A Study of Relationship between Individual Benefit and Tourism Impact Perceptions for Residents from Historical & Cultural Metropolis of China

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Abstract--On the basis of literature review and the social exchange theory, this study directed at the residents' tourism correlation of tourism destinations, the utilization of tourism resources, the participation in local decision-making, the attitude to environmental protection, the perception of individual benefit and loss as well as the variate model and hypothesis path of the variable of resident tourism impact. Based on the above-mentioned, this research employed the questionnaire survey in a case study of Nanjing City in China to obtain primary data as analysis resources. Meanwhile, in order to analyze the individual benefit and the collective model of tourism impact perception, this research tested variables by using the sub-model confirmatory analysis. This study could provide the prospective, healthy and sustainable development of tourism destinations with scientific evidence along with encouragement strategies on residents in tourism destinations.

Key Words-Tourism impact; resident perception, social exchange, individual benefit

I. INTRODUCTION

Since the 1960s, studies on the impact of tourism development and tourists on tourism destinations have been emerged. In the 1970s, studies on the negative impacts of tourism took place of ones on the positive impacts of tourism in 1960s and further comprehensive studies on tourism arose. From the 1990s, studies on the relations between hosts and guests of community residents in tourism destinations have been seriously valued (Andrew, 2000) [1]. International studies have paid more attention to the horizontal and longitudinal comparison and the improvement of study theory framework, especially the perception and attitude to tourists from residents in tourism destination. Some brand new issues have been concerned in tourism studies, such as the perception and attitude to new immigrants (Sherlock, 2001) [2] (Huang and Stewart, 1996) [3], the perception and attitude before the developing of tourism (Andrew, 2007) [4], perceptions and concerns on the social vulnerable groups (Wang and Pfister, et al., 2008) [5].

In terms of the abundant history and culture, many case studies choose small and medium-sized tourism destinations and ancient towns which are rich in splendid ethnic customs as their investigation sites. However, rare studies on tourism destinations with luxuriant history and culture can be found, especially studies on residents in metropolis with such impressive history and culture. As one of the famous tourism destinations with history and culture in China, the tourism development of Nanjing City has been initialed in a relatively early time. In the light of the huge urban area and population, perceptions on the impact of tourism and tourists from residents in tourism destination have been accordingly weakened. Yet, tourism can not only impact the society, culture, economy and environment inevitably, but also connect with nearly all aspects of residents' individual life; along with the continuous development of tourist industry in urban tourism destinations and the increased communal spaces of residents and tourists as well as the deep impact from residents' perceptions on the tourism.

II. LITERATURE REVIEW

First, literature review for the social exchange theory in early period. In the 1960s, the social exchange theory was founded by a very famous American sociologist named George Homans, and its major representations were Peter Blau, James Coleman and Emerson who are from the UK (Gao, 2005) [6]. This theory focused on individuals as the main research object, believing that "interaction process between different people is a process of mutual delivered value and mutual exchanged value". The social exchange theory also regarded the social process between individual and collective actors as valuable process for resources exchanging (Zhou, 2007) [7]. In another word, the social exchange theory widely exists in the social interaction, social psychology, social activity and social contract, the heart of which was "the mutual delivered value" and to satisfy the need of both sides of exchange (Liu & Shen, 2009) [8]. This was exchange relation among nature persons (Zheng, 2004) [9]. Based on the behavior theory of psychology, Homans, the founder of the social exchange theory, established a basic theoretical proposition through strict deductive method. He insisted that people would repeat behaviors for getting rewards, instead of repeating for penalty. Social exchange, in fact, was "individual's rational behavior for either getting rewards or reducing punishment" (Liu, 1988) [10]. Here according to Homans, the payment or reward was far beyond the scope of traditional economics, where such kind of seeking advantages and avoiding disadvantages may involve the social, emotional and even values dimension, including

obligation, prestige，power and friendship, combining with economical rationality, social rationality and value rationality organically. Meanwhile, the social exchange theory paid more attention to the rule and function of human's need and emotion during interpersonal communication and social exchange (Tang, 2008) [11].

Second, literature review for the social exchange theory in recent years. In the late 1980s, the social exchange theory began to be adopted in research on tourism, explaining what the psychological driving factors of the involvement of residents in tourism destinations in the exchange activities in tourist activities are. AP (1992) [12] constructed a social exchange process model through the research. Combining the basic concepts and factors of various social exchange theories, he attempted to understand the dynamic relationship between residents and tourists and interpret residents' perception of tourism impact. In the social exchange theoretical framework, the residents living in a tourist area can be regarded as the masters of this area. The generation of their attitude towards the tourism was usually based on the certain values that were exchanged and derived from the tourism activities, for example, the increase in direct personal benefits, local income, employment and commodity trading, the overall development of the economy, etc. In these series of processes, individual interests were the most important value domain. For the tourism, individual interests or individual expenditures can affect residents' attitude towards the tourism. Especially, if an individual or his friends or family members engaged in the tourism industry, he would have more specific and clearer understanding of the economic value produced by the tourism (Aramberri，2001) [13]. From the perspective of individual interests, Ko and Stewart (2002) [14] analyzed the relationship between residents' individual interests and their supportive attitude towards the development of the tourism by using theoretical models in their researches, and the results showed that residents' positive and negative perceptions would affect the degree of their overall satisfaction with the community and thereby their attitude towards the development of the tourism. Gursoy and Uysal et al. (2002) [15] further discovered in their researches that residents' perception of individual interests as well as expenditures tended to be influenced by the extent of residents' concern about the community, community dependence, ecological concern and the operation situation of the tourism resources in tourism destinations. The continuity confirmed their previous viewpoint: residents' decision-making capacity impacts their perception of benefits and costs in the exchange relations and it ultimately acts on their supportive attitude towards the tourism.

III. THEORY HYPOTHESIS

As previously mentioned, according to the reliability and validity test and the fitting situation of the prior variables (utilization of tourism resources, tourism correlation, attitude to environmental protection and participation in tourism decision-making capacity/local

dependence) and the whole model of such three hypothesis sub-models, namely antecedent variables and individual benefit, antecedent variables and individual loss, individual benefit, individual loss and perception of tourism impact, the overall model of the relationship between the individual benefit of residents and their perception of tourism was input into AMOS analysis software which can conduct path analysis of latent variables and test several basic hypotheses in this study. From the confirmatory factor analysis, the overall hypothesis model is eventually composed of six latent variables. They are individual benefit, individual loss, perception of tourism impact, utilization of tourism resources, attitude to environmental protection and participation in tourism decision-making capacity/local dependence. Each latent variable is expressed by several observable variables. The relations among latent variables are shown in Figure 1, presuming that three prior variables are mutually independent, and that individual benefit is independent from individual loss. With regard to this hypothesis model, ten basic hypotheses are presented as follows.

H1: The positive significant impact of residents' utilization of local tourism resources on the perception of individual benefit in the tourism development.

H2: The negative significant impact of residents' utilization of local tourism resources on the perception of individual loss in the tourism development.

H3: The positive significant impact of residents' participation in local tourism decision-making on the perception of individual benefit in the tourism development.

H4: The negative significant impact of residents' participation in local tourism decision-making on the perception of individual loss in the tourism development.

H5: The negative significant impact of residents' attitude towards environmental protection on the perception of individual benefit in the tourism development.

H6: The positive significant impact of residents' attitude towards environmental protection on the perception of individual loss in the tourism development.

H7: The positive significant impact of residents' tourism correlation on the perception of individual benefit in the tourism development.

H8: The negative significant impact of residents' tourism correlation on the perception of individual loss in the tourism development.

H9: The positive significant impact of the perception of residents' individual benefit on their perception of tourism impact.

H10: The negative significant impact of the perception residents' individual loss on their perception of tourism impact.

IV. DATA SOURCES

A. Question Design

Based on the literature review at home and abroad and the hypothesis put forward in the research, the survey questionnaires in this research mainly include perception of residents' individual benefit, perception of individual loss,

perception of tourism impact, residents' tourism correlation, residents' attitude towards environmental protection, residents' utilization of local tourism resources, and residents' participation in local decision-making. Each part is described by unequal observable variables respectively. For example, the perception of individual benefit involves 11 observable variables, such as the increase of employment/ entrepreneurial opportunities and the improvement of living conditions. The perception of individual loss involves 7 observable variables, such as the deterioration of living conditions and the worsening of the relations with tourists. Tourism impact perception involves 22 observable variables, such as the promotion of economic development in urban areas, and the business opportunity for residents and small and medium-sized enterprises. The residents' tourism correlation involves two observable variables, the first of which is family member or friends' engagement in tourism or related industry, and the second of which is the residence close to a popular tourist attraction. Residents' attitude towards environmental protection involves three variables, such as the awareness of natural balance and the prevention of ecological destruction. Residents' utilization of tourism resources involves three variables such as frequently visited Forest Parks/ City Parks and hot springs. Residents' participation in local decision-making involves nine variables such as participation in activities like municipal construction hearing and frequent attention to news about urban construction and development. In terms of the variables in the above seven parts, this research adopts Likert Scale (number one to five represents respectively five basic attitudes of "strongly disagree" "disagree" "neutral" "agree" "strongly agree") to test the respondents. In addition, the questionnaire also includes the survey of their basic information, which is mainly about six items of gender, age, educational background, profession, salary (monthly income) and time of residence in Nanjing. The distribution and assignment of all the variables are listed in table one.

B. Data Collection

The data collection of questionnaire in this research can be divided into two phases. The first part is the questionnaire's pretest phase that was conducted in Nanjing City, a metropolis fulfilled with splendid history and culture, from November to December in 2011. In addition, the content of this questionnaire was modified according to the results of pretest. The second part is the formal investigation phase that was conducted from December in 2011 to February in 2012 in Nanjing City. 350 questionnaires were issued and 301 were returned, among which 284 were effective after removing 17 wrong filled and omitted questionnaires. In all, the response rate of questionnaires reached 86% and the effective rate was 94.35%.

C. Study Method

This study uses the SPSS Statistics 20 and AMOS 20 as the main research methods. In order to basically count and report the data, descriptive statistical analysis and analysis of means of the SPSS will be applied; meanwhile, in order to test the hypothesis model and the 10 basic paths, confirmatory factor analysis and path analysis will be applied by the AMOS.

V. STUDY RESULT

A. Demographic Profiles of Respondents

According to the initial statistic analysis of 282 effective questionnaires, the respondents differ in such demographic statistical items as age, educational background, profession, salary (monthly income) and time of residence. From the characteristics of gender statistics, the male respondents are 115, accounting for 40.5%. The female respondents are 169, more than males, accounting for 59.5%. The number of the respondents aging from 21 to 30, is 159, accounting for 56%. The number of respondents aging from 31 to 40, is 49, accounting for 17.3%. In terms of the marital status, 171 respondents are single, accounting for 60.2%. 113 respondents are married, accounting for 39.8%.

In terms of educational background, 64 respondents are high-school/ vocational college graduates, accounting for 22.5%. 177 are community college or university graduates, accounting for 62.3%. 35 are research institution graduates, accounting for 12.3%. In terms of profession statistics, 99 are company employees, accounting for 334.9%. 58 are students, accounting for 20.4%. 24 are service industry professionals, accounting for 8.5%.

Eventually, in terms of salary (monthly income), half of the respondents have a salary ranging from 2000 to 5000 RMB. 35.2% of them have a salary of below 2000 RMB. 10.6% of them have a salary ranging from 5000 to 8000 RMB. In terms of residence time, 188 respondents have lived in Nanjing City for more than ten years, accounting for 66.2%. 27 respondents have lived in Nanjing City for 5 to 10 years, accounting for 9.5%.

B. Relationship Model between Individual Benefits and Tourism Impact Perception of Residents

After the analysis by the AMOS, the hypothesis model of the relation between individual benefit and tourism impact perception is a recursive model. The capacity is 284 questionnaires. The number of error variance is obviously positive. Factor loading quantity ranges from 0.533 to 0.950. They all meet the requirements of basic model adaptation in the AMOS model. The standard error ranges from 0.53 to 2.09, which also meets the requirement of model adaptation. As a result, the hypothesis model of relation between residents' individual benefit in tourism destination and tourism impact perception can be recognized.

As a result of the review of the adaption indicators of several models, the freedom degree radio of chi-square ($X2 /df$) was 2.774, which was lower than 3.0; RMSEA value 0.079, lower than 0.08; all the simple goodness of adaption indexes, including PGFI, PNFI and PCFI, were greater than 0.50, but the model fit testing indicators including NFI, CFI, and GFI failed to reach the critical standard of 0.80, indicating the poor external quality and low degree of adaption of the models. With the aid of modification index

(MI), the model of the hypothesis of the relationship between t individual benefit perception of residents in tourism destination and tourism impact perception was modified. Combining MI value and relevant theories, the independent hypotheses of some observable variable errors were partly unleashed and set as interrelated. After modification, the freedom degree radio of chi-square was lower than 1.95, and the value of IFI, TFI and CFI was respectively 0.911, 0.927 and 0.943, meeting the adaption demand that all of them should be greater than 0.90, although the value of NFI and RFI was 0.832 and 0.808, lower than the adaption level of 0.90, the adaption level was favorable because the hypothesis of the relationship between the perception of individual benefit of residents in tourism destinations and tourism impact perception could be identified after synthesizing various indexes.

C. Hypothesis Proof-test for Relation Model between Individual Benefits and Tourism Impact Perception of Residents

In this study, 10 basic hypotheses about the relationship between the perception of individual benefit of residents in tourism destinations and tourism impact perception were made based on the social exchange theory. And then, through second-order confirmatory factor analysis, the latent variables related to the correlation of residents and tourism were deleted because they did not pass the reliability and validity test, and the rest 8 basic hypotheses were to be tested. During the model modification process, we found that there is a high correlation between the individual loss variable as well as individual benefit variable and the variable of attitudes towards environmental protection as well as the variable of perception on tourism impact, so, on the basis of the basic hypotheses, the above two latent variables were set as interrelated..

After the regression of the coefficient parameters results through the maximum likelihood method, we made the path analysis for the 10 latent variables. P value of 6 out of 10 paths in the structure model was lower than 0.05, reaching a significant level, indicating that the path was passed, and the estimated standard errors were between 0.35 and 0.152. Table 4 provides the collection of some parameter estimates of the overall model path analysis.

VI. CONCLUSION

First, results of the hypothesis testing should be tested and concluded carefully. According to the testing of 10 basic hypotheses which presented the relationship between the individual benefit of residents in tourism destinations and perception of tourism impact, it could be found that 6 of 10 hypotheses are tenable, such as the perception delivered by residents' utilization of tourism resources to residents' individual benefit holds positive significant impact; on the contrary, 4 of 10 hypotheses are untenable, such as the perception delivered by residents' attitude to environmental protection to residents' individual benefit possesses negative significant impact. The perception given by residents' attitude to environmental protection, utilization of tourism resources and degree of participation in tourism decision-making/local dependence to residents' individual benefit manifests positive significant impact; specifically, among those hypotheses, the degree of residents' participation in tourism decision-making/local dependence has the greatest impact. Meanwhile, the perception of residents' tourism impact can possibly be impacted by residents' attitude to environmental protecting, perception of residents' individual benefit and loss; among them, the perception of residents' individual benefit can be considered as the most important influential element. Moreover, relevant interaction between individual benefit and individual loss can also be found from the results of study; the more individual benefits residents perceive, the more individual losses they undergo.

Second, analysis of the testing results should be paid more attention. Being accompanied by the development of local economy and improvement of civic awareness, the consciousness and participating willingness of local social management and development given by respondents has been increased gradually. The more participation and consciousness residents give the greater benefit they will obtain from the tourism development. Furthermore, given the increased sharing rate of the utilization of public facilities between residents and tourists; the stronger awareness of environmental protection they have, the better perception of local benefit boosted by the tourism development they get. Tourism impact perception can be impacted by the perception that contains residents' individual benefit and loss; however, in the light of the individual benefit, the individual loss produces weaker impact to residents' perception of tourism impact. Specifically, the positive perception given by respondents to tourism development has greater impact than the negative one.

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