Scientific Research

The Influence of Tourism on Rural Life in Minority Areas

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ABSTRACT

In this paper, taking three ethnic minority areas as an example, through a questionnaire to obtain relevant data, according to the characteristics of the ethnic minority areas, using the factor analysis method, we analyse the tourism in ethnic areas of country life with various effects. We summarize the pros and cons, avoid or minimize the adverse impacts within the maximum limits, mitigate the conflicts between the value of resource and the development, find a balance between tourism development and rural construction, realize win-win tourism development and rural construction.

Keywords: Rural Tourism; Influence; Factor Analysis

1. Introduction

With the rural tourism in ethnic regions being more and more popular, people also begin to focus on impact rural tourism [1] which brings to local people's living. Because of its distinctive features and functions [2], rural tourism not only meets the consumer demand for tourism [3], but also affects the developments of society [4], economy [5], environment and culture of the local [6]. In order to know how much of these four aspects' impact and what internal relationship exists [7], taking three ethnic minority areas as an example, through a questionnaire to obtain relevant data [8], according to the characteristics of the ethnic minority areas [9], using the factor analysis method [10], we analyse the tourism in ethnic areas of country life with various effects [11].

2. The Basic Idea and Basic Method of Factor Analysis

The idea of factor analysis stems from Charles Spearman in 1904 [12], it uses the idea of dimension reduction, starting from the original variables related to matrix inside, puts some perplexing relationship with the variable as a multivariate statistical several comprehensive factor analysis method [13].

2.1. A Factor Model

$$\begin{cases} X_1 = a_{11}F_1 + a_{12}F_2 + \cdots + a_{1m}F_m + \varepsilon_1 \\ X_2 = a_{21}F_1 + a_{22}F_2 + \cdots + a_{2m}F_m + \varepsilon_2 \\ \quad \vdots \\ X_p = a_{p1}F_1 + a_{p2}F_2 + \cdots + a_{pm}F_m + \varepsilon_p \end{cases}$$

Among them, $F_1, F_2, \cdots, F_m$ are the main factor, and respectively reflects one aspect of information unobservable latent variables; a_{ij} is the factor loading coefficient, it is the i index in the j load factor. If an index in a factor of effect, the factor loading coefficient is high, and vice versa; ε_p is special factor, can be ignored in the actual modeling. The cumulative contribution rate indicates the amount of information corresponding to several father-in-law factor cumulative reflect the original index, factor accumulation contribution rate $\geq 85\%$ factor as the main factor number.

2.2. The Establishment of Data Sources and Index System

See Appendix for data sources. In this paper, through a questionnaire survey of Xijiang Miao village in Guizhou, Gongcheng Yao Autonomous County of Hongyan village and Guilin Butterfly Valley for the scenic area, collected a total of 371 effective samples. The reason for

choosing these three sites are: Xijiang Miao village is in Leishan country which is a state-level poor country, Hongyan village is located in Gongcheng Yao Autonomous Country which is an impoverished country in Guangxi, Butterfly Valley is located in Lingui country which is an old revolutionary base area. Three minority villages have long followed the small-scale peasant economy mode of production, have embarked on the road of tourism development in support of the local government, and are representative. The questionnaire was based on the TIAS model, TIS model, Song Linfei SRSS system, combined with the specific situation in minority areas were added, from the aspects of design. The implicit index for political, economic environment, social culture, a total of 5, the following is subdivided into 34 dominant index. The dominant index according to the Li Ke scale analysis method, including the 5 options, followed by "fully agree with (5)", "agreed (4)", "uncertainty (3)", "don't agree (2)", "totally disagree (1 points)". Unified data using SPSS software to do quantitative analysis, numerical value is greater, illustrate the impact of tourism on rural life more.

This study used structural questionnaire survey method to collect data. Research group designed the questionnaire, a survey, in view of the existing problems to improve the contents of the questionnaire, the interview and discussion the formal questionnaire. To carry out large-scale questionnaire survey in 2012 June-2012 year in August, in a household questionnaire, a volume, were randomly distributed 400 questionnaires, 380 were recovered, the recovery rate is 95%, effective questionnaire 371, effective rate was 92.8%. Specific samples are shown in **Table 1**.

2.3. Data Screening

Factor analysis of the original data, by the principal component analysis method to extract the initial common common factors are 1, and extract factor scale of ×6, ×7, ×14 to less than 0.5, that the three variables on the impact on the local life role of rural tourism in ethnic regions was not significant, so out of variable.

2.4. The Reliability and Validity of Data

After eliminating variables, doing reliability testing on 31 variables, the reliability coefficient of the most commonly used is the Cronbach alpha coefficient. Cronbach alpha coefficients ranged from 0 to 1. The bigger the coefficient is, the higher the degree of internal consistency of the scale of each subject is, and the higher the reliability of the scale is. Applying of SPSS software and the analysis of the design of the questionnaire gives that the Cronbach alpha coefficient is 0.663, which is in line with the requirements of the reliability level of the ques-

Table 1. Basic characteristics of samples.

Demographic characteristics		Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Male	176	47.4	47.4	47.4
	Female	195	52.6	52.6	100.0
People	Han	19	5.1	5.1	5.1
	Miao	217	58.5	58.5	63.6
	Tujia	2	0.5	0.5	64.2
	Yao	131	35.3	35.3	99.5
	Zhuang	2	0.5	0.5	100.0
Household register	Local people	321	86.5	86.5	86.5
	Outsiders	50	13.5	13.5	100.0
Age	Less than 20 years old	18	4.9	4.9	4.9
	21 - 39 years old	136	36.7	36.7	41.6
	40 - 59 years old	172	46.4	46.4	88.0
	Above 60 years old	45	12.1	12.1	100.0
Work	Not to participate in the tourism service	130	35.0	35.0	35.0
	Participation in tourism service	223	60.1	60.1	95.1
	Other work	18	4.9	4.9	100.0
Cultural degree	Didn't go to school.	54	14.6	14.6	78.7
	Primary school	79	21.3	21.3	100.0
	Junior middle school	163	43.9	43.9	43.9
	High school (secondary school)	72	19.4	19.4	64.2
	University or above	3	0.8	0.8	44.7
The total family income	More than 25,000	75	20.2	20.2	48.2
	15,000 - 25,000	104	28.0	28.0	28.0
	5000 - 15,000	145	39.1	39.1	87.3
	Less than 5000	47	12.7	12.7	100.0
Source of family income	Not from tourism	76	20.5	20.5	20.5
	Less from tourism	61	16.4	16.4	65.5
	From the part of Tourism	106	28.6	28.6	49.1
	Mainly from tourism	128	34.5	34.5	100.0

tionnaire. Validity is a measure of the accuracy of the results. Validity is the validity of data scale, the scale can accurately, really, objectively test attributes of things. Usually the structural validity of the questionnaire is used to study the validity of the questionnaire. Construct validity refers to the concept of measuring tool measuring theory or a special degree. This study uses confirmatory factor analysis method to examine the construct validity of extracting common factor, the method of principal component, factor rotation by the varimax rotation. Through the rotation of variables, we find that all the factors loading are greater than 0.5, so the validity of scale is in line with the requirements.

3. Factor Analysis

3.1. Factor Analysis

Factor analysis of the 31 variables using the SPSS19.0, the KMO value is 0.746, Bartlett value is 2320.405, and Sig is 0 (see **Table 2**). These mean that the data is suitable for factor analysis. And the four groups of indicators of the corresponding factor analysis, 19 factors were extracted. The political aspect extracted 3 common factors accumulated explanatory variables into 78.164%, economic aspects of the sample of 4 common factor accumulative explanatory variables into 75.869%, environmental sample of 4 common factor accumulative explanatory variables into 85.151%, culture extract 8 common factor accumulative explanatory variables into 71.902%.

3.2. The Framework of Indicator System and Weight Determination

Through the index search, classified, and using SPSS19.0 analysis and selection of indicators, 19 factors are eventually extracted, we rename and arrange those factors in **Table 3**.

In the naming of the 19 factors, the weight of 19 indicators, we use the principal component analysis method. The ratio of each factor's contribution rate and accumulated contribution rate is considered as the weight of the factors. Because tourism on rural political, economic, environmental, cultural influences has an equally important position, the political, economic, environmental, cultural four index weight is set to be the same. This can

Table 2. KMO tests and Bartlett.

Sampling enough of Kaiser-Meyer-Olkin metric.		0.746
Sphericity Test Bartlett	Approximate chi-square	2320.405
	df	465
	Sig.	0.000

Table 3. The nomenclature and factor contribution rate.

Index	Factor	Loading	
	Factor	Factor load	Factor contribution
Politics Influence	Cadre corruption F_1	0.975	41.654
	Policy changes F_2	0.865	22.939
	Understand the policy F_3	0.730	13.571
Economics Influence	Poverty gap F_4	0.997	31.147
	Rent prices F_5	0.969	19.395
	The land problem F_6	0.726	14.079
	To increase the income of farmers F_7	0.689	11.249
Environmental Science Influence	Sanitary condition F_8	0.976	26.765
	Infrastructure F_9	0.960	23.142
	Traffic jam F_{10}	0.918	18.369
	The ecological environment F_{11}	0.773	16.876
Culture Influence	Outdated customs and bad habits F_{12}	0.896	14.314
	External conflict F_{13}	0.889	11.590
	Family and marriage F_{14}	0.857	9.755
	Religious conflict F_{15}	0.812	7.944
	Crime rate F_{16}	0.810	7.653
	Scienceandtechnology information F_{17}	0.739	7.504
	Neighborhood disputes F_{18}	0.702	6.734
	Moral standards F_{19}	0.680	6.409

reflect that the tourism has the same important position on the effect of four aspects of the country, but also to political, tourism to the country influence of economy, environment, coordination of culture, according to the index system of factors and their weights, the evaluation of tourism on rural effect is established, various weight is shown in **Table 4**.

It is seen from **Table 4**, weight three indicators reflect the impact of tourism on the rural local life, cadres corruption factor, the gap between rich and poor sanitary condition factor, weighting factor is high, up to 0.5329, 0.4105, 0.3143. With the development of the local tourism, the local economy income increases, but due to various reasons, some people get a lot of interest, while others have little interest, increasing the income inequality, the growing gap between rich and poor. At the same time, because of economic development, the cadre of available resources is relatively more, also makes the corruption becomes more serious. In the process of tourism development, the population increase, because of,

Table 4. Effect evaluation index system of rural tourism.

Two levels of index	Weight of two level index	Three levels of index	Weight of three level index
Political influence Evaluation index	0.2500	Cadre corruption F_1	0.5329
		Policy Changes F_2	0.2935
		Understand the policy F_3	0.1736
Economic impact Evaluation index	0.2500	Poverty gap F_4	0.4105
		Rent prices F_5	0.2556
		The land problem F_6	0.1856
		To increase the income of farmers F_7	0.1483
Environmental impact Evaluation index	0.2500	Sanitary conditions F_8	0.3143
		Infrastructur F_9	0.2718
		Traffic jam F_{10}	0.2157
		The ecological environment F_{11}	0.1982
Cultural impact Evaluation index	0.2500	Outdated customs and bad habits F_{12}	0.1991
		External conflict F_{13}	0.1612
		Family and marriage F_{14}	0.1357
		Religious conflict F_{15}	0.1105
		The crime rate F_{16}	0.1064
		Science and technology information F_{17}	0.1044
		Neighborhood disputes F_{18}	0.0937
		Moral standards F_{19}	0.0891

(Two level index spanning label at left: Tourism to the country Impact assessment Index system)

the local environment has also been greatly affected. Other factors also have a different impact of tourism on the. In general, the score weights to individual factors still have bigger difference, this also shows, travel or have had a considerable effect on some local factors.

4. Summary

Everything has two sides. In order to develop the rural tourism better, increase the positive impact of tourism on the local, to reduce the negative influence, we should make full use of the macro-adjusting role of government so that more people can enjoy the comprehensive benefits of tourism. While increasing the tourism economy, the government should also carry out the supervision, to create civilized and harmonious cultural atmosphere, strengthen the health construction of the environment, to promote the local economy develop steadily.

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