Research on the Image Communication of Red Culture in Guangxi Red Village under the Network Environment

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Abstract. By combining theoretical research with empirical research, this paper applies the foreign mature theory of tourism destination image perception to the research of tourists' perception of red tourism destination image in China, and makes a beneficial attempt to the research of tourists' perception of red rural tourism destination image. By measuring the evaluation of tourists' perception on the image of red rural tourism destinations, this paper understands the actual situation of tourists' perception on many specific factors of red rural tourism destination image, and finds out the characteristics of their perception behavior, which provides reference for the image communication of red rural tourism destinations.

Keywords: red culture; Red rural tourism; Image of tourism destination; communication

1　Introduction

He also emphasized the comprehensive promotion of rural revitalization, based on characteristic resources, integration of agriculture, culture and tourism, according to local conditions to develop rural tourism, leisure agriculture and so on. Guangxi's red resources are mostly distributed in rural areas. Combining with rural characteristics, developing red tourism is an important way to rural revitalization and an effective way to inherit the red gene.

Red culture tourism is also known as red tourism. Many scholars in China have studied red tourism. Weng Gangmin pointed out that red tourism resources are a kind of thematic historical and cultural resources[1] integrating political, economic and social functions. From the perspective of identity, Zhao Zhifeng et al. studied the social effects of red tourism based on the grounded theory, and divided the social effects of red tourism into three dimensions [2]: historical identity, political party identity and national identity. The related research mainly focuses on the development of red tourism resource value, red tourism effect, red tourism market research and other aspects, while

the research on the integration of red culture, image construction and communication is less.

Scholars have different research directions on the image and communication of tourism destinations. Bosque proposed an image measurement method [3] based on the cognitive-emotional association of destination image. Zhang H. et al. argued that the construction of destination image is influenced [4] by five dimensions: cognitive image, emotional image, overall image, cognition-emotional joint image and self-harmony. Taking the Internet as the background, Xie Yanjun et al. analyzed the influence [5] of network platforms on the publicity and shaping of tourism destination image from the perspectives of Internet, network news, virtual communities and tourism blogs. Therefore, this study will start from the direction of "red culture integration" under the background of network environment, study the influence of red culture integration on the image of red villages in Guangxi, construct the influencing factors of the image of red villages in Guangxi, and design the network publicity plan of red villages in Guangxi.

The academic circle has always paid attention to the value of red culture and the construction of red tourism brand, but the image construction of red rural tourism has not been clarified. The concept, structure, relationship logic, elements and image communication mechanism of red tourism image are not clear, which can be used as the breakthrough point of this research project. In addition, there are many researches on the exploration of red tourism resources at home and abroad, but few researches on the integration of red culture and revolutionary red countryside. A large number of research results have been achieved in the application of red culture resources mining, planning and development, tourism products and so on in Guangxi, but the image construction and communication effect of red culture integrated into the red villages in Guangxi still need to be studied. To sum up, the communication of red tourism image is consistent with the network environment.

2   Empirical research on red villages in Guangxi

(1) The design of index system

Based on the research of Ni Rui [6] et al., this study adopted 17 tourism motivation expressions according to the actual situation of red villages in Guangxi. According to different tourist destinations, the researchers choose different indicators of image cognition. Based on the research of Wu Tiehong et al. (2008) [7], this study considers the particularity of the image measurement of red tourism destinations, and on the basis of the actual situation of red villages in Guangxi, it solicited experts' opinions to increase or decrease the measurement attributes of tourism image, and finally selected 26 cognitive image index factors. Therefore, this study uses a scale composed of dull, unpleasant, depressed and plain to measure tourists' perception evaluation of the emotional image of red rural tourism destinations in Guangxi. Emotional image is expressed as "the feeling of visiting Guangxi red rural tourism", which is measured by four adjective scales. Through sorting out the relevant literature, 18 factors were used, and each factor was measured by Likert 5-point scale. The overall image is expressed as "I have a good overall impression of Guangxi red rural tourism", "I will recommend Guangxi red rural

tourism to others" and "I have a good experience of Guangxi red rural tourism", which constitute the scale measurement.

(2) Distribution of questionnaires

The author conducted a formal questionnaire survey from September 2022 to November 2022 through questionnaire Star, field questionnaire, wechat, QQ, Douyin and other software. The survey time mainly focused on holidays and weekends after holidays. The respondents were those who had known about the red rural tourism in Guangxi. A total of 208 valid questionnaires were actually collected, with an effective recovery rate of 90.43%.

3   Statistics and analysis of survey data

3.1   Descriptive analysis

From the table 1, in terms of gender composition, males accounted for 47.1% and females accounted for 52.9%, with more female tourists than male tourists. In terms of occupation, the most popular tourist is "other", accounting for 23.3%, followed by "white-collar", "workers", "civil servants" and "retirees". In terms of the source of tourists, the proportion of tourists in Guangxi area is 22.9 percent, and that outside Guangxi area is 77.1 percent. In terms of age structure, the most popular age group of tourists is 18-25 years old, accounting for 73.3%. It can be seen that young people are the main group of tourists in scenic spots. It is worth noting that the proportion of "18-25 years old" is quite large, and tourists in this age group are generally school students, so school students are the main body of tourists. From the perspective of political status, the majority of tourists are youth league members and party members, accounting for 82.4%, which is consistent with the "red" characteristics of the scenic spot.

Table 1. Analysis of tourists' social and demographic attributes

		Frequency	Percentage	Effective percentage	Cumulative percentage
Gender	male	99	47.1	47.1	47.1
	female	111	52.9	52.9	100
	Total	210	100	100	
Career	Worker	16	7.6	7.6	65.7
	White collar	17	8.1	8.1	73.8
	Civil servants	4	1.9	1.9	75.7
	Retirees	2	1	1	76.7
	Others	49	23.3	23.3	100
	Total amount	210	100	100	
Source of visitors	Guangxi area	48	22.9	22.9	22.9
	Outside Guangxi Region	162	77.1	77.1	100
	Total	210	100	100	
Age	Under 18	3	1.4	1.4	1.4

	Ages 18-25	154	73.3	73.3	74.8
	Age 26-44	38	18.1	18.1	92.9
	Ages 45-64	14	6.7	6.7	99.5
	Over 65	1	0.5	0.5	100
	Total	210	100	100	
	Party Member	51	24.3	24.3	24.3
Political outlook	League player	122	58.1	58.1	82.4
	The Masses	32	15.2	15.2	97.6
	Others	5	2.4	2.4	100
	Total	210	100	100	

3.2   Reliability and validity analysis of the scale

In order to ensure the scientific nature of the measurement, we first evaluated the reliability and validity. Reliability analysis was carried out with the help of statistical software SPSS, using Cronbach's consistency coefficient a value in the Alpha analysis model. In this study, the a value of tourist motivation is 0.940, the a value of tourist destination image perception evaluation is 0.984, the a value of affective evaluation is 0.964, and the a value of overall evaluation is 0.735, indicating that the questionnaire scale in this study has high reliability. The validity refers to the construct validity. This study conducted factor analysis on 18 factors of tourists' travel motivation and 26 factors of destination image cognition evaluation, and the KMO values were 0.675 and 0.775, respectively, indicating that factor analysis could be done.

To sum up, the questionnaire scale in this study has high reliability and validity.

3.2.1. Factor analysis of tourists' tourism motivation.

The basic purpose of factor analysis is to use a few factors to describe the relationship between many indicators or factors. This study uses factor analysis to investigate the connotation of factors in tourism motivation and cognitive image. For the factor analysis of tourists' tourism motivation, the validity test was carried out first. The value of KMO measure was 0.675, which could be used for factor analysis.

According to the actual connotation of each factor of tourists' travel motivation and the factors it contains, the six factors are named as "respect for martyrs," "social interaction," "regulation of body and mind," "conformity motivation," "experience motivation" and "knowledge motivation" (see Table 2 for details). The loading of all the index factors of the six major factors is above 0.5, indicating that these factors have a strong correlation with the original variables they contain.

Table 2. Naming and loading table of tourist motivation factors

Factor naming	Specific variables	1	2	3	4	5	6
	Visit historical and cultural attractions	0.804					

		1	2	3	4	5	6
Intellectual motivation	Learn about the deeds of revolutionaries	0.849					
	Feel for yourself the heroic spirit of the revolutionaries back then	0.801					
	Visiting places friends want to visit,	0.377					
	Relieve stress at work	0.683					
Social interaction	Online introductions you'd like to check out		0.637				
	Increase knowledge of revolutionary history		0.561				
	View the unique architecture and scenery		0.552				
	Promote emotional communication among colleagues and classmates		0.729				
	With family and friends		0.769				
	Relax and rest		0.675				
Herd motivation	Buying specialty souvenirs			0.611			
	I'll go when everyone else goes			0.811			
Conditioning Body and mind	Escape from everyday life for a while				0.762		
	Family and friends were going, so I had to play along				0.418		
Honor the martyrs	Cherish the memory of revolutionary martyrs					0.846	
Experience motivation	Experience the will of the revolutionaries						0.955

3.2.2 Factor analysis of tourists' cognitive evaluation of tourist destination image.

Similarly, before the factor analysis of the cognitive evaluation of tourist destination image, the KMO degree and Bartlett's sphere test are conducted on the samples, the value of KMO measure is 0.736, and the significance probability of Bartlett's sphere test in the table is 0, which is less than 1%, indicating that the statistical data are suitable for factor analysis.

The rotated factor loading matrix is obtained through factor analysis (Table 2). From the total variance interpretation table (Table 3), the six factors explain 74.479% of the total variance. Therefore, it can be preliminously believed that these six factors can explain most variables and summarize most information. The six factors are named as "reception facilities and services", "tour facilities and services", "landscape environment/network popularity", "red/historical resources", "tour atmosphere" and "celebrity/educational resources" according to the actual connotation of each factor and the factors contained in the evaluation of tourists' perception of the tourist destination image. The loadings of all the index factors of the six major factors are around 0.5 or

above, indicating that there is a strong correlation between these factors and the original variables they contain.

Table 3. Rotated component matrix a of cognitive evaluation

Factor naming	Specific variables	1	2	3	4	5	6
	The red heritage attractions are well preserved	0.744					
	Demonstration base for Patriotic education	0.478					
	High degree of greenery	0.587					
Reception facility services	Quaint and secluded natural surroundings	0.355					
	Public toilet hygiene	0.438					
	The scenic spot staff is of high quality	0.672					
	Good counseling services	0.538					
	The tour itinerary is well arranged		0.624				
	Tourism commodities have distinctive features		0.665				
Touring the atmosphere	Convenient transportation		0.547				
	Good ticketing service		0.407				
	The residents are warm and friendly		0.464				
	The scenic spot is clean and sanitary		0.536				
	Famous red tourist destinations on the Internet			0.446			
	The signage of the scenic spot points clearly			0.695			
Tour facility services	Travel goods are reasonably priced			0.628			
	Guide explains well			0.436			
	Tickets are reasonably priced			0.503			
	Tourist civilization			0.555			
Red/Historical Resources	Revolutionary spirit				0.664		
	The display of the original red attractions				0.631		
Landscape environment/Internet visibility	Red resources are rich in content					0.533	
	Cradle of revolution					0.766	
	The Revolution has a long history						0.588
Celebrity Education Resources	Spectacular exterior architecture						0.562
	Unique architectural style						0.515

4   Conclusion and discussion

(1) Research conclusion

Through the analysis and processing of the questionnaire data, this study has drawn the following conclusions: most of the tourists who know about the red rural tourism in Guangxi are young people under 45 years old, especially the students aged 18-25 years old are the main body of tourists in the scenic spot, and most of the political status are league members and party members. The biggest promotion to the red rural tourism in Guangxi is the publicity of the Internet.

The tourism motivation of Guangxi red rural tourism can be basically classified into the following six categories: respect for martyrs, social interaction, regulation of body and mind, conformity motivation, experience motivation and knowledge motivation. Tourists' image construction of red rural tourism in Guangxi is composed of cognitive image and emotional image, and cognitive image and emotional image together constitute tourists' overall image of red rural tourism in Guangxi. The cognitive image can be classified into the following six categories: reception facility service image, tour facility service image, landscape environment/network popularity, red/historical resource image, tour atmosphere image and celebrity/educational resource image. The differences of tourists' cognitive image of red villages in Guangxi are mainly reflected in the service image of reception facilities, landscape environment/network popularity and celebrity/educational resources image.

(2) Countermeasures for the communication of red village image in Guangxi under the network environment

Through the questionnaire analysis, most of the tourists' understanding of the red villages in Guangxi comes from the Internet. Therefore, the combination of the communication of Guangxi red villages and the strategy of "Internet + tourism" is conducive to the development and exploration of the development mode of Guangxi red rural tourism. Building its own tourism brand based on the Internet will enhance the competitiveness and cultural influence of regional tourism. Under the development concept of "Internet + tourism", the communication of Guangxi red countryside will achieve further results, and more tourists will understand Guangxi red countryside, feel Guangxi red culture, and experience the journey of red countryside.

1. Change the original communication mode of Guangxi red village to improve the satisfaction of the audience

The mode of "Internet + tourism" provides a way for the communication of red culture in the new era. With the Internet as the carrier of communication, the participation threshold is low, and the novelty of a variety of related product development is conducive to mobilizing tourists' visiting emotions. In addition, the big data model will analyze and predict the relevant tendencies of the audience for many times, and give two-way feedback on the basis of certain data, so as to have a more comprehensive understanding of the needs of the audience. Integrating network resources, creating an open and shared red culture communication platform, integrating network explanation, Guangxi red rural tourism communication and audience service, breaking the barriers of traditional propaganda mode, stimulating people's spiritual consumption, breaking

the limitations of time and region, which will expand the coverage and scope of influence of Guangxi red rural communication. In addition, with the addition of online courses, Guangxi red rural tourism will be transformed into online course resources with the help of online courses, integrated into teaching ideological and political courses, and become a regular educational content, so as to expand the influence of Guangxi red rural communication.

2. Enrich the communication content of Guangxi red villages and reduce the communication cost of Guangxi red villages

The tourism industry and the Internet industry are inherently market-oriented. Now the tourism industry is booming and the Internet industry has a bright future. The combination of the two will produce a remarkable effect of "1+1 > 2". Through the investment in the mobile platform of Guangxi red village communication, the long-term demand for resource use has been met, the timeliness of information feedback has been greatly improved, and the research cost has been reduced. Through online and offline communication, red culture has indirectly enriched the content and expanded the audience. Applying the unique advantages of "Internet + tourism" to the communication of red villages in Guangxi is bound to reduce the communication cost.

3. Contribute to the "Guangxi Red Rural Tourism +N" model, and drive the formation and development of Guangxi red rural tourism industry chain

The opening and sharing of "Internet +" is a win-win situation for cultural industries, social networks and e-commerce platforms. With the red villages in Guangxi as the core, "cultural creativity" is carried out to make the production of cultural products meet the needs of the audience, forming a sustainable development of the relevant industrial chain, while meeting the spiritual consumption, but also transition to the material level of development. At the same time, Guangxi red rural tourism itself will connect enterprises and audiences in the Guangxi red rural industrial chain, becoming the most important link or lack of it. The addition of social network and e-commerce platform enables the audience to communicate with each other online and offline while traveling and understanding the red culture, which satisfies the emptiness in the virtual network world, and improves the satisfaction of the audience by purchasing suitable red cultural products. With the chain effect, the red rural tourism in Guangxi has been spread twice in reverse. Functional products based on the Internet have become carriers of red culture, and product development and scenic spot publicity can be achieved simultaneously. In the Internet era, in addition to meeting the cultural needs of the audience, it makes full use of the multi-direction feedback of the Internet to carry out product and industrial redevelopment, which promotes the spread of red rural tourism in Guangxi.

(3) Research deficiencies and prospects

The shortcomings of this study are mainly reflected in the following two aspects:

First, the number of questionnaires is relatively small, and the distribution of questionnaires is concentrated. In order to improve the effect of questionnaire survey, the number of questionnaires can be further increased. In addition, the time of questionnaire distribution is concentrated in the holiday, and the majority of students are tourists during this period. The representativeness of questionnaire sampling needs to be further improved, so it can be considered to disperse the questionnaire at other times.

Second, due to the limitation of time and energy, this study cannot comprehensively compare the changes in tourists' perception of red tourism destination image in terms of time difference and space difference. Studying the image of tourists in tourism destinations has a certain guiding effect on the image communication of tourism destinations.

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