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# Study on the coupling mechanism of social interaction and rural tourism practitioners sustainable participation

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**Abstract.** As a green industry, tourism provides a new path for the green development of rural areas and plays an important role in the development of rural economy and the construction of ecological civilization, the sustainable participation willingness of the practitioners is the primary factor that affects the sustainable development of rural tourism. This paper studies the effect of Social Interaction on sustainable participation of practitioners. Through the empirical analysis, it is found that the interaction between practitioners and tourists, government and neighbours has a significant positive impact on the willingness of practitioners to continue to participate in rural tourism. Practitioners' satisfaction with local tourism development plays an intermediary role in social interaction behaviour and willingness to participate continuously.

## 1. Introduction

The strategy of rural revitalization has endowed rural economic development, ecological civilization construction and tourism development with new missions and opportunities. Tourism, as one of the green development industries, has been concerned by all sides, but the lack of talents has been the bottleneck restricting the development of rural tourism, and the continuous participation of rural tourism practitioners is an important prerequisite for the sustainable development of rural tourism. Tourists, neighbours and government are the three main bodies related to rural tourism practitioners in their business activities, and their social interaction with tourism practitioners has a profound impact on their satisfaction and willingness to continue participating in rural tourism business activities.

At present, the academia about social interaction theory study less on rural tourism practitioners satisfaction and continuous participation willingness, therefore, this paper focuses on the social interactions among practitioners, tourists, neighbours and government, and also focuses on satisfaction between social interaction and practitioners continuous participation willingness. This study hopes for more efficient high-quality rural tourism development to provide certain theoretical experience, promote the sustainable development of rural tourism.

## 2. Literature review, theoretical hypothesis and model construction

### 2.1 Social Interaction

Social interaction, first proposed by The German sociologist Simmel in 1908, refers to the process in which people take social actions towards others<sup>[1]</sup>. Zheng analysed social interaction from four dimensions, namely, dimension, depth, breadth and frequency<sup>[2]</sup>. Scholars generally believe that social interaction refers to the social interaction between social individuals or groups and other individuals or groups, which will often affect the behaviour intention and tendency of individuals or groups in the



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next step. Rural tourism practitioners in business activities, the main contact of social individuals or organizations, including visitors, neighbours and government three main body, they are from a different direction and extent, affects the business activities of rural tourism practitioners satisfaction and further to participate, therefore, this study will be social interaction behaviour according to different subjects, respectively is the visitor interaction behaviour, the neighbours interaction behaviour and government three dimensional interactive behaviour.

### *2.2 social interaction and practitioners continuous participation willingness*

Practitioners continuous participation willingness in rural tourism refers to the intensity of the intention of rural tourism practitioners to continue to operate the rural tourism industry<sup>[3]</sup>. Many scholars have found that in the process of rural tourism operation, the interaction behavior and perception with other subjects can positively influence the willingness of rural tourism practitioners to continue to participate. For example, Shao Yu pointed out through empirical research that social interaction can positive affect the long-term participation willingness of urban and rural housing insurance.<sup>[4]</sup> studies on Gong have confirmed that interactive perception has a significant positive impact on users' willingness to continue participating<sup>[5]</sup>. Therefore, based on the above analysis, this paper puts forward the following hypothesis: H1: Interaction with tourists has a positive influence on practitioners Continuous participation willingness; H2: Interaction with neighbours has a positive influence on practitioners Continuous participation willingness; H3: Interaction with government has a positive influence on practitioners Continuous participation willingness.

### *2.3 The mediating effect of satisfaction*

In the process of social interaction, individuals' perception of interactive behaviours can positively influence their satisfaction of participating behaviours, while satisfaction can guide users' further participation behaviours and promote the formation of their willingness to continue participating. Qiao studied customer behaviour in tourism virtual community and confirmed the positive influence of customer interaction on customer satisfaction<sup>[6]</sup>. Chi<sup>[7]</sup> and Zhou et al confirmed satisfaction can positively influence the willingness to continue participation. Li<sup>[8]</sup>, Zhai<sup>[9]</sup>, Gong<sup>[5]</sup> and other scholars confirmed the mediating role of satisfaction between individual interactive perception and willingness and behaviour of continuous participation through empirical research and analysis: H4: Satisfaction is a mediating variable between the interaction between practitioners and tourists and practitioners Continuous participation willingness; H5: Satisfaction is a mediating variable between the interaction between practitioners and neighbours and practitioners Continuous participation willingness; H6: Satisfaction is a mediating variable between the interaction between practitioners and government and practitioners continuous participation willingness.

## **3. Research methods**

### *3.1 Case Overview*

Dujiangyan has a long history of rural tourism development. Since 1985, local farmers have been engaged in rural tourism activities, becoming one of the earliest rural tourism areas in Sichuan. So far, a number of national rural tourism demonstration sites have been formed. This study selected Feihong community and Sanxi community as the research sites. Feihong Community and Sanxi community are the typical representatives of rural tourism development in Dujiangyan City. They have been rated as the key villages of national rural tourism and national forest villages in this year.

### *3.2 Questionnaire Survey*

*3.2.1 Variable Description and Questionnaire Design* .The dependent variable is the willingness to continue to participate in rural tourism. This study refers to the intensity of the intention of rural tourism practitioners to continue to operate the rural tourism industry. The independent variable is

social interaction, which includes three dimensions of tourist interaction, government interaction and neighbourhood interaction. Mediating variable satisfaction refers to the satisfaction with the development of local rural tourism.

The questionnaire is divided into four parts. The first part is the measurement of social interaction, referring to Islam's <sup>[10]</sup> scale for tourist interaction and Valentinov<sup>[11]</sup> for neighbours interaction and government interaction. The second part measures the satisfaction with the development of local rural tourism, referring to the scale of Zhen<sup>[12]</sup> et al. The third part is the measurement of the respondents' willingness to continue participating in rural tourism, referring to the scale adapted from Chi<sup>[7]</sup>. All adopted Likert five - point scale. The fourth part is the demographic characteristics of the interviewees, including age, gender, education level, and working years of rural tourism.

**3.2.2 Data Collection.** This study conducted a questionnaire survey among local tourism practitioners in Feihong community and Sanxi Community on October 30 and November 13, 2020 respectively. A total of 173 questionnaires were issued and 156 were recovered. The recovery rate was 90.2%. After screening, there were 152 valid questionnaires, with an effective rate of 97.4%.

**3.2.3 Descriptive Statistical Analysis of Samples.** The respondents of this questionnaire are distributed in all age groups, but middle-aged and elderly workers over 36 years old account for the vast majority, accounting for 80.2% in total. Women accounted for a relatively high proportion of rural tourism workers, accounting for 63.2%. The respondents' educational level is generally low, mostly below junior middle school, accounting for 65.8% in total. Rural tourism industry is generally operated for a long time, accounting for 32.9 % of the total.

## 4. data analysis and results

### 4.1 Reliability and Validity Test

In this study, IBMSPSS26.0 was used to test the reliability of the questionnaire. Through data analysis, the Cronbach's  $\alpha$  of five latent variables, namely, interaction with tourists, government, neighbours, satisfaction and participation willingness was all greater than 0.7, indicating a good reliability. The convergence validity of the five latent variables is greater than 0.5, indicating that they all have certain convergence validity. At the same time, the square root of the convergence validity of each latent variable is greater than the Pearson correlation value between different latent variables, indicating that each latent variable has differential validity (Table 1).

Table 1 Reliability and validity test

	Reliability	mean	Std. Error	Convergent validity	The difference between validity				
	Cronbach's Alpha			AVE	TI	GI	NI	SAT	WILL
<b>TI</b>	0.849	4.33	0.678	0.5240	<b>0.724</b>				
<b>GI</b>	0.918	3.85	1.008	0.7345	0.144	<b>0.857</b>			
<b>NI</b>	0.865	4.39	0.763	0.6889	0.206	0.288	<b>0.830</b>		
<b>SAT</b>	0.768	4.58	0.616	0.7282	0.466	0.265	0.341	<b>0.853</b>	
<b>WILL</b>	0.779	4.38	0.744	0.7199	0.342	0.331	0.373	0.623	<b>0.848</b>

The diagonal bold characters are the square root of AVE, and the lower triangle is the Pearson correlation of the dimensions.

### 4.2 Hypothesis Testing

**4.2.1 Social Interaction and Participation Intention.** In this paper, multiple linear regression was used for hypothesis testing. The regression analysis results were shown in Table 2, and the significance P values were all less than 0.05, indicating that the three dimensions of independent variables had a significant impact on the dependent variables. In terms of the standardized coefficient, the values are

all positive, indicating that the three dimensions of independent variables have a positive influence on the dependent variables. Therefore, it can be seen that tourist interaction, government interaction and neighbourhood interaction have a significant positive impact on the willingness to continue participation. Therefore, hypothesis H1, H2 and H3 are all valid.

Table 2 Multiple regression results of social interaction and participation intention

	Unstandardized Coefficients	Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Beta			Lower Bound	Upper Bound	tolerance	VIF
TI	0.282	0.257	3.540	0.001	0.125	0.440	0.950	1.053
GI	0.162	0.219	2.952	0.004	0.054	0.270	0.910	1.099
NI	0.251	0.257	3.422	0.001	0.106	0.396	0.889	1.124

a. The dependent variable: WILL

**4.2.2 Mediating Effect Test.** The mediating effect is verified according to the four steps of Baron and Kenny's mediating relationship test theory. First of all, it can be seen from Table 3 that the three dimensions of independent variables have a significant positive impact on satisfaction. Combined with the results of 3.2.1, it can be seen that the three dimensions of independent variables have a significant positive impact on dependent variables. The regression results of satisfaction with dependent variables showed a significant P value of 0.000 and a standardized coefficient of 0.623. It indicates that satisfaction has a significant positive effect on willingness to continue participation.

Table 3 Multiple regression results of social interaction and satisfaction

	Unstandardized Coefficients	Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Beta			Lower Bound	Upper Bound	tolerance	VIF
TI	0.364	0.401	5.673	0.000	0.237	0.490	0.950	1.053
GI	0.089	0.145	2.009	0.046	0.001	0.176	0.910	1.099
NI	0.175	0.216	2.965	0.004	0.058	0.291	0.889	1.124

a. The dependent variable: SAT

Secondly, it can be seen from Table 4 that, after the addition of satisfaction, the significance of the three dimensions of independent variables on the regression results of dependent variables all increased p, and the adjusted R squared all increased, which enhanced the explanatory power, indicating that the mediating effect of satisfaction was established. Among them, the significance P value of the regression results of tourists' interaction and dependent variable changed from 0.000 to 0.360, and the positive correlation was no longer significant, indicating that satisfaction had a completely mediating role in tourists' interaction and willingness to participate continuously. To sum up, hypothesis 4.5.6 is true.

Table 4 Mediating effect test results

		Standardized Coefficients	t	Sig.	R Square	R Square Change
		Beta				
Model 1	TI	0.342	4.458	0.000	0.117	0.111
Model 2	TI	0.066	0.917	0.360	0.391	0.383
	SAT	0.592	8.187	0.000		
Model 3	GI	0.331	4.290	0.000	0.109	0.103
Model 4	GI	0.178	2.745	0.007	0.417	0.409
	SAT	0.575	8.868	0.000		
Model 5	NI	0.373	4.929	0.000	0.139	0.134
Model 6	NI	0.182	2.743	0.007	0.417	0.409
	SAT	0.560	8.422	0.000		

a. The dependent variable: WILL

## 5. Research conclusions and implications

This study confirms that social interaction has a significant positive impact on rural tourism practitioners sustainable participation, in which satisfaction plays a mediating role. This paper provides some basis for promoting the stable development of rural tourism and has some practical enlightenment on how to improve the willingness of practitioners to participate. The sustainable development needs to strengthen the interaction among various subjects. Practitioners should improve their service awareness, communicate more with tourists, enhance the interaction between the host and the guest; neighbours should help others and promote common development. The government should provide help and guidance for tourists and promote the development of local rural tourism.

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