

Residents' Perception and Attitudes Toward Tourism Impact Under Different Participation Mode in China

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Abstract Resident's perception and attitude is one of the primary contents to tourism impact studies. As one of the important stake holders, degree of local residents supporting to tourism development plays a key role. In addition to illustrating multiple dimensions of tourism impact perceptions and attitude of local residents, this research further examines the effects of residents involvement. The paper authenticates and analyzes the relational model. Three structural variables (participation, tourism impact perception and support degree of rural residents) used to build a structural equation model exploring interrelationship and influencing factors. The research provides a method for identifying tourism development effects and causes to support effectively sustainable management of rural destinations.

Keywords Rural tourism destination · Residents' involvement of rural tourism · Perception and attitude · Tourism impact

1 Introduction

Many rural communities attempt to utilize "tourism" as a major local development strategy in China. However, increasing evidence suggests that tourism development leads not only to positive, but also to negative outcomes at the local level (Lankford et al. 1994). Tourism development can not sustain in an area for long,

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unless it can really contribute to the host community. As one of the important stakeholders, degree of local residents involvement and supporting to tourism development plays a key role. Local residents' perception and attitudes toward the impacts of tourism are likely to be an important planning and policy consideration for sustainable development of existing and future tourism programs. Although many studies have been performed to identify residents' perception and attitude toward tourism impact, including dimensions and content of local residents perception toward tourism, differences of residents perception and attitude and its causes, relationship and interactive mechanism between residents perception and attitude, comparative study on different communities residents and so on, just a few have assessed relationships between involvement of local residents and residents' attitude toward tourism which is an important, yet not well understood, area of research.

For the purpose of achieving sustainable supporting, this article, taking Ganggu Village and Fujiabian Village, Jiangsu province as examples, attempts to investigate and analyze the interactive relationship between residents' involvement in local tourism development, residents' perception and attitudes to tourism impacts, further explore the relationship between rural tourism community involvement and residents' attitude. Attempts to identify the main controversies and obstacles in the process of rural residents taking part in local tourism development, pursue suitable means to balance different stakeholders' interests, provide reference for local development planning.

2 Literature Review and Conceptual Model

2.1 Resident's Perception and Attitude

Residents' perception and attitude is one of the primary contents to tourism impact studies and achievements are so great. Liu and Var (1986) suggested that tourism development is usually justified on the basis of economic benefits and challenged on the grounds of social, cultural or environmental destruction. Lu et al. (2009) indicated that tourism development may change residents' relationships to one another and to their community. It is generally felt that residents' perception toward tourism impact including economic, social, cultural and environmental impact. From the perspective of human being, residents' perception can be divided into perceived negative tourism impact and perceived positive tourism impact. According to the theory of Tourism Area Life Cycle (TALC) (Butler 1980), if negative impact of tourism development decreases, residents of tourism destinations become more positive toward tourism development. Perdue et al. (1990) proved that relationship between residents perceived profits and their supporting level are positively correlated. A number of studies in recent years have identified that host residents' perception of tourism impact are assessed in terms of benefits and costs of social, economical and environmental aspects.

2.2 Involvement of Local Residents

Murphy (1985) put forward to the tourism community involvement in Tourism: a Community Approach, but not until in the middle of the 1990s, community involve tourism development attracted the attention of scholars. World Trade Organization (WTO), World Tourism and Travel Council (WTTC) and Earth Council definitely confirm that community involvement is the important part to the sustainable tourism development in Tourism in the twenty first Century Agenda. Local residents are cells of community, act as the main actor and receiver of community involvement, local residents lay the foundation to sustainable tourism development. Residents' perception and attitude toward rural tourism interacted with their involvement level of tourism. As a result of the above discussion, the following working hypotheses are presented:

H₁: rural residents' involvement positively impact on perceived benefits of tourism development.

H₂: residents' perceived benefits positively impact on the attitude of future tourism development.

H₃: rural residents' involvement negatively impact on perceived costs of tourism development.

H₄: residents' perceived costs negatively impact on the attitude of future tourism development.

H₅: rural residents' involvement positively impact on the attitude of future tourism development.

3 Method

3.1 Study Site

There are mainly two patterns of rural tourism development in China: One is government dominant model, refers to those rural destinations were planned, invested, developed, operated and managed mainly by government, and the tourism incomes also under control of government; the other is enterprises dominant model, refers to rural destinations were operated and managed by enterprises according to government's polices, tourism profits belong to enterprises these two patterns have different sponsor and profit distribution manner, leads to different community involvement patterns.

Ganggu Village located in the north part of Lixiahe area, Jiangsu province, where has a history of more than 1500 years of cultivation. Alternating of the Yangtze River and sea deposited lots of little mounds in the river. In order to resist flood, local people piled up those mounds and plant crops on it called Duotian hundreds years ago. For the purpose of prospering local tourism industry, local government direct local resident plant rape on 4,600 of Duotian in Ganggu Village, and form the famous landscape of "amazing rape flower sea of million islands."

It is one of the most well-known tourism sites in Xinghua city. Moreover, government of Xinghua City and tourism bureau invested in construction of sightseeing tower, build up more than 1,000 m long wooden footway, equipping with sightseeing wood boats and so on, to make Ganggu Village become a rural destination. According to the recent statistics, tourism revenue is about RMB 36,000,000 Yuan with 660,000 arrivals in 2011.

Fujiabian Village lies in Honglan Township, Lishui County, Jiangsu province, where the provincial hi-tech agricultural park, Fujiabian Agricultural Industry Park is located. Fujiabian Village cultivated more than 3,000 mu plum garden, millions mu strawberry garden and ecological landscape resources, each year, Fujiabian Plum festival and strawberry harvest festival attracts millions of tourists, drive the development of local farm house tourism. Tourism and leisure agriculture have become the supporting industry of local economy, statistics shows that tourists arrivals had been over 300,000 in 2008.

3.2 Survey Instrument

The items of field survey were originally derived from a comprehensive review of existing literature (Wang et al. 2011; Jorgensen and Stedman 2001). A pilot test distributed to 10 selected experts in tourism study was conducted to test the internal consistency of the questionnaire items. According to the characteristics of study sites, the final version of survey questionnaire consisted of the following major sections: the first section included questions concerned with demographic background; the second section consisted of 15 statements concerning the economic, social, cultural and environmental impacts of rural tourism; The third section included 6 statements relative to community involvement; The final section designed 6 statement to get information on overall assessment of tourism (attitude). In relation to the last three parts. The selected 37 items were rated on a 7-point Likert scale where 1 = Strongly disagree (SD) and 7 = Strongly agree (SA).

3.3 Data Collection and Analysis

About 380 questionnaires were distributed to the local residents of Ganggu Village and Fujiabian Village, Jiangsu province from October 1st to October 7th of 2012. 178 and 166 effective questionnaires were recollected later. As rural agriculture is declining in China, most young people have gone to city looking for non-agricultural jobs, majority of rural residents are senior and women with lower education. Some questionnaires was completed through in-depth personal interviews by investigators. The samples include people with different ages, residents time,

Table 1 Social characteristics of respondents in Ganggu Village and Fujiabian Village

		Percentage	
		Ganggu (%)	Fujiabian (%)
Gender	Woman	46.5	33.5
	Man	53.7	66.7
Age	15–29	22.8	7.3
	30–45	30.9	40.3
	45–64	30.9	35.4
	>65	14.5	13.9
Education	Primary school	20	13.6
	Middle school	33.6	33.9
	High school	26.4	33.1
	Collage	28.1	28.1
Length of settlement	<3	11.8	6.3
	4–10	11.8	16.9
	10–30	28.2	38.1
	>30	48.1	38.0

education level and occupation. The randomly chosen samples ensure the reliability of the study results. Reliability analysis (Cronbach's Alpha) was carried out, resulting in 0.841 and 0.884, respectively. Generally, An Alpha of 0.7 or above is considered acceptable as a good indication of reliability (Gursoy et al. 2002). Table 1 shows the social background of the respondents.

Exploratory factor analysis (EFA) was employed to derive the underlying dimensions of destination image and residents' perception. Conformational factor analysis (CFA) and SEM were used to test the conceptual model that examined the relationship among residents' perception, residents' attitude, involvement level of two study areas, then analyze and explain the results and explore the causes.

4 Results

4.1 Comparative Analysis of Attitude

Research on the residents' perception and involvement mainly focus on the attitude of residents. Residents' attitude of Fujiabian Village and Ganggu Village were measured from two perspectives: one is the desirability to participate, the other one is the supporting degree of further development of local tourism.

Comparative analysis of desire to participate, supporting further development of local tourism (showed in Table 2) indicates that, residents attitude of the two Village are slightly different. Residents of Ganggu Village were more positively than Fujiabian Village.

Table 2 Comparative Analysis of Residents Attitude of Ganggu Village and Fujiabian Village

		Percentage	
		Ganggu (%)	Fujiabian (%)
Desire to participate	1	0	0
	2	0	1.0
	3	0.9	1.0
	4	5.5	10.0
	5	8.2	11.0
	6	9.1	17.0
	7	76.4	59.0
Support further development	1	0	0
	2	0	2.0
	3	1.8	1.0
	4	7.3	10.0
	5	8.2	9.0
	6	7.3	23.0
	7	75.5	55.0

4.2 Evaluation of Proposed Model

Principle axis factoring extraction method with oblique rotation was adopted. Underlying dimensions of residents perception were derived according the rules of eigenvalue of item higher than 1, factor accumulative loadings over 60 %, items with loadings lower than 0.4 and with loadings higher than 0.4 on more than one factor were eliminated. The same EFA procedure was used to verify the underlying dimensions of residents perception of Fujiabian Village and Ganggu Village as the latent variable of residents perception.

Structural Equation Modeling (SEM) is a technique for simultaneously estimating the relationships between observed and latent variables, and the relationship among latent variables. SEM is a method that gained popularity because it combines confirmatory factor analysis and regression analysis into a single model, which is valuable for sociological, psychological and other relationship research.

The proposed model hypothesized that there were significant causal relationships among four latent variables of “perceived benefits,” “perceived costs,” “personal involvement,” and “attitude.” Standard estimated hypothetical model and indicate significance of two sites are shown in Figs. 1 and 2.

Note: I₁: i get a job from scenic area or related to tourism; I₂: my relative works in scenic area or related to tourism; I₃: my job related to tourism; I₄: i take part in the management of local tourism development; I₅: i take part in decision making about tourism development; I₆: tourism is closely related with my family. P₁: rural tourism enhance local reputation; P₂: rural tourism contribute to protect local cultural relics; P₃: rural tourism promote communication with outside world; P₁₂: tourism leads to more income; P₁₃: tourism leads to more job opportunities; P₆:

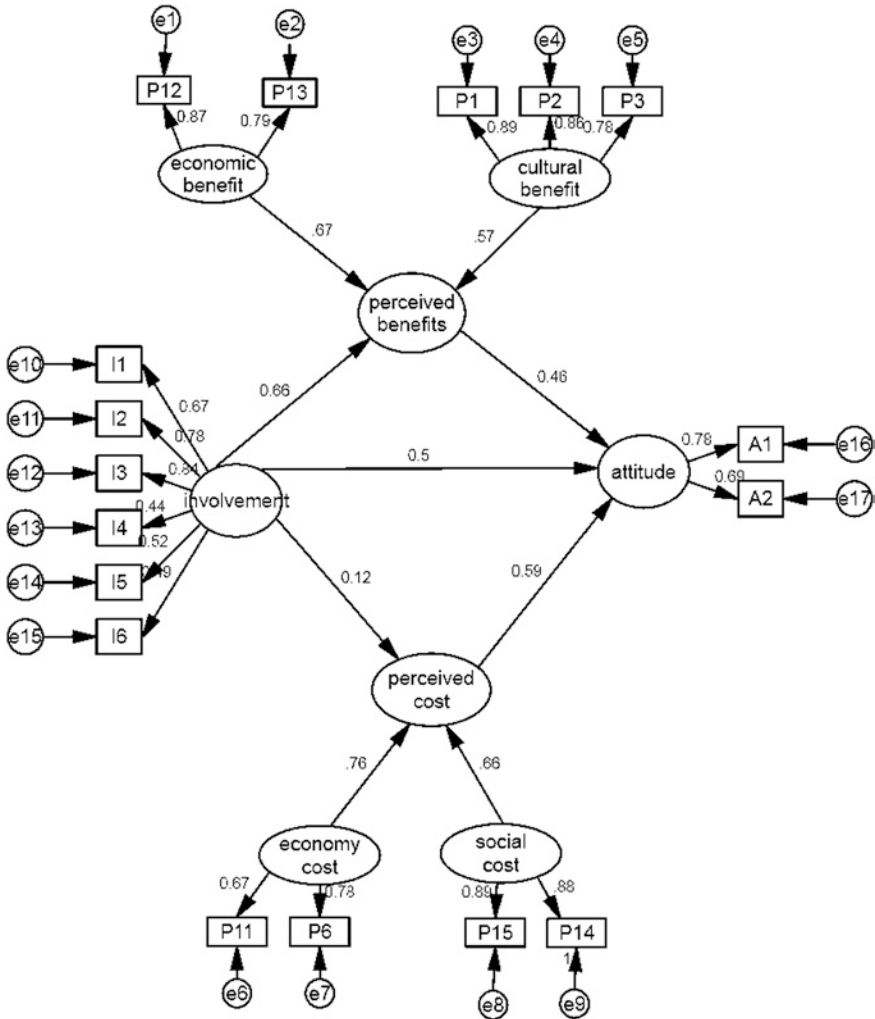


Fig. 1 Parameter estimation of structural equation model of residents support in Ganggu Village

living standard is increasing because of rural tourism; P7: Prices are increasing because of rural tourism; P14: rural tourism gives benefits to a small group of people in this region; P15: tourism development increase contradictions among neighborhood; P10: tourists make traffic situation became crowded.

As it shown in the Figs. 1 and 2 that all variables were significantly related to their specified constructs, verifying the posited relationships among indicators and constructs. Various measures of overall model goodness-of-fit and measurement model fit were assessed to determine if the proposed model can be accepted (Table 3). It showed fairly high reliability of the measurement model.

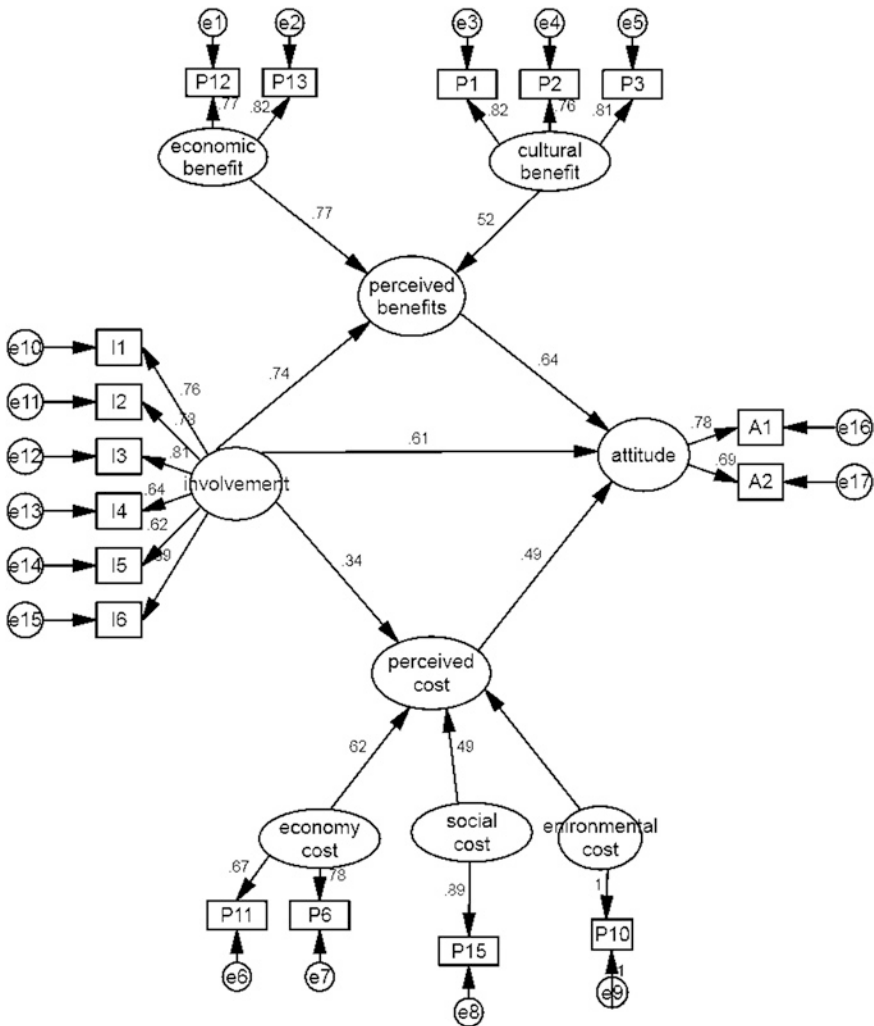


Fig. 2 Parameter estimation of structural equation model of residents support in Fujiabian Village

Table 3 Result of confirmatory analysis of structural equation model

Hypotheses	CR.		P	
	Ganggu	Fujiabian	Ganggu	Fujiabian
H1	3.987	4.786	***	***
H2	2.674	3.949	***	***
H3	3.127	2.793	0.063	***
H4	3.098	3.513	***	***
H5	2.768	2.675	***	***

During the process of path analysis in SEM, path index is the standard regression coefficient between latent variables, which reflect the degree of interacted of the latent variables. Path analysis results of sample sites and testing results are shown in Table 3 and Fig. 3.

According to the result of confirmatory analysis of structural equation model (Table 4), there are single direction between the four latent variables, which means the measurement model is a typical recursive model, in accordance with the conceptual model.

Analysis results shown that our results confirm that there is a strong relationship between residents' involvement and attitude toward tourism impact. But difference exists between Ganggu Village and Fujiabian Village. According to the path index of II–I6, residents' involvement of Fujiabian Village shows more deeply involvement than Ganggu Village. Ganggu residents' perception toward environmental cost is not as significant as residents of Fujiabian Village.

Combined with the investigation and field interviews, the history of tourism development in Ganggu Village is less than Fujiabian, because of government dominants in construction of scenic area and advertising, most income are from ticket sale, few people earn lots of money through running local restaurants and hotels and so on, most local residents receive little allowance from government, make they positively supports tourism development but have lower involvement level and supporting degree. In contrast with Ganggu Village, tourism of Fujiabian Village is dominant by enterprises, government play the role of supporting and policy directing, most local residents take part in running restaurants and hotels,

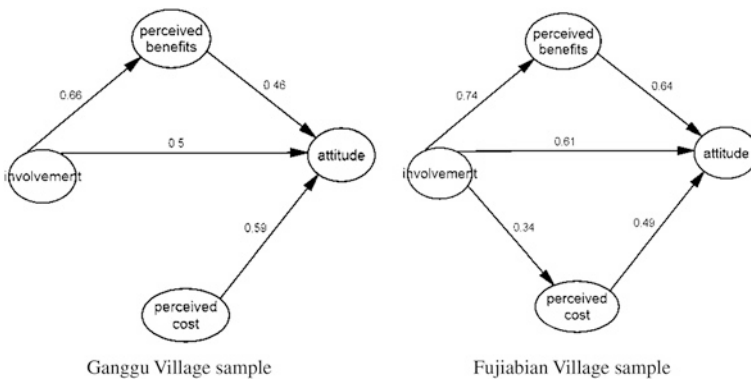


Fig. 3 Path analysis results of sample sites. **a** Ganggu Village sample, **b** Fujiabian Village sample

Table 4 The Goodness-of-Fit between Hypothetical Structural Equation Model and Revised Structure Equation Model

Index	RMSEA	RMR	GFI	NFI	IFI	CFI
Standard	<0.05	<0.05	>0.90	>0.90	>0.90	>0.90
Ganggu	0.045	0.033	0.903	0.902	0.934	0.932
Fujiabian	0.002	0.041	0.825	0.886	0.907	0.907

seeing agricultural and sideline products and so on, leads to relatively deeply involvement and results in more significant effects of community involvement.

5 Conclusion

Resident's perception and attitude is one of the primary contents to tourism impact studies. In addition to illustrating multiple dimensions of tourism impact perceptions and attitude of local residents, this research further examines the effects of residents' involvement through comparative study.

Exploratory factor analysis (EFA) was employed to derive the underlying dimensions of destination image and residents' perception. Conformational factor analysis (CFA) and SEM were used to test the conceptual model that examined the relationship among residents' perception, residents' attitude, involvement level of two study areas. Results showed that this analysis frame contribute to reveal the influence mechanism of residents' tourism support under different involvement mode.

Comparative analysis indicates that, residents' attitude of the two Village are slightly different. Residents of Ganggu Village are more positive than Fujiabian Village.

SEM Analysis suggests that there is a strong relationship between residents' involvement and attitude toward tourism impact. But difference exists between Ganggu Village and Fujiabian Village. Different involvement mode under different dominant force and profit distribution are the main causes.

Limited by time and funds, this study only carried out less than 200 residents for each sample sites, SEM analysis results needs further modified. It is necessary for us to go into investigation and consider more comprehensively.

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