Construction And Design of Evaluation Model of Tourist Participation

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Abstract: Tourist participation is a relatively subjective content. The design and construction of the evaluation index system and evaluation model of tourist participation are relatively difficult, and it is difficult to reach a completely consistent point of view and argument. This paper mainly designs and constructs the evaluation model of tourist participation from the following aspects of the construction of the theoretical model of tourist participation, the extraction of the evaluation index, the determination of the weight of the evaluation index by AHP, the fuzzy comprehensive evaluation of tourist participation, the design of the evaluation questionnaire of tourist participation and the test of the questionnaire The logical clue from determining the index weight to fuzzy comprehensive evaluation is to explore the index content and analysis results of tourist participation, so as to make a certain contribution to the accurate publicity and marketing of tourism enterprises, especially scenic spots.

1. Constructing the theoretical model of tourist participation

There is no mature model for the evaluation index system of tourist participation, and the research on tourist participation at home and abroad is still in the primary stage. At present, the evaluation of tourist participation can be divided into qualitative evaluation and quantitative evaluation. Qualitative evaluation starts from the physiological feelings of tourists. Some studies believe that the participation degree of tourists' physical and mental satisfaction through the input of physiological organs in the process of traveling belongs to deep participation, while the participation degree of regular sightseeing and paying attention to sightseeing belongs to shallow participation, and the participation degree in the middle belongs to middle participation. The quantitative evaluation is usually based on the theory of customer participation. The evaluation system is constructed through the index of customer participation dimension, and the PLS method is used to evaluate the degree of participation. This kind of evaluation model has not been recognized by the majority of scholars. Based on the theory of customer participation and the dimensions of customer participation, this study extracts the indicators of tourist participation with the time axis of tourist participation, and constructs the model of tourist participation degree by expert scoring method and fuzzy comprehensive evaluation method to evaluate the indicators. The theoretical model is shown in Figure 1:

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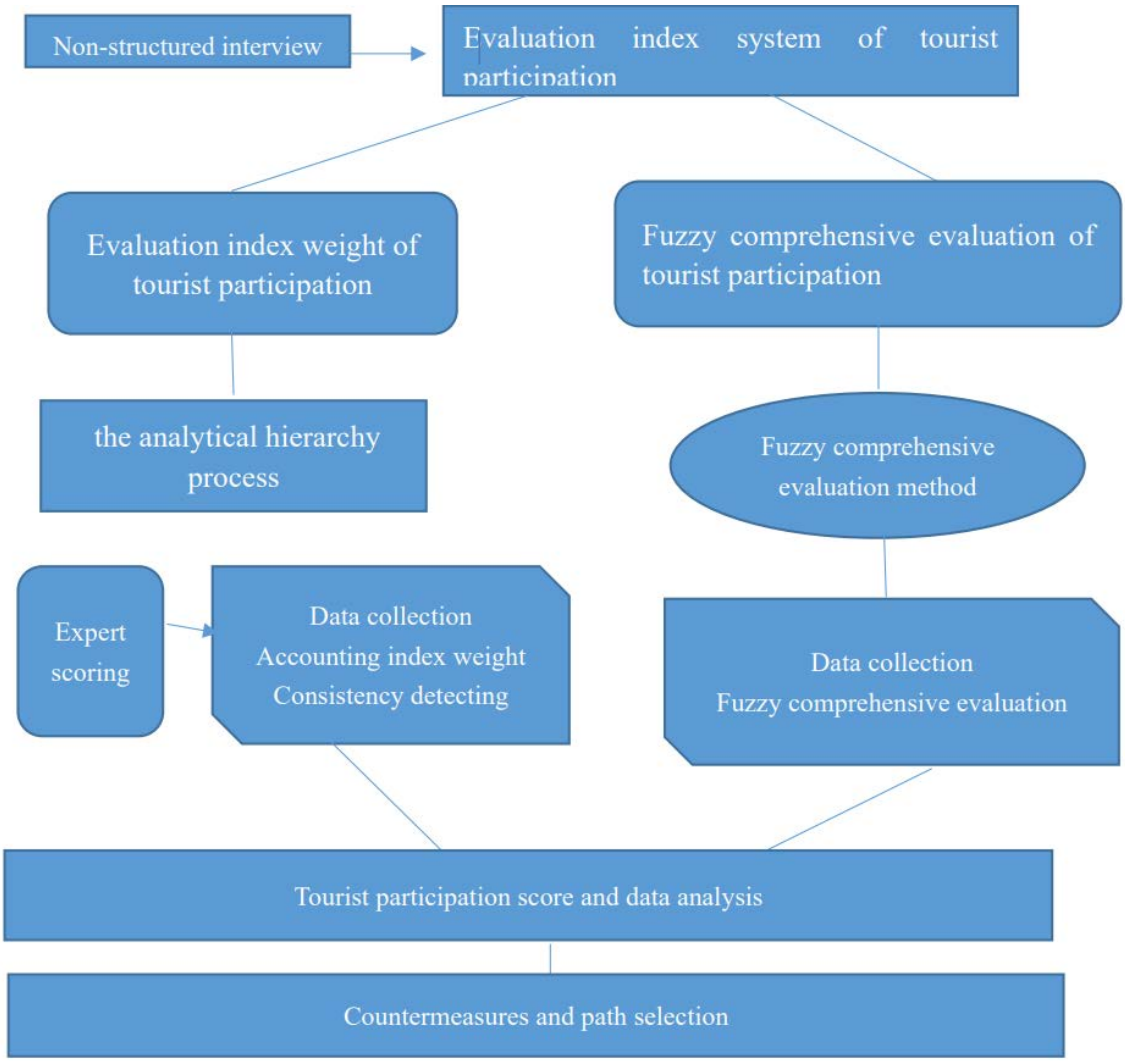

Figure. 1 Evaluation index system of tourist participation

2. Extraction of tourist participation evaluation index

Customer participation theory emphasizes that consumers should participate in the whole business operation process from product design and development as far as possible, including design, marketing, sales, customer service and other business operation processes. Tourism is sold as a product, and tourists are consumers. The dimensions of tourists' participation in tourism are as follows: the preparation before tourism, including the choice of tourist destination, the collection of destination information, the formulation of travel plan and the preparation for tourism; Participation in the tour: including transportation, sightseeing, activity experience, dining, accommodation and shopping, use of facilities and equipment, compliance with the regulations of the scenic spot, communication with colleagues and staff, etc; Post tour behavior: sharing with friends, destination recommendation, revisiting, etc. this kind of participation behavior runs through the whole tourism process. Therefore, this study is based on the three different stages of tourist participation evaluation index extraction.

For the evaluation of participation, most of the existing studies are qualitative analysis, lack of quantitative analysis and mature evaluation model. Before the construction of the model, this study first selected 20 tourists in leisure agricultural tourist attractions by means of open questionnaire for random survey.

The survey uses unstructured interviews to invite tourists to review the key events of their travel in chronological order. The review contents mainly include: the source process and acquisition of scenic spot information, the motivation of choosing leisure agricultural scenic spots as the travel destination, the key behaviors of tourists in the travel, the tourists' perception and evaluation after the

implementation of these key behaviors, and the reasons for the implementation of these key behaviors What factors affect tourists' perception of participation, and suggestions for scenic spots. Then, the content of the tourists' oral description is arranged as follows:

Table. 1 Tourist interview content

Contents	Descriptions of tourist’s participation
Pre-travel behavior	Collect data on the website; Choose the destination for the trip; Ask questions of interest in advance; Make travel plan; Prepare for travel items; Scheduled travel service;
Travel behavior	I will abide by the scenic spot regulations; Obey the arrangement of staff; Take care of facilities and equipment; Save resources; Strong sense of protection; Participate in the activities being held in the scenic area; Purchase of goods; eat; Information sharing; In case of difficulties, they will ask for help; Dissuade or report violations;
Post-travel behavior	Make a conclusion according to travel experience; Organize the articles; Share purchased items; Experience sharing; Travel notes arrangement;
Sources of information	Through tourism websites, mass media, travel agencies, etc; Recommended by friends; Wechat circle of friends, QQ group and other information sharing; travel agency; Advertising, television, etc;
Travel motivation and willingness	Relax, accompany family, experience life, acquire knowledge, taste / travel, purchase green products, willing to spend money, willing to travel frequently, and hope to respect and feedback the opinions put forward;
Other suggestions	The problem of scenic spot charge; Experience the entertainment of the activity; Diversity of activities; Timely update of facilities and equipment; Activity novelty;

To sum up, it can be seen that the participation of tourists in tourism is reflected in the preparation before the tour, the information collection of the destination, the participation of various experience behaviors, physical and mental power during the tour, and the information sharing and memory after the tour. Combined with the existing qualitative research results and the actual situation of tourists' participation in the whole process of tourism, this study intends to investigate the degree of tourists' participation in the tourism process from the three aspects of "before Tour", "during tour" and "after tour", combined with the requirements of sustainable development of tourism.

The evaluation index system of tourist participation is divided into three levels: the first level is the target level, that is, tourist participation (a); the second level is the element level, that is, pre tour participation, in tour participation and post tour participation (b); the third level is the index level, that is, the specific evaluation items after the second level decomposition: pre tour participation: information collection, doubt consultation, strategy development and reservation; In tour participation: activity participation, responsible participation (abide by regulations, protect facilities, protect environment, cherish resources, accurately state and cooperate with work); Post tour participation: information sharing, suggestions for improvement, product sharing, re tour, etc.

According to the above design ideas, the evaluation index system of tourist participation is constructed, as shown in Table 2.

Table. 2 Evaluation index system of tourist participation

Target layer(A)	Element layer (B)	Index layer (C)
Tourist participation index system A	Pre-travel participation behavior B1	Information gathering C1
		Information comparison C2
		Consultation in advance C3
		Work out a system C4
		Purchasing necessities C5
		Booking accommodation, etc C6
	Participation behavior in Travelling B2	Participate in activities C7
		Purchase items C8
		Share information C9
		Follow the rules C10
		Help in difficulty C11
		Communication and interaction C12
		Civilized Tourism C13
		Save resources C14
		Take good care of equipment C15
		Protect the environmentC16
		Dissuasion of uncivilized behavior C17
		bring up an opinion C18
	Post-travel participation behavior B3	Sorting out items C19
		Share items C20
		Share your feelings C21
		Sum up experience C22

3. Determination of the percentage of evaluation index through AHP

AHP is suitable for a quantitative analysis method which can judge the importance of the target event by comparing the two factors by comparing the two factors after the target event is decomposed. It is a qualitative and quantitative analysis method. Based on the analysis of the nature, influencing factors and their internal relations of complex decision-making problems, the paper makes the thinking process of decision-making mathematically by using less quantitative information, so as to provide a simple decision-making method for complex decision-making problems with multi-objective, multi criteria or unstructured characteristics. Especially suitable for the decision-making results difficult to directly and accurately measure the situation. In view of the immature theoretical model of the evaluation of tourists' participation at present, the index selection of this evaluation system is extracted by random interview content. In order to improve the reliability of the model, the paper will use AHP analysis method to distribute the weight of each index in the system. The specific operation steps are as follows:

3.1 Constructing hierarchical structure

The building of the ladder hierarchy is generally divided according to the above-mentioned hierarchy. The ladder structure of this paper is to be built according to the evaluation system of tourists' participation degree in 2. The structure diagram model is shown in Figure 2.

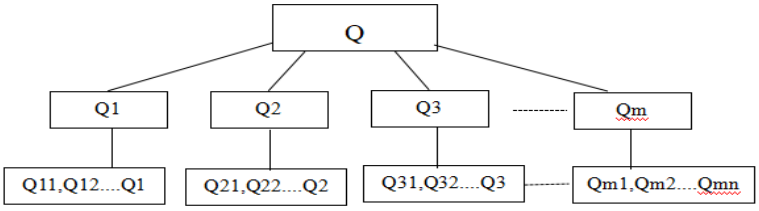

Figure. 2 Hierarchical structure of evaluation index

3.2 Expert evaluation and establishment of judgment matrix

The establishment of expert scoring judgment matrix is a process of comparing the indicators contained in each factor layer, grading and confirming the score according to the importance of the comparison indicators. Usually, the score of importance is evaluated by several experts with rich industry experience, and the judgment matrix is constructed according to the evaluation results. The score can be 1-9 scales, or 1-7 scales. This study intends to use the scale method of 1-9 to construct the judgment matrix, and use the function qij to express the ratio of Qi and QJ to Q, I = 1,2, 3... N. Different scores represent different importance of indicators. In this study, the cardinal score 1, 3, 5, 7 and 9 are used to represent "equally important", "slightly important", "obviously important", "strongly important" and "extremely important" respectively. The median of adjacent judgment is 2, 4, 6 and 8, The judgment matrix constructed by the importance score of each index obtained from the expert's score should meet the following requirements:

1) $Q_{ij}>0$ 2) $Q_{ij}=\frac{1}{Qij}$ 3) Qnn=1

Table. 3 Theoretical matrix for Evaluation index system of tourist participation

	Q1	Q2	Q3	...	Q6
Q1	Q11	Q12	Q13	...	Q16
Q2	Q21	Q22	Q23	...	Q26
Q3	Q31	Q32	Q33	...	Q36
...	...	...	...	...	...
Q6	Q61	Q62	Q63	...	Q66

3.3 Calculate the weight of each index and consistency test

(1) Calculate the score of elements in each line of the matrix: $Qi=\prod Qij(i,\ j=1,\quad 2...n)$

(2) Calculating the n-th root of a vector: $\overline{Qi}=\sqrt[n]{Qi}$

(3) Normalize the vector: $Wi=\frac{\overline{Qi}}{\sum_{i=1}^{n}Qi}\ (i=1,2,.....n)$

(4) Calculate weight vector: $W=(W1,W2.....Wn)^T$

(5) Calculate the maximum eigenvalue: $\lambda\max=\sum_{i=1}^{n}\frac{(AW)i}{nwi},i=1,2.....n$

The maximum eigenvalue of the matrix λmax substitution formula $CI=\frac{\lambda\max(Q)-n}{n-1}$ & $CR=\frac{CI}{RI}$, The CR value is calculated in accordance with the results. When the consistency of each judgment matrix is no more than 0.1, the judgment matrix can be used to determine the weight of each evaluation index through verification. Otherwise, the evaluation system needs to be rebuilt and experts are invited to judge the importance of each index.

4. Fuzzy comprehensive evaluation of tourist participation

Tourists have the characteristics of diversification and uncertainty. Their education level, personal experience and other factors determine that most tourists can only use fuzzy language to describe their participation in the evaluation of scenic spots, and it is difficult to quantify their participation clearly and accurately. Therefore, the evaluation system of determining the weight of each index through AHP level analysis method cannot be directly used for the evaluation of tourists' participation, in order to improve the accuracy of the evaluation system, the fuzzy comprehensive evaluation method is used to de fuzzify the model. The theoretical operation steps are as follows:

4.1 Establish evaluation factor set Q

The theory model uses Q to represent the target layer factor set. Qi refers to the factor of project layer, i = 1,2,3... N, that is, Q1 represents the first factor index of project layer, Q2 represents the second factor index of project layer until Qn. Therefore, the set of evaluation factors Q= {Q1, Q2... Qi....Qn}. Qij is used to represent the j evaluation factor under the index of level i of the project layer. The three-tier evaluation factor set is constructed as follows:

(1) Target layer:Q={Q1,Q2,.....Qi,....Qn}

(2) Element layer: Q1= {Q11, Q12....Qij, Qin}

Where n is the number of project level indicators

4.2 Building comment set T

Comment set T= {Ti, Ta, Ts}, and s represents the number of grades of comments, that is, the number of grades of comments.

4.3 Determining the weight coefficient R

According to the analytic hierarchy process described in 4.3, the weight set of each level is calculated as follows:

Weight set of the first level: R= {R1, R2, Ri,.Rn }(i=1,2,...n)

Weight set of the second level: Ri= {Ri1, Ri2, Rij, Rim} (i=1, 2...n.j=1, 2, m)

4.4 Establishing fuzzy evaluation matrix V

Vij= (Vij1, Vij2. . .Vijl. . .Vijs), Vijl=Tijl/n with n refers to the total number of tourists surveyed, Tijl refers to the number of tourists who evaluated Qijl as Tl, and 0<Vij<1. The fuzzy evaluation matrix from Q to T is obtained by expanding the matrix:

$$V=\begin{Bmatrix} V_{11} & V_{12} & \dots & V_{1m} \\ V_{21} & V_{22} & \dots & V_{2m} \\ .. & .. & .. & .. \\ V_{i1} & V_{i2} & \dots & V_{im} \end{Bmatrix}$$

4.5 Calculation of fuzzy comprehensive evaluation value B

$$B = R * V = \{R_1, R_2, \dots R_n\} * \begin{Bmatrix} V_{11} & V_{12} & \dots & V_{1m} \\ V_{21} & V_{22} & \dots & V_{2m} \\ .. & .. & .. & .. \\ V_{i1} & V_{i2} & \dots & V_{im} \end{Bmatrix} = \{b_1, b_2, \dots b_n\}$$

The final evaluation total score Y is expressed as follows: Y=B*TS.

5. Questionnaire design of leisure agricultural tourism tourists' Participation

Based on the index system of tourist participation extracted in Section 4.2 above, the expert scoring table (Appendix 1) is set to score, and the scale method of 1-9 is used to construct the judgment matrix. The function Qij is used to express the ratio of the influence degree of Qi and Qj on Q, i = 1, 2, 3,... n. Different scores represent different importance of indicators, in which odd scores 1, 3, 5, 7 and 9 represent "equally important", "slightly important", "obviously important", "strongly important" and "extremely important" respectively. The median of adjacent judgment is 2, 4, 6 and 8. Set up Haikou leisure agricultural tourism and tourist participation evaluation questionnaire (Appendix 2). A total of 22 items were included in the questionnaire, and the Likert 5-level scale was used to evaluate the items, including 5-completely consistent, 4-consistent, 3-average, 2-not consistent and 1-completely not consistent.

5.1 Expert scoring table of tourist participation index system in leisure agricultural tourist attractions

There are three levels in the scale, and the elements in the same level are compared in importance, which are divided into seven scales to score.

Expert scoring table of tourist participation index system of leisure agriculture tourism

Dear experts

Warming greeting! In order to realize the sustainable development of leisure agricultural tourism, this paper makes a reasonable evaluation on the tourist participation of Haikou leisure agricultural tourism scenic spot, and designs an expert scoring table of the tourist participation index system of leisure agricultural tourism. The purpose of the evaluation is to determine the weight of each index by using the analytic hierarchy process. I hope you can evaluate the rationality and scientificity of the index. The scoring details are as follows:

(1) The index system of this paper is based on the dimension of customer participation. The following table is the explanation of the index system and index.

Table. 3 Expert Scoring table

Target layer	Element layer (b)	Index layer (c)	Content meaning
Tourist participation index system A	Preparatory participation B1	Information collection C1	Collection of relevant information of tourism destination before travel
		Information comparison C2	Analyze the information collected to confirm the final destination
		Consult C3 in advance	Consult in advance for any doubts about the destination before traveling
		Develop strategy C4	Make travel strategy / plan
		Purchase necessities C5	Travel goods preparation
		Booking accommodation, etc. C6	Book products according to the strategy
	Behavioral participation B2	Participate in activity C7	Choose your favorite project to participate in the experience
		Purchase item C8	Souvenir / specialty purchase
		Sharing information C9	Share travel related information / photos through wechat, QQ, etc
		Compliance C10	Obey the requirements of the scenic area
		Difficult help C11	In case of difficulties, ask the team for help like staff
		Communication and interaction C12	Language / action communication, etc
	Responsible participation B3	Civilized tourism C13	Abide by the regulations of the scenic spot and have no uncivilized tourism behavior
		Resource saving C14	Use on demand, no waste
		Protect equipment C15	No damage to tourism facilities and equipment
		Environmental protection C16	No environmental damage
		Discouraging uncivilized behavior C17	Timely advise other personnel in case of uncivilized tourism behavior
		Comment C18	Put forward opinions / suggestions on products / services
	Follow up participation B4	Organize items C19	After the tour, the items are regular, etc
		Share item C20	Share the items purchased during the trip with relatives and friends
		Share feelings C21	Circle of friends / network sharing travel experience
		Lessons learned C22	Summarize the travel experience / experience

（2）Fill in the form according to the scale of matrix 1-9:

Scale Meaning

1 Indicates that the two factors have the same importance compared to each other

3 Indicates that one factor is slightly more important than the other

5 Indicates that one factor is obviously more important than the other when compared with two factors

7 Indicates that one factor is more important than the other when compared with two factors

9 Indicates that one factor is more important than the other when compared with two factors

2,4 The median value of the above two adjacent judgments

6,8 If the reciprocal factors i and j compare and judge bij, the judgment bji=1/bij calculated by factors j and i.

(3) Expert scoring table

Table. 5 Comparison of importance of element layer

Tourist participation a	Preparatory participation B1	Behavioral participation B2	Responsible participation B3	Follow up participation B4
Preparatory participation B1				
Behavioral participation B2				
Responsible participation B3				
Follow up participation B4				

Table. 6 Comparison of importance of preparatory participation evaluation factors

Preparatory participation B1	Information collection C1	Information comparison C2	Consult C3 in advance	Develop strategy C4	Purchase necessities C5	Booking accommodation, etc. C6
Information collection C1						
Information comparison C2					Fig. 1.	Fig. 2.
Consult C3 in advance						
Develop strategy C4						
Purchase necessities C5						
Booking accommodation, etc. C6						

Table. 7 Comparison of importance of behavioral participation evaluation factors

Behavioral participation B2	Participate in activity C7	Purchase item C8	Sharing information C9	Compliance C10	Difficult help C11	Communication and interaction C12
Participate in activity C7						
Purchase item C8						
Sharing information C9						
Compliance C10						
Difficult help C11						
Communication and interaction C12						

Table. 8 Comparison of importance of responsible participation evaluation factors

Responsible participation B3	Civilized tourism C13	Resource saving C14	Protect equipment C15	Environmental protection C16	Discouraging uncivilized behavior C17	Comment C18
Civilized tourism C13						
Resource saving C14						
Protect equipment C15						
Environmental protection C16						
Discouraging uncivilized behavior C17						
Comment C18						

Table. 9 Comparison of importance of follow-up participation evaluation factors

Follow up participation B4	Organize items C19	Share item C20	Share feelings C21	Lessons learned C22
Organize items C19				
Share item C20				
Share feelings C21				
Lessons learned C22				

5.2 Questionnaire on tourist participation in leisure agricultural tourist attractions

This questionnaire is divided into two parts, the first part is the basic information survey of tourists, in order to understand the demographic and social characteristics of tourists; The second part of the main part is divided into 22 questions to investigate the participation of tourists in leisure agricultural tourism.

Table. 10 Questionnaire on tourist participation

SN	Description	5"Fully compliant" -- 1 "totally non-compliant"				
1	I can easily get the tourism information of scenic spots	5	4	3	2	1
2	I think the scenic spots have distinctive characteristics and are easy to compare and choose	5	4	3	2	1
3	I can get consulting services in advance	5	4	3	2	1
4	I can find a variety of travel strategies to choose from	5	4	3	2	1
5	It's very convenient for me to buy travel necessities in the scenic spot	5	4	3	2	1
6	I can get convenient reservation service at the scenic spot	5	4	3	2	1
7	The activities carried out in the scenic spot can arouse my interest in participation	5	4	3	2	1
8	I can buy my own satisfied specialties and souvenirs in the scenic spots	5	4	3	2	1
9	I can get convenient WiFi and other services in scenic spots	5	4	3	2	1
10	I was aware of the relevant regulations and requirements of the scenic spot when I visited	5	4	3	2	1
11	I encountered difficulties and the staff were able to help me in time	5	4	3	2	1
12	I can interact with other tourists	5	4	3	2	1
13	I found signs / special personnel at the scenic spots to guide tourists to travel in a civilized way	5	4	3	2	1
14	Scenic spots have signs / special personnel to guide tourists to save resources	5	4	3	2	1
15	The facilities and equipment of the scenic spot are properly maintained	5	4	3	2	1
16	Proper environmental protection measures for scenic spots	5	4	3	2	1
17	Staff will advise tourists if they find that they have uncivilized behavior	5	4	3	2	1
18	My opinions / suggestions can get attention and feedback from scenic spots	5	4	3	2	1
19	I will share the products purchased during the trip with my relatives and friends	5	4	3	2	1
20	When someone asks for my opinion on the scenic spot, I will tell him my true feelings	5	4	3	2	1
21	I will visit my favorite scenic spots again	5	4	3	2	1
22	I will spread and share the travel information	5	4	3	2	1

6. Questionnaire test of tourist participation

The questionnaire was carried out in Chengdu Happy rural leisure farm scenic area from April to May in 2019. A total of 50 questionnaires were distributed to tourists, and 48 questionnaires were recovered, with a recovery rate of 96%. Two non-standard questionnaires were abandoned, and the effective rate was 92%.

6.1 Descriptive analysis

According to the collected questionnaire, the demographic statistics of the questionnaire data are as follows:

(1) Gender composition: female tourists accounted for 56.7%, male tourists accounted for 43.3%, and the proportion of male and female tourists was approximately the same.

(2) Age structure analysis: the tourists are mainly 16-25 years old, 26-35 years old and 36-45 years old age group, the total effective sample proportion is 20.1%, 37.6% and 25.8%, respectively. The tourists in the leisure agricultural tourism scenic spot are mainly young and medium-aged tourists.

(3) The educational background of tourists is mainly college and undergraduate education, accounting for 71.9% of the total.

(4) Statistics of tourist source composition: most tourists in the scenic area are tourists of the city. Although the scenic spot is located in the suburb of Chengdu, the city has convenient transportation. There are direct buses and tourist buses. The metro line 17, which will be passing by the end of the year, greatly facilitates the public to travel. The journey takes time within the "one hour traffic" plan, so it attracts a large number of tourists to visit. Among the tourists in this questionnaire, the main tourist groups are working class and family travel. The motivation of the trip is to return to nature and relax the leisure demand. The monthly income of visitors collected in the questionnaire is between 3000 and 5000 yuan, which is in line with the monthly average wage level of the on-duty employees in 2019 published by Chengdu City. The income of the tourists who come to the tour is at the middle level.

6.2 Reliability Analysis

Through the CITC and reliability analysis of 3 factors and 22 programmes, the overall reliability alpha is 0.877, and the Cronbach alpha coefficient values of the three factors are 0.858, 0.808 and 0.819, respectively, which are greater than 0.8, which indicates that the internal consistency of the scale is good.

Table. 11 Reliability statistics

Crombacha Alpha	Programmes
.877	24

6.3 Validity Analysis

SPSS23.0 software was used to test the structural validity of the data. According to the criterion of validity test in factor analysis, kmo value above 0.9 is very suitable for factor analysis, kmo score between 0.8 and 0.9 is very suitable, score between 0.7 and 0.8 is suitable, and score below 0.7 is not suitable. The kmo value of this questionnaire is 0.870 as shown in table 4.5, which is suitable for factor analysis and validity test.

Table. 12 KMO&Bartlett test

KMO Sampling suitability quantity.		.870
Bartlett sphericity test	Approximate chi square	1074.993
	degree of freedom	171
	high visibility	.000

The test data have converged after six iterations after rotation, and the component matrix is divided into four principal factors. Therefore, according to the results of the test questionnaire, the later formal questionnaire will have the original three principal component factors adjusted to four principal component factors. The factors are named as preparation type participation B1, behavior type participation B2, responsibility type participation B3 and follow-up type participation B4, with 22 index items (6 index items of preparation work; 6 index items of responsibility type participation B3 and 4 index items of follow-up type participation); There were 6 implementation behaviors; There are 6 responsible behaviors; There were 4 follow-up behaviors.

Table. 13 Rotated component matrix

Principal factors	Results			
	1	2	3	4
Responsible behavior 4	.902			
Responsible behavior 5	.889			
Responsible behavior 2	.824			
Responsible behavior 3	.817			
Follow up behavior 2	.726			.436
Follow up behavior 4	.701			
Responsible behavior 1	.691			
Preparation behavior 2		.802		
Preparation behavior 1		.769		
Preparation behavior 4	.366	.734		
Preparation behavior 5		.702		
Preparation behavior 3		.613		
Implementation behavior 3		.460		
Implementation behavior 5			.784	
Responsible behavior 6			.733	
Follow up behavior 3			.688	
Implementation behavior 6		.420	.655	
Preparation behavior 6			.607	.373
Implementation behavior 2				.807
Follow up behavior 1	.382			.680
Implementation behavior 4				.593

7. Conclusion

Through the design, extraction, construction, fuzzy comprehensive evaluation, expert evaluation and questionnaire analysis of the tourist participation evaluation model and index system, we find that the index system in the evaluation model mainly includes four types: preparation participation, behavior participation, responsibility participation and subsequent participation. The analysis of questionnaire includes demographic characteristics, and in terms of reliability and validity, based on the theory of customer participation, the evaluation index of tourists' participation is extracted by unstructured interview, and the evaluation index system of tourist participation is constructed. Then AHP AHP is used to determine the weight of each index system, and the expert rating table and questionnaire of tourists' Participation are designed, Then, the fuzzy comprehensive evaluation method is used to evaluate the participation of tourists, and finally, the evaluation model of tourist participation is established.

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