

# Research on Influencing Factors of Rural Tourism Cultural Creativity Based on Data Analysis

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**Abstract.** By tapping the cultural characteristics of rural tourism and developing creative cultural products, the culture can be rejuvenated, which not only conforms to the general trend of the integration of literature and tourism, but also helps to realize the strategy of rural revitalization, stimulate the cultural consumption of rural tourist destinations and promote the all-round development of local economy, society and culture. On this basis, the development strategies and suggestions of rural tourism cultural and creative products are put forward. Rural tourists can be divided into functional rationality (35.4%), active enjoyment (40.4%), potential development (11.8%) and face perception (12.4%). The main factors affecting tourists' consumption willingness and demand are cultural connotation quality, product price, brand awareness and word of mouth. When researching and developing cultural and creative products in rural tourist destinations, we should avoid the homogenization of products, but innovate the characteristics of folk villages, pay attention to practical functionality, ensure the quality of price matching, and extend the cultural communication chain, thus promoting the promotion of cultural consumption experience.

**Keywords:** Cultural creativity; Data analysis; Influencing factors; Reliability and validity test

## 1 Introduction

With the passage of time, the research of cultural and creative products has gradually shifted from paying attention to the characteristics of folk rural culture to the design centered on consumer demand [1-2]. However, the deeper motivation of values still needs to be further explored, which coincides with the era of "Marketing 3.0" oriented by values [3]. On this basis, the development strategies and suggestions of rural tourism cultural and creative products are put forward. In the research and development process of cultural and creative products, we need to pay attention not only to consumers themselves, but to those complete individuals with independent thoughts and hearts. Only products that resonate with them and interact with their values can truly win their hearts [4-5]. Therefore, how to guide rural tourists to form a correct consumption concept according to the consumption values is a subject worthy of in-depth study.

## 2 Research Design

For rural tourists, this study distributed questionnaires online and offline, and divided them into three parts for investigation. Likert 5-point scale was applied to the first and second parts, and its score was positively correlated with the degree of agreement. In the third part, based on the results of the questionnaire survey, structural equation model is used to analyze the relationship between the influencing variables and the preference of different types of tourists for the development factors of rural tourism cultural and creative products. When exploring the perceived value and consumption value of rural tourists, we draw lessons from the research results of domestic and foreign scholars such as Yu Fenglong, and make an analysis based on the CCVs scale [6-7]. Through the research on cultural consumption and cultural and creative products by Johnny and Wu, we construct a dimension of research and development factors of cultural and creative products to explore the expectations of rural tourists for cultural and creative products [8-9]. Through the survey data, the demand model of rural tourists' cultural and creative product design is preliminarily obtained and corresponding suggestions are put forward. A total of 442 questionnaires were distributed online and offline, of which 376 were recovered, and the missing questionnaires were deleted, with 314 valid questionnaires, with an effective rate of 83.5%.

## 3 Data Analysis

### 3.1 Reliability and validity test

This paper uses AMOS 24.0 to make confirmatory factor analysis on three scales of rural tourists' perceived value, consumption value and research and development factors of cultural and creative products, and deletes the item with factor load less than 0.5 (see tables 1, 2 and 3). The relationship between variables is tested by structural equation modeling method, and the parameters in the model are adjusted and modified. Ensure that the ratio of chi-square ( $\chi^2$ ) to degree of freedom (df) of CFA model is between 0 and 5, and the smaller the better, the other indicators do not need to be met completely. Table 4 shows that the CFA models of the three scales have good fitting effect.

**Table 1.** Silver Branch Load Table of Perceived Value of Rural Tourists.

Title number	dimension	Standardized factor load
Q1_Line 1	Landscape value	0.700
Q1_Line 2	Emotional value	0.494
Q1_Line 3	Social value	0.754
Q1_Line 4	Cost value	0.778

**Table 2.** Rural tourists' consumption values silver branch load table.

Title number	dimension	Standardized factor load
Q2_Line 1	Practical rationality	0.481
Q2_Line 2	creature comfort	0.736
Q2_Line 3	Independent development	0.827
Q2_Line 4	Family emotion	0.704
Q2_Line 5	Face image	0.813

**Table 3.** R&D factors of cultural and creative products in rural tourist destinations.

Title number	dimension	Standardized factor load
Q3_Line 1	External perception	0.703
Q3_Line 2	Behavioral functionality	0.538
Q3_Line 3	Cultural carrying capacity	0.669

**Table 4.** Fitting Degree of 4: CFA Model.

Model fitting index	$\chi^2$	df	$\chi^2/df$	CFI	NFI	TLI	IFL
ideal value			0-5	>0.9	>0.9	>0.9	>0.9
Perceived value of rural tourists	214.287	59	3.632	0.924	0.899	0.899	0.924
Consumption values of rural tourists	170.369	80	2.130	0.945	0.902	0.928	0.946
Research and Development Factors of Wen chuang Products	191.386	62	4.130	0.872	0.839	0.839	0.873

In order to verify the reliability and validity of this paper, we adopt CRonbach's Alpha coefficient, Cr and AVE internal consistency coefficient, combined reliability and mean square deviation to extract values, as shown in Table 5. Cultural value factor should delete the title "Is tourism a kind of enjoyment or a burden? Is it worth trying?" If the AVE value is higher than 0.5, it can be inferred that the convergence validity among the dimensions is considerable; On the contrary, it shows inconsistency or deviation. When CRonbach's Alpha coefficient exceeds 0.7, it can be inferred that the reliability of internal consistency is high, because the value of Cr value exceeds 0.7. According to the research results, it can be seen that the three variables involved in this survey are significantly correlated, which shows that the questionnaire has good structural validity. The Cronbach's Alpha value of the extracted factor is between 0.7 and 0.909. The CR value is between 0.68 and 0.89, and the CR value of family emotion and external perception is close to 0.7, which indicates the internal consistency of the questionnaire. Except for the AVE values of "independent development" and "behavioral functionality", which are 0.475 and 0.465 respectively, slightly less than 0.5, the AVE values of all the extracted factors have reached the ideal standard, which shows that the convergence validity of each factor shows a high level.

**Table 5.** Reliability and Validity Test.

Variables/dimensions	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
Landscape value	0.794	0.798	0.569
Emotional value	0.786	0.768	0.623
Social value	0.869	0.876	0.703
Cost value	0.877	0.890	0.671
Practical rationality	0.773	0.759	0.613

### 3.2 Regression analysis

Through the regression analysis of the consumption values of rural tourists, this paper takes the perceived value of rural tourism as the dependent variable, and explores the relationship between the five dimensions of rural tourism consumption values and the four dimensions of

perceived value. See Table 6 for specific data. In the tourism scene, some scholars believe that consumers' consumption values can reflect the ultimate state of their deep desire and pursuit [10]. Through the in-depth study of the consumption values of rural tourists, we can make clear the root of consumption behavior, so as to explore consumers' preferences for cultural and creative products. The regression equations are shown in Formula 1.

$$\begin{cases} \hat{b} = \frac{\sum_{i=1}^n (x_i - \bar{x})}{\sum_{i=1}^n (x_i - \bar{x})^2} = \frac{\sum_{i=1}^n x_i y_i - n\bar{x}\bar{y}}{\sum_{i=1}^n x_i^2 - n\bar{x}^2} \\ \hat{a} = \bar{y} - \hat{b}\bar{x} \end{cases} \quad (1)$$

**Table 6.** Results of Regression Analysis.

Consumption values of rural tourists	Perceived value of rural tourism			
	Landscape value	Emotional value	Social value	Cost value
Practical rationality	0.167***	0.228***	0.089*	0.174***
creature comfort	-0.062	-0.044	0.173***	0.131**
Independent development	0.157***	0.192***	-0.043	0.287***
Family emotion	0.026	0.207***	0.063	0.164***
Face image	0.137	0.008	0.595***	0.142***
R <sup>2</sup>	0.123	0.200	0.433	0.374

Note: \*\*\* means sig. at 0. 01 level; \*\* means sig. at the level of 0. 05; \* means sig. at the level of 0. 1.

Practical and rational consumption values. Rural tourists are practical and rational when they make consumption decisions as "economic people", but they should not ignore their status as "social people". Rural tourists pay attention to emotional value and can use tourism to maintain traditional social relations. Through the regression coefficient, the regression coefficient of practical rational consumption values on the emotional value is the largest, which is 0.228 and significant at the level of 0.01. The emotional value is reflected in the traditional concepts of family harmony and filial piety, which is also complementary to the rational consumption values of real cost.

Material enjoyment of consumption values. From Table 4, we can see that the material enjoyment consumption values are only significant for the social value and the cost value at the 0.01 and 0.05 levels, respectively, and the regression coefficient is 0.173 and 0.131, respectively. When rural tourists consume, they not only pursue material enjoyment, but also expect the improvement of social value. Material enjoyment and cost value seem to be contradictory, but in fact, rural tourists give consideration to both. According to the interview, experiencing rural tourism aims to improve the quality of life and feel about different lives. Those who do not want to mention the backward rural infrastructure and service facilities, and the weak service awareness and poor experience of employees. Therefore, the balance between material enjoyment and cost value is crucial.

Develop consumer values independently. In addition to the insignificant regression to social values, the regression coefficients for landscape value, emotional value and cost value were 0.201, 0.0192 and 0.287, respectively, and they were all significant at the 0.01 level. When rural tourists describe the reasons for their willingness to experience rural tourism in the questionnaire interview, they mostly interpret them as "broadening their horizons", "feeling

different cultural atmosphere" and "improving their understanding of rural culture", which can be summarized as the perceptual pursuit of landscape value, emotional value and cost value. Rural tourists are willing to consume tourism for their personal growth and development.

Family emotional consumption values. And the regression coefficient on the emotional value, and it is significant at the level of 0.01. Traditional Chinese culture emphasizes family harmony. Rural tourism can strengthen the relationship between family members and friends, improve the perception of life, and reflect the emotional value. Family emotional consumption view is obviously correlated with landscape and cost value. In the rural tourism, the family members appreciate the natural scenery, experience the folk culture, and recognize the cost value. The deeper the family emotion, the higher the cost value.

Face image consumption values. In Table 4, the regression coefficient of face image consumption value is significant at the level of 0.01. On the one hand, rural tourists' perception and pursuit of social value is reflected in the consumption concept of "material enjoyment", and on the other hand, the consumption value of "face image" is also very prominent. Rural tourists who consume for the purpose of improving face image pay more attention to the eyes of people around them and the social evaluation obtained after the tour, and their perception of cost value is relatively few.

### 3.3 Cluster analysis

According to the above correlation analysis, no two variables have correlation coefficients close to 1 or -1. Therefore, this paper clusters the research and development factors of cultural and creative products with the perceived value and consumption values of rural tourists, so as to divide the consumption behavior characteristics of rural tourists on cultural and creative products. K-means clustering of the data using SPSS 24.0, which determined the number of clusters as 4 from the sample data and the characteristics of cultural and creative product consumption. From Table 7, the probability values of the distance difference between categories are all less than 0.01, that is, the clustering is effective. It can also show which variables are statistically significant among the categories, and conclude which variable plays a greater role in the cluster analysis based on the size of the F value. The formula for the cluster analysis is shown in Formula 2.

$$SSE = \sum_{i=1}^K \sum_{p \in C_i} |p - m_i|^2 \quad (2)$$

Table 7. Table of clustering variance.

	Cluster		Deviation		F	sig.
	Mean square	Degrees of freedom	Mean square	Degrees of freedom		
External perception	48.924		4.117		11.884	
Functional behavior	33.068		1.873		17.653	
Cultural bearing	697.292		6.431		108.424	
Landscape value	406.869		5.254		77.446	
Emotional value	52.793	3	2.634	310	20.042	0.000
Social value	220.619		4.403		50.112	
Cost value	121.455		2.36		51.474	
Practical rationality	61.851		2.762		22.393	
Creature comfort	486.76		6.692		72.740	

Independent development	26.236	2.116	12.398
Family emotion	200.089	6.513	30.720
Face image	830.752	8.816	94.228

**Table 8.** Center attributes of each cluster.

	Cluster I	Cluster II	Cluster III	Cluster IV
Proportion	35.4%	40.4%	11.8%	12.4%
Landscape value	12.95	13.69	12.03	11.85
Emotional value	8.7	9.38	7.65	8.38
Social value	6.31	11.91	6.65	8.56
Cost value	16.74	18.25	11.78	15.97
Practical rationality	8.14	8.91	6.68	7.72
Creature comfort	11.86	13.33	8.57	12.28
Independent development	13.98	14.17	10.373	13.33
Family emotion	7.91	8.73	6.24	7.74
Face image	8.7	9.38	7.65	8.38
External perception	6.31	11.91	6.65	8.56
Functional behavior	16.74	18.25	11.78	15.97
Cultural bearing	8.14	8.91	6.68	7.72

The central properties of each cluster were obtained in Table 8, and the clusters were explored:

Cluster I: Such tourists accounted for 35.4% of the total survey sample, including 111 people. In addition to ranking third in "material enjoyment", "social value" and "external perception", the vast majority of factors ranked second. It reflects that this kind of tourists do not care too much attention to others' eyes and the external form of goods when buying cultural and creative products. They attach relative importance to the attributes and functional value of products, and can name them as functional rational tourists.

Cluster II: Such tourists accounted for 40.4% of the total survey sample, accounting for the largest proportion, with 127 people. All the factors are ranked in the first place, and their demand for cultural and creative products is complex, that is, considering the external characteristics of the products and paying attention to the internal cultural factors, and showing high attention to tourism consumption, so they are named as actively enjoying tourists.

Cluster III: This type of tourists accounted for the least proportion, at 11.8%, including 37 people. In addition to "landscape value" and "social value", which are in the third, the rest are at the bottom. Therefore, they are named as potential development tourists, and they can distinguish their purchase intention according to their behavior and manner of entering the store, and show their different attraction points of cultural and creative products.

Cluster IV: Such tourists accounted for 12.4 percent, including 39 people. Its "social value", "material enjoyment" and "external perception" both rank second. In addition to the "landscape factor" in the fourth, most factors are in the third, which can be attributed to face-oriented tourists.

## 4 Conclusion

Through the investigation and regression analysis of the consumption values and perceived values of rural tourists, we find that the consumption values of practical rationality, independent development and family emotion have a significant impact on the perceived value of rural tourism. This shows that cultural and creative industries will be affected by consumer behavior in the development process. Through the correlation analysis between the research and development factors of rural tourism cultural and creative products and the consumption values and perceived values of rural tourists, we find that the functional dimension of behavior is closely related to the factors of "social value", "face image" and "practical rationality", which shows that China's traditional culture and values have been deeply rooted in the hearts of rural tourists. Internal perception is one of the core elements to promote the development of rural tourism cultural and creative products, and it is also the most important internal driving force. Although this study used the previous scale to construct the questionnaire of rural tourists' consumption values, perceived values and R&D factors of cultural and creative products, the optimization of confirmatory factor analysis model still needs to be further promoted.

**Acknowledgments.** The key project of Shandong Commercial Vocational and Technical College is "Research and Practice of Vocational Education to Help Rural Revitalization". (C121)

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