

Research on the Influence of Place Attachment on Residents' Attitude and Behavior Based on Structural Equation Model ——Taking Beijing as an Example

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ABSTRACT

Place attachment describes the emotional relationship between people and places, which is a new perspective in the study of residents' perception of tourism impact. Taking 'place attachment' as the starting point, this paper further studies the effect of place attachment on tourism impact perception, so as to establish a theoretical model of 'place attachment - tourism impact perception - residents' attitude and behavior, which is based on Beijing that is an empirical case. The results indicate that: 1. The higher the place attachment, the stronger the perception of tourism impact. 2. Residents' perception of benefits is slightly higher than that of costs. The stronger the perception of benefits, the more support residents have for tourism development. 3. As an intermediary variable, benefit perception regulates the relationship between place attachment and residents' attitudes and behavior. Through the investigation of residents' perception of tourism impact and its impact research, we can provide the basis for the further development of tourism in Beijing.

Keywords: *Tourism impact, Residents' perception, Place attachment, Beijing, Structural equation model.*

1. INTRODUCTION

For a long time, tourism has been called 'smoke-free industry' in both theoretical and industrial circles. However, with the rapid development of tourism, its disadvantages are increasingly exposed. The contradiction between residents and tourists in tourism destination breaks out. Therefore, the attitude and behavior of residents towards tourism development has become a core hot issue. The study of sense of place explores the relationship between people and environment from perspective of people's perception and attitude, including people's experience in specific places and emotional connection between and people's emotional connection with that place [1]. This paper takes 'place attachment' as the breakthrough point and takes Beijing as a case to further study the effect of place attachment on tourism impact perception, so as to establish the theoretical model of place attachment tourism impact perception residents' attitude and behavior, and improve the research content at this level.

2. JOURNALS REVIEWED

2.1. Residents' Perception

In foreign studies, since the 1970s, a large number of empirical and theoretical studies have tested the perception and attitude of destination residents towards tourism [2]. The hot spots are mainly focused on economic, social, cultural and environmental factors. Domestic scholars began to study 'residents' perception' in the middle and late 1990s, mainly involving the influence of residents' perception and attitude on tourism development [3], the relationship between the influencing factors and so on [4]. After entering the 21st century, with increasing research perspectives, the classification of residents' perception and attitude [5], the comparison of spatial and temporal differences between residents' perception and attitude [6] and other research contents have been proposed successively. However, there are few researches on the theoretical basis of perception and attitude research and the relationship between perception and attitude.

2.2. Place Attachment

The research on ‘place attachment’ in foreign countries started earlier. 1989, Williams first proposed the concept of place attachment and he believed that place attachment refers to the emotional connection between people and specific places [7]. Since then, ‘place attachment’ has gradually become a hot topic in geography and sociology. Gieryn proposed that place attachment is a kind of connection between people and places based on emotion, cognition and practice, and the emotional factor is the most important [8]. Williams pointed out that place attachment consists of two dimensions: place identity (affective attachment) and place dependence (functional attachment) [7]. Compared with foreign research, domestic research started relatively late. In 2006, Huang Xiang et al. introduced the concept of ‘place attachment’ and proposed the CDEEM research framework [9]; Tang Wenyue analysed the conceptual dimensions and attitudinal elements in the study of sense of place, and on this basis constructed the research framework of sense of place [10].

2.3. Residents’ Attitudes and Behavior

Tourism impact refers to the various impacts of interests caused by tourism activities (including tourist activities and tourism industry activities), and the attitudes and behavior of residents in tourist destinations towards tourism development are rooted in the complex impacts brought by tourism [11]. Doxey pointed out that with the development of tourism, local residents’ attitude towards tourism development follows a certain process and develops in a series of different stages, from ‘euphoria’ at the beginning to ‘apathy’ and ‘anger’ at the end to ‘resistance’ [12]. And social exchange theory, interaction between people as a kind of sociological theory calculate gain and loss of rational behavior, and it was assumed that all human interaction are in pursuit of the interests of the biggest satisfaction, the main connotation of the theory is that when travel behavior in the event, residents were obtained from this behavior is more or less, as residents of interest than they put into cost in the tourism activities, residents will have support for tourism sympathetic attitude and vice versa [13].

3. RESEARCH DESIGN

3.1. Case Introduction

As the political and cultural center of China, Beijing is not only an ancient capital with a profound history for thousands of years, but also an open and inclusive international metropolis. With a long history, culture and rich tourism resources, Beijing is highly attractive to tourists from home and abroad. With the reform and opening up, Beijing’s tourism industry has made remarkable achievements with its profound cultural deposits and diversified tourism activities, and has become an important tourist destination in the world. However, in recent years, a large number of tourists have caused many adverse effects, which have caused some troubles to the production and life of local residents.

3.2. Hypothesis

In recent years, some studies have shown that the degree of place attachment, that means, the intensity of the emotional connection between people and places in tourist destinations will affect residents’ perception of the environment [7]. Yin Lijie et al. also built the theoretical model of ‘sense of place – development expectation – influence perception’, and found that the stronger the residents’ sense of place is, the higher their expectation for rural tourism development will be, and the stronger their ability of influence perception on tourism will be [14]. At the same time, there is a correlation between residents’ participation in tourism activities and place attachment emotion, that is, the stronger the degree of place attachment, the higher the degree of tourism participation [15]. To sum up, there is a close theoretical relationship between place attachment, tourism influence perception and residents’ attitude and behavior. In other words, the higher the sense of place attachment is, the higher the residents’ perception of tourism influence is. In addition, different perceptions of costs and benefits will lead to different attitudes and behavior of residents towards tourism development. In theory, the stronger the perception of benefit, the more positive the residents’ attitude and behavior towards tourism development; on the contrary, the stronger the perception of cost, the more negative of their attitude towards tourism development. Therefore, this paper takes place attachment as an independent variable, tourism influence perception as an intermediary variable, and residents’ attitude and behavior as dependent variables to form a two-level hypothetical relationship and build a second-order structural equation model.

Table1. Theoretical model research hypothesis of ‘place attachment-impact perception- residents’ attitude and behavior

Level	Assumptions
The first level	Ha:Place attachment had a significant effect on perceived benefit
	Hb:Place attachment has a significant effect on cost perception
The second level	H1:Benefit perception has significant influence on residents’ attitude
	H2:Benefit perception has a significant influence on residents’ behavior
	H3:Cost perception has a significant impact on residents’ attitudes
	H4:Cost perception has a significant impact on residents’ behavior

3.3. Questionnaire Investigation

Based on the above-mentioned situation, this paper constructs the place attachment scale, tourism impact perception scale and residents’ attitude and behavior scale. The questionnaire was in the form of Likert scale, from 1 to 5, representing ‘very disagree’ to ‘very much’ Agree. The time of this questionnaire survey is from December 19 to December 28, 2019, and the survey sites are Shichahai, Zhong Lou, Gu Lou and other places. A total of 103 questionnaires were distributed, of which 100 were valid, and the effective recovery rate was 98.08%.

4. ANALYSIS OF RESEARCH RESULTS

4.1. Reliability and Validity Test of the Scale

In this paper, SPSS 17.0 is used to analyse the reliability of the results of the scale. According to the data, the Cronbach’s Alpha coefficient based on standardization is 0.952, greater than 0.8, so the scale has a good reliability; according to Kaiser’s standard, the KMO values of the items are all greater than 0.8, and $P < 0.001$, indicating that the scale has a good structural validity and is suitable for factor analysis.

Table2. KMO and Bartlett’s inspection

Cost perception	Kaiser-meyer-olkin measurement with sufficient sampling	.881
	Bartlett’s sphericity test	1452.355
	df	171
	Sig.	.000
Benefit perception	Kaiser-meyer-olkin measurement with sufficient sampling	.874
	Bartlett’s sphericity test	758.599
	df	55
	Sig.	.000
Place attachment	Kaiser-meyer-olkin measurement with sufficient sampling	.858
	Bartlett’s sphericity test	772.752
	df	28
	Sig.	.000
Resident attitude and behavior	Kaiser-meyer-olkin measurement with sufficient sampling	.817
	Bartlett’s sphericity test	409.793
	df	15
	Sig.	.000

4.2. Factor Analysis of Measurement Results

Factor analysis results show that the factor loads of cost perception, benefit perception, place attachment,

residents' attitude and behavior are all greater than 0.663 and the cumulative variance contribution rate is greater than 70.16%, which explains the vast majority of variance and has high reliability.

Table 3. Factor analysis results of tourism impact

Indicators	Test item	Item	Factor loading coefficient	Cumulative variance contribution rate	Indicators	Test item	Item	Factor loading coefficient	Cumulative variance contribution rate
The cost of perception	economic costs	CA1	.761	62.780%	The interests of perception	economic interest	XA1	.895	70.772%
		CA2	.819				XA2	.892	
		CA3	.853				XA3	.871	
		CA4	.805				XA4	.682	
		CA5	.717						
	Socio-cultural cost	CB1	.663	71.554%		Socio cultural interest	XB1	.862	70.165%
		CB2	.703				XB2	.824	
		CB3	.746				XB3	.855	
		CB4	.804				XB4	.784	
		CB5	.738						
		CB6	.738						
		CB7	.761						
	Environmental costs	CC1	.840	68.823%		environmental interest	XC1	.882	79.671%
		CC2	.835				XC2	.894	
		CC3	.885				XC3	.906	
		CC4	.849						
		CC5	.839						
CC6		.826							
CC7		.732							

Table 4. Factor analysis results of place attachment

Indicators	Item	Factor loading coefficient	Cumulative variance contribution rate	Indicators	Item	Factor loading coefficient	Cumulative variance contribution rate
place dependence	DA1	.901	78.031%	place identification	DB1	.916	84.752%
	DA2	.801			DB2	.917	
	DA3	.887			DB3	.940	
	DA4	.941			DB4	.908	

Table 5. Factor analysis results of role identification

Indicators	Item	Factor loading coefficient	Cumulative variance contribution rate	Indicators	Item	Factor loading coefficient	Cumulative variance contribution rate
Residents' attitudes	JA1	.875	79.452%	Residents' behavior	JB1	.881	84.971%
	JA2	.894			JB2	.931	
	JA3	.905			JB3	.938	

4.3. Model Validation

In order to test the reliability of structural equation, confirmatory factor analysis is carried out on the test items and the first-order structural factors of sample data. The results showed that the factor loads of two-dimensional place attachment, perception of tourism impact and residents' attitude and behavior are between 0.664 and 0.941, without negative value, which meets the basic requirements of standardized factor load greater than 0.4. The combination reliability of the measurement model is greater than 0.893, which indicates that the combination reliability of the measurement model is high, and the observation variables can explain the measurement model strongly.

The results of partial least squares estimation shows that the perception of cost and benefit of place attachment are positively correlated at the level of 0.05, indicating that the stronger the sense of place dependence and identity, the higher the perception of cost and benefit. There is a correlation between the perception of benefits and residents' attitude and behavior at the level of 0.05, which means that the higher the residents' perception of the benefits bring by tourism development, the more positive their attitude towards tourism development is, and support the further development of tourism. However, the P values of cost perception on Residents' attitude is greater than 0.05, indicating that the relationship between the two are not significant.

Table 6. Path coefficient of each index of structural equation model on each variable

Relationship between potential variables and observed variables	Initial sample (o)	Sample mean (m)	Standard deviation (STDev)	T statistic	P value
The cost of perception →Residents' attitudes	.153	.261	.158	0.971	.332
The cost of perception →Residents' behavior	.409	.464	.125	3.283	.001
The interests of perception →Residents' attitudes	.628	.568	.157	4.012	.000
The interests of perception →Residents' behavior	.390	.349	.145	2.681	.008
place attachment →The cost of perception	.581	.655	.075	7.792	.000
place attachment →The interests of perception	.668	.718	.061	10.924	.000

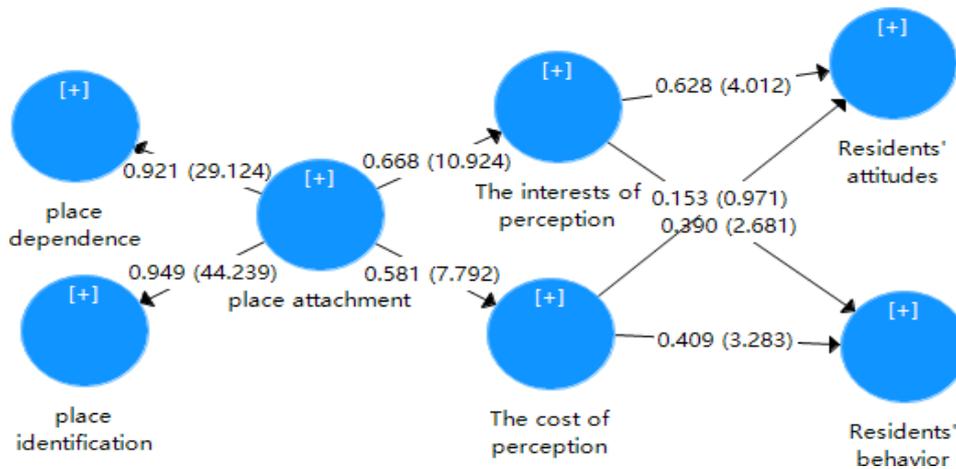


Figure 1 Path coefficient of ‘place attachment tourism impact perception residents’ attitude and behavior

5. CONCLUSION AND DEFICIENCY

5.1. Conclusion

Through the quantitative analysis of the scale of local attachment, perception of tourism impact and residents’ attitude and behavior, the conclusions are as follows:

First of all, the two dimensions of local attachment play a role in different degrees, indicating that the higher the degree of local attachment of residents, that is, the higher the degree of dependence and identification of the place, the stronger the perception of tourism impact, and will pay more attention to the different aspects of the impact of tourism development. At the same time, the residents’ perception of tourism benefits is higher than that of residents’ perception of tourism development, which is positively related to residents’ perception of tourism development. In this process, although residents have some perception of the cost of tourism development, but in the acceptable range, that is, the cost consumption does not exceed the psychological carrying capacity, and there is no indifference, boredom and resentment attitude of Doxey tourism community attitude evolution theory. Therefore, residents support the further development of Beijing Tourism at this stage. In addition, as an intermediary variable, benefit perception regulates the relationship between local attachment and residents’ attitude and behavior: benefit perception plays a mediating role in the theoretical model of ‘local attachment tourism impact perception residents’ attitude and behavior. The Beijing case shows that there is a close relationship among local attachment, benefit perception, residents’ attitude and behavior, but the path of cost perception to residents’ attitude and behavior is not established, which needs further discussion.

5.2. Deficiency

In the design of the questionnaire, due to the lack of a unified conclusion on the dimensions of ‘local attachment’, there are inevitably deviations or omissions in the design of the questionnaire sentences. In addition, the local attachment emotion will change with the regional characteristics and personal experience. This paper is a general review. In the follow-up, we need to deeply understand the characteristics of the case and further explore it from the perspective of dynamic research. In the process of issuing the questionnaire, some residents are not willing to fill in the questionnaire, which makes the sample collection not comprehensive enough, and the questionnaire is issued in the off-season of Beijing tourism. Residents’ perception of tourism impact may decline with the decrease of tourists, which may affect the survey results.

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