role in the mechanism model of tourists' perceived quality on tourist satisfaction. In the field of tourism research, many scholars have verified the mediating role of tourists' perceived value. For example, scholars Wang Xia et al. (2006: 1-6), Bian Xianhong et al. (2005: 84-88) and He Qiongfeng et al. (2011: 45-52) all confirmed through their respective empirical studies that tourists' perceived value partially mediates the relationship between tourists' perceived quality and tourists' satisfaction, which is consistent with previous studies of scholars.

3 The moderating effect of tourist involvement

Through the multi-level regression analysis in this study, it can be found that tourist involvement plays a significant moderating role in the impact of perceived value on tourist satisfaction. This moderating effect was verified by the effect of affective value and functional value on satisfaction. Emotional value impact on satisfaction of the tourists, because of the high degree of involvement in the tourists has produced a certain sense of belonging, on the psychological, on the whole, the overall image of rural tourism destinations and products and services have a positive attitude, the higher the degree of involvement in that tourists rural tourism destination information for the collection and sorting, and produce the psychological

resonance, Tourists already have a certain degree of emotional identity, which means that tourists' involvement will increase the impact of tourists' emotional value on satisfaction. In the influence of tourists' functional value on satisfaction, because tourists with high involvement degree are familiar with and yearning for the destination before traveling, they have a certain psychological tendency to the functional value of the destination, so involvement degree will adjust the relationship between functional value and satisfaction. This research conclusion is consistent with the research of Chen et al., (2007: 1115-1122) and Song Haiyan and Zhu Mingfang (2012: 52-66.).

Research conclusions

Based on the above analysis, the following conclusions can be drawn: (1) The three dimensions of tourists' perceived quality in rural tourism have a significant positive impact on the three dimensions of tourists' perceived value; (2) The basic reception quality of rural tourism tourists' perceived quality and support system quality have a significant positive impact on satisfaction, while characteristic experience quality has no impact on satisfaction; (3) The emotional value and functional value of rural tourism tourists' perceived value have a significant positive impact on tourist satisfaction, while Social value has no effect on tourist satisfaction; (4) Tourist involvement has a significant positive moderating effect among emotional value, functional value and tourist satisfaction.

Recommendation

1 Recognize and pay attention to the importance of tourists' perceived quality to the development of rural tourism

The perceived quality of tourists in rural tourism plays a crucial role in improving tourist satisfaction. Rural tourism management departments and tourism enterprises need to identify the three dimensions of tourists' perceived quality, and try to improve the basic reception quality and support system quality of tourists' perceived quality as much as possible. , to provide tourists with good tourism reception facilities and establish a complete tourism support system for tourists to participate in rural tourism, thereby improving tourists' satisfaction.

2 Deepen the understanding of tourists' perceived value and enhance the depth of tourists' participation

The market potential of rural tourism is huge, but the duration of stay of rural tourists is short, and the depth of tourists' participation in rural tourism is not enough. The emotional value and functional value dimensions of tourists' perceived value have an impact on rural tourism satisfaction, while the social value dimension in perceived value has no effect on rural tourism satisfaction. The main reason is that tourists' participation in rural tourism is not deep enough. Therefore, as rural tourism managers and rural tourism enterprises, they should pay attention to the improvement of tourists' emotional value and functional value in the process of rural tourism reception and service, extend the rural tourism industry chain, and increase the depth of tourists' participation.

3 In terms of tourism marketing, increase the management of rural tourism tourist market segments

This study analyses the main demographic indicators of tourists before analysing the moderating effect of tourist involvement. Through the results of this study, we can know that tourists' occupation, education level and income level will affect tourist satisfaction to a certain

extent. From this, it can be seen that the basic demographic characteristics of tourists in rural tourism can be used as the standard for the market segment of rural tourism source. Different market segments have different perceived value of tourists, and the satisfaction expressed by tourists' perception is also different. Secondly, it is necessary to design targeted tourism products and services for the main market segments to meet the tourism needs of these tourists, so as to stabilize and gradually expand this market share, improve tourist satisfaction, and promote the high-quality development of rural tourism.

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