



A Study on Kinmen Resident's Perception of Tourism Development and Culture Heritage Impact

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Tourism development could drive the enhancement of national income and the demands for international tourism that tourism benefits have become the key source of national revenue. The integration of cultural relics with tourism development to drive the national or regional development has currently become the world trend. Making good use of the integration of historic and cultural heritage with unique national characteristics and customs has become a major incentive to tourists. Aiming at Kinmen as the research target, the local residents are researched in this study to discuss the attitudes towards the development after the opening to tourism. Total 412 valid copies of questionnaire are retrieved, from which negative correlations appear between the residents' perception of tourism impact and attitudes towards the sustainable development of Kinmen; besides, the perception of tourism crowding would deepen the negative correlation between the perception of tourism impact and the attitudes towards the sustainable development. In this case, the government must solve the problem of tourism crowding by effectively dispersing tourism crowding.

Keywords: tourism development, tourism crowding, attitudes towards the sustainable development of tourism, Kinmen cultural heritage

INTRODUCTION

Tourism development could drive the enhancement of national income and the demands for international tourism that tourism benefits have become the key source of national revenue. According to the estimation of World Tourism Organization (WTO), tourism industry would be the industry the mostly full of vitality in the 21st century. The development of tourism and the assessment of benefits are the primary policies in the world for revitalizing the economic development (Tsai et al., 2012; Ponting & O'Brien, 2014; Yeh & Fotiadis, 2014). Nevertheless, it is the primary consideration to formulate an appropriate culture

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policy for tourism development without “focusing on development, but ignoring protection” to preserve local cultural heritage and enhance the cultural tourism industry as well as prevent local residents’ life from deviation caused by tourism impact.

Kinmen, which was promoted the inscription plan in 2001, shows three advantages of (1) presenting historic and cultural multiplicity, including southern Fujian culture, hometown culture of overseas Chinese, and battlefield culture, (2) being the last gene pool in southern Fujian architecture and culture circle with the integrity of traditional settlements and architecture preservation, and (3) revealing close relationship with cross-strait history. As the modernization being frozen for more than 50 years because of battlefield tasks at early stage, some parts of Kinmen still remained simple humanities in settlements and slow economic development, which were different from the modernized economic and humanities landscapes in Taiwan. Furthermore, the most ancient stratum in Kinmen is granitic gneiss. Such bad natural resources restricted the agricultural development. Drought-resistant crops were the major products, and quality sorghum was made white wine to become an important tourism goods. Up to several ten thousands of soldiers stationed in the island because of the battlefield governance in 1949-1990, when a special “garrison economy” was developed for a half of a century. The local residents used to rely on the agriculture, business, and service of traditional industries. According to the industrial economic income statistics provided by Kinmen County Government, the agriculture was 16.9%, the business 36.73%, and the service industry 46.73% in 1981, and the agriculture and the business slightly dropped to 11.6% and 30.61%, respectively, while the service industry rose up to 57.79% in 1991, a year before the abolishment of martial law. In 1996, three years after the abolishment of martial law and the opening to tourism, the agriculture in Kinmen dropped down to 3.92% and the business appeared 32.32%, while service industry rose up to 63.76%. The agriculture in Kinmen rapidly shrank 12.98% within 15 years, while the service industry largely rose 17.03% because of the tourism development. The rising rate of the service industry was 4.05% higher than the shrinking rate of the agriculture. The agriculture showed 2.87%, the business rose to 43.94%, but the service industry slightly dropped to 53.19% in 2004. It presented that “Establishing the county with tourism, cultural Kinmen”, as the key in developing the economic modernization, was actively practiced, and tourism reinforced the function and development of service industry in the regional economic system. The local agricultural economy therefore dropped to maintain few living and basic tourism goods, such as peanuts, sweet potatoes, and sorghum, the business slightly dropped but then rose to 7.21%, and the service industry dropped from the top in 1996 down to 53.19%. The residency population

State of the literature

- Visitors changed the industrial business styles, the economic sources became diversified, and the convenient main roads of settlements also resulted in visitor exchange, noise, and garbage.
- Tourism created new lifestyles, to which the residents had to adapt, and also caused impacts on the life.
- It aims to explore the Kinmen residents’ opinions about the opening to local tourism and the correlations among the perception of tourism impact, the attitudes towards the sustainable development of tourism, and the perception of tourism crowding.

Contribution of this paper to the literature

- Tourism development would result in certain economic benefits, and the residents also perceive the positive and negative effects of tourism development on local construction and environmental quality.
- Most residents present the educational background of senior high schools and universities, but the tourism knowledge is obviously inadequate.
- Tourism impact is permanently accumulated, and the permanent local residents have the deepest perception.
- The participation in tourism activities allows the residents understanding more of local history, culture, and natural environments, could enhance the residents’ identity to the residential areas, and have the relationship among the residents become enthusiastic and united.

appeared 43442 people in 1992, while the residency population reached 56958 people in 2001, when “mini-three links” between Kinmen and Xiamen was practiced. The household population was up 100248 people in July 2011 (according to China Times 2011.8.3) and reached 132000 in 2015. It implemented the plan of the local government attracting foreign population immigrating to create towns and communities.

In the two decades after the opening to tourism, triple population was increased in Kinmen. Under the promotion of tourism development “focusing on development, but ignoring protection”, farms in Kinmen were decreasing, buildings, public facilities, and areas for transportation and roads were increased, social life was rapidly changed, and emerging residential district and business district were generated to have the residents perceive the change and crowding of living space. Visitors changed the industrial business styles, the economic sources became diversified, and the convenient main roads of settlements also resulted in visitor exchange, noise, and garbage. Tourism created new lifestyles, to which the residents had to adapt, and also caused impacts on the life.

Documentary method, interview method, and questionnaire survey are used as the research data sources for data collection and analyses. Local residents are the subjects mostly influenced by tourism development that the residents’ attitudes towards tourism development are a primary issue. For this reason, this study aims to understand the perception of tourism development and tourism impact of the local residents in Kinmen and the attitudes towards tourism development after the opening to tourism in 1992. Moreover, the tourism impact faced by local residents after the practice of tourism cultural and economic policies as the reference for future development plans. A questionnaire is used for surveying the perception and attitudes of local residents with distinct background towards the tourism development in Kinmen as well as discussing the residents’ opinions about tourism impact caused by visitors and the interaction. It aims to explore the Kinmen residents’ opinions about the opening to local tourism and the correlations among the perception of tourism impact, the attitudes towards the sustainable development of tourism, and the perception of tourism crowding.

METHODOLOGY

2.1 Analysis of current situations in Kinmen

Kinmen, with the total area about 150km², covers the main island, Lieyu, Dadan, and surrounding 15 islets and is located on the mouth of Jiulong River in Fujian Province. The history could be traced back to the development of Mumahou and Zheng Chengong in Tang dynasty. Because of the location between both sides across the strait, the ecology, history, architecture, and culture inherit traditional culture from the immigrants in the coast of China since Tang dynasty to the beginning of Republic of China and integrate with commercial culture and baiyue culture. There are 170 ancestral halls, 280 temples, 130 ancestral hall-centered settlements, and 230 mansions on the island. Such a large scale of heritage covers entire and live non-material cultural heritage; it is rather precious and rare in the world. Kinmen presents great cultural tourism resources as it presents the spirit of southern Fujian culture, is full of battlefield relics and atmosphere, and is the original hometown of overseas Chinese in Southeast Asia. Cultural Affairs Bureau of Kinmen County indicated that Kinmen and Lieyu were selected as one of 12 potential points by Council for Cultural Affairs (Taiwan) in 2003 for applying for World Heritage. It is now listed as one of 48 potential points by Ministry of Culture (Taiwan) for applying for World Heritage. The southern Fujian (also named hoklo) culture accumulated for centuries, the formation of modern hometown of overseas Chinese, the coherence of

clan ethics among immigrants for the millennium, and the diversely integrated folk beliefs are the rear presentation of multi-dimensional integration of Chinese traditional cultural heritage. After the separate governance in 1949, the importance of Kinmen, in the competition between democracy and communism, for the development of world trend has been frequently mentioned. Since 1949, Kinmen experienced several battles to guard the security of the Strait, including Battle of Guningtou, 93 Artillery Bombardment, and 823 Artillery Bombardment, which left inefaceable historic tracks and battle relics, such as debris, Beishan Mansion with lots of bullet holes, and General Li Kuangqien Temple constructed by the residents raising funds.

In 2001, when the trend to apply for World Heritage was started, Council for Cultural Affairs of Executive Yuan invited an Australian architect and the expert of relic maintenance, Bruce R. Pettman, to visit Kinmen. He evaluated that the culture of "battlefield relics" (Cold War Landscape) could be highlighted as the characteristics of Kinmen to apply for UNESCO's World Heritage. Kinmen Cultural Center (the predecessor of Kinmen Cultural Affairs Bureau) took place a series of lectures about World Heritage and published books to promote Kinmen being inscribed as World Heritage. The first Southern Fujian Culture Symposium in 2003 and Islands of the Worlds in 2004 were strived for being taken place in Kinmen. Control Yuan also published the book *Disappearing Battlefield—Display of Kinmen's World Cultural H Heritage*. The intention to promote Kinmen as World Heritage was not stopped. Since 1992 when the cross-strait transportation became frequent, researchers and local cultural workers started to promote Kinmen and Xiamen applying for the co-inscription, as Xiamen was also actively striving for inscribing World Heritage by emphasizing the southern Fujian culture and the hometown culture of overseas Chinese, which were similar to Kinmen. Some tourism workers also proposed the saturation of Kulangyu and suggested the tourists visiting Kinmen as an alternative. In order to balance the development of offshore islands, the government published and practiced "Offshore Islands Development Act" in 2000, in which offshore islands were opened on a pilot basis to the transport links with Mainland China. The entrance/aboard number of people in 2001, when the mini-three links between Kinmen and Xiamen were opened, was more than 20,000 people; after the improvement and the opening to Fujian residents' "Kinmen Tour" in 2004, the entrance/aboard number of people exceeded 50000; for the first time, it appeared more than 1 million people in September 2005; and, visitors to Taiwan through Kinmen and Xiamen were "blowout", about 6000 groups in the first half of 2010 (Xiamen Custom). The visitors actually getting in Kinmen should contain Taiwan visitors (including those stayed overnight in Kinmen and then entered Mainland China for tourism), Taiwan businessmen, China visitors (including those stayed overnight in Kinmen and then entered Taiwan for tourism), and few international visitors. Visitors to Kinmen were averagely about 350000 every year before the opening to tourism and reached more than 500000 after the opening to tourism (Tourism Bureau). Ministry of Transportation and Communications announced that the yearly delivery of visitors in Wutong Ferry Terminal rapidly rose from 1054875 in 1999 to 1336773 in 2001 and 2005134 in 2015. The delivery of visitors increased about 1 million, and those staying overnight in Kinmen were about 1/3 of total capacity in Wutong Ferry Terminal, about 1200 (accommodation people) – 5500 (transfer people) visitors visiting Kinmen every day. Since Kinmen is a small island, tourism industry plays a critical role in the economy to enhance the revenue and job opportunities. In regard to the environment, the carrying capacity of the island is limited and sensitive, and the shortage of electricity and water affects the tourism development (national Penghu University of Science and Technology, 2005). The island is easily destroyed and can hardly be recovered in short period. The resources being concentrated on a limited space and the problems of water and

pollution need to be faced (UNEP, 2003). Accordingly, the island would be rapidly damaged when there is not a perfect plan for developing the limited resources.

2.2. Tourism impact and sustainable development

Impacts could be divided into economic impact, social and cultural impact, and environmental impact. Tourism impact, as the first mentioned economic impact, contains the enhancement of local income, the increase of job opportunities, investment simulation, and inflation (Perdue, Long and Allen, 1990; McCool and Martin, 1994; Lee, 2013; Sharpley, 2014). When environmental protection and community awareness were concerned after 1980, more and more research discussed the impact of tourism on local environment and social culture. The promotion of local reputation, identity, and pride, the change of traditional value, and the commercialization of culture are the social and cultural impact (Delamere, Wankel and Hinch, 2001; Andersson & Lundberg, 2013). Environmental impact covers the changes of real environments and ecological resources. The influence of environmental resource protection, dirty environments, over-crowded environments, improvement of local infrastructure, and traffic problems were discovered from empirical studies (Hall, 1992).

Tourism development is regarded as an important decision to enhance local employment, reinforce local industry, increase income, and improve the quality of life. Nonetheless, the impact resulted from tourism development is multi-dimensional, which presents positive and negative effects on environment, society, culture, economy, and politics. The positive and negative impacts caused by local tourism development are concerned by researchers (Delamere et al., 2001). It is wondered whether the unfavorable influence of tourism on communities is related to the rapid growth of mass tourism. The positive and negative impacts generated in the growth of tourism industry, particularly the residents' perception of tourism impact, are the key factors in the support of tourism development as well as the main reason of tourism being sustainably developed in the area (Allen, Hafer, Long and Perdue, 1993; Andereck and Vogt, 2000; Kyle et al., 2004; Kim, Uysal & Sirgy, 2013).

Historic relics are created by humans, but cannot be regenerated. Following the changes of social styles in Taiwan in 1970, national income was enhanced and the daily standard of the public was promoted to increase the opportunities in tourism and recreation. According to the citizen tourism survey of Tourism Bureau of Ministry of Transportation and Communications (2005), about 90% citizens would precede tourism and recreation on weekends or national holidays. The domestic tourism of citizens, surveyed by Tourism Bureau of Ministry of Transportation and Communications (2006), revealed that there were more than 1 billion times of domestic tourism of citizens, where "pure tourism" (61%) appeared the most, followed by "visiting friends and relatives" (22 %), "sports vacation" (7%), and "religious tours" (5%). Among those for "pure tourism", about 5.6million people engaged in relics, history, and architecture in recreational areas, showing that areas with traditional history and cultural heritage presented certain spiritual, aesthetic, social, historic, symbolic, and true value on the citizens, and the created and developed tourism attraction could not be ignored. It is therefore considered in this study that over-development of tourism would impact local humanities and environments and further influence the living conditions for local residents. Hypothesis 1 reveals the negative correlation between local residents' perception of tourism impact and attitudes towards sustainable development.

2.3. Tourism crowding and perception

Past research indicated that people would perceive the increasing population by crowding; however, the long-term research discovered that increasing population showed different meanings in distinct research. Environmental psychologists agreed that crowding was a subjectively psychological pressure, and the number of people in a unit space reaching the certain amount was the condition. It was the concept of density. Nonetheless, density was purely the physical meaning that crowding was called merely when people appeared negative evaluation on specific density and judged it as too many people (Bricker & Kerstetter, 2010; Ponting & O'Brien, 2014). Shelby (1989) defined perception of crowding as the response to specific density; or, the factor in crowding, in addition to the increase of density, might be limited by individual motivation or objectives to induce personal negative and subjective evaluation of density (Tsunghung, 2009; Bell, Needham & Szuster, 2011; Kim et al., 2013). Choi, Mirjafari and Weaver (1976) indicated that crowding was not simply the condition of an individual being in a fixed unit space, but the experience of psychological phenomenon, which was caused by the interaction between relatively high population density and other social, individual, and environmental variables. The above definition presented two dimensions on crowding. 1. Perception of crowding: In addition to physically subjective evaluation, one could perceive crowding when not being able to reach the standard because of being affected by too many people. 2. "How many people would be crowding": It was a subjective evaluation, i.e. "personally negative and subjective evaluation of density that perception of crowding appeared on individual motivation or objectives being limited or disobeyed when density increased to certain point". According to above two definitions, perception of crowding contained two concepts of descriptive information and evaluative information. The former presented the number of people, and the latter showed personally subjective judgment of the number of people (Vaske & Donnelly, 2002; Vaske & Shelby, 2008; Cheng & Kuo, 2015). Such two concepts also implied the factors in perception of crowding.

Descriptive information was affected by environment features, characteristics of activity engaged, and visitors' personal traits, where the number of people was not simply measured by density. Empirical research discovered that the increase of spatial density would not necessarily generate the perception of crowding (Pearce, 2012). In this case, developing the idea of encounter was that residents and visitors recalled the number of people met in recreation areas (Shelby, Vaske & Heberlein, 1989; Vaske & Donnelly, 2002; Lepp & Gibson, 2003; Kim et al., 2013). Crowding could be further defined as people's negative evaluation of the number of encountered people in the memory (Shelby et al., 1989). As a result, encounter was regarded as the mediator on perception of crowding in the traditional correlation between density and perception of crowding (Vaske & Donnelly, 2002; Vaske & Roemer, 2013).

Evaluative information was the definition based on crowding, rather than an objective fact statement, and would follow personally psychological and social factors to generate distinct subjective judgment on crowding (Bricker & Kerstetter, 2010). Tsunghung (2009) proposed the factors of (1) visitors' personal traits, including recreation motivation, expectation and preference for encounter, and experience standard, (2) the properties to encounter other groups, containing the size, characteristics, behaviors, and activities of groups encountered, and the similarity between groups, and (3) environmental factors in recreation areas, covering the types of recreation areas, locations, and environmental design and quality, which more or less revealed the effects on perception of crowding in various studies. Theoretically, the more people were encountered, the higher perception of crowding would appear. However, there were some other factors in the relation between the number of people encountered and perception of crowding. It is therefore considered in this study that local residents' perception of tourism

development impact and the willingness to sustainably develop tourism industry would change with the perception of crowding. Hypothesis 2 presents that tourism crowding shows moderating effects on local residents' perception of tourism impact and attitudes towards sustainability.

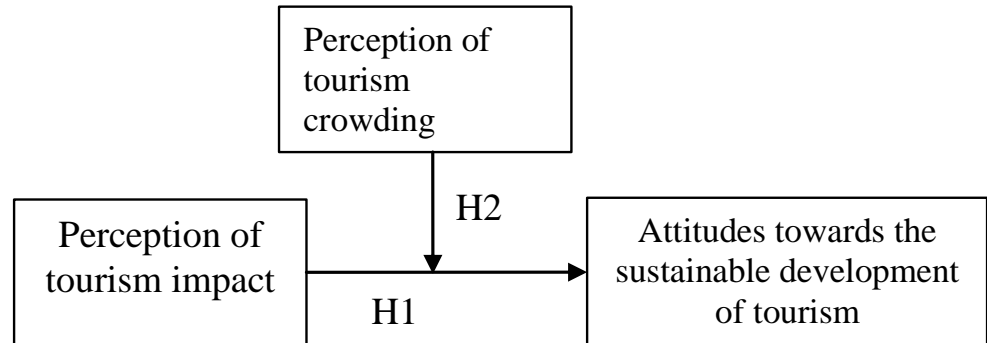


Figure 1. Research model

2.4 Sample

Based on above research purposes and research model and referring to relevant literatures, a questionnaire aiming at Kinmen residents is developed in this study. It aims to discuss Kinmen residents' perception of the government's opening to tourism and the correlations among perception of tourism impact, attitudes towards sustainable development, and perception of tourism crowding. 5-point Likert Scale is applied to the quantitative measurement. The last part of the questionnaire contains demographic variables of gender, marital status, age, residency period, occupation. Total 500 copies of questionnaires are distributed and 438 copies are retrieved, including 412 valid copies.

RESULT

Tourism impact refers to local residents' life and ecological environment being disturbed after the opening to tourism of an area; such perception changes with people. The tourism impact scale proposed by Ap and Crompton (1988) and Harrill (2004) is used for the measurement in this study. Total 20 questions in the scale are divided into living conditions and environmental conditions; and, the Cronbach's α appears 0.84. Attitudes towards sustainable tourism development are local residents' opinions about the continuous opening to tourism. Referring to Choi and Sirakaya (2005), the scale contains 6 questions, and the Cronbach's α reveals 0.93. Perception of tourism crowding refers to the residents' personal opinions about crowding in the city. Referring to Su, Lin and Liu (2012), the scale includes 5 questions, and the Cronbach's α shows 0.88.

The correlation coefficients of variables are listed in Table 1. All correlation coefficients larger than or equal to 0.211 present the statistical significance $p < .05$; and, the statistical significance reveals $p < .01$ when the correlation coefficient is larger than or equal to 0.249. From Table 1, Kinmen local residents' perception of tourism impact and attitudes towards sustainable development show remarkably negative correlation ($r = -.211$, $P < .05$), and the attitudes towards sustainable tourism development present notably negative correlation ($r = -.249$, $P < .01$) with tourism crowding. Moreover, the perception of tourism impact reveals positive correlation with tourism crowding ($r = .332$, $P < .01$).

Table 1. Correlation Coefficient Table

	M	S.D.	1	2	3
1. Perception of tourism impact	3.612	.574	1		
2. Attitudes towards sustainable development	3.478	.781	-.211*	1	
3. Perception of tourism crowding	3.784	.512	.332**	-.249**	1

Note. n=412; *P< .05, **P< .01

DISCUSSION

Historic relics are the important cultural assets for tourism development globally. The combination of cultural heritage and tourism has been regarded as a special tourism and recreation activity. The combination of tourism, relics and culture in a city, and natural ecological resources has currently become a cultural and economic trend in the world. Kinmen County presents the above conditions, including the multiplicity of traditional history and culture accumulated for centuries, the specific "battlefield relics", the cultural and historic relics, live southern Fujian culture which is still accumulating, and ancient settlement architecture. With the diversified cultural assets and rich natural and ecological resources, Kinmen shows the better advantages than any counties and cities in Taiwan. In addition to the formulation of governmental policies and the marketing and operation not inclining to the planning and policy consideration of "focusing on development, but ignoring protection", local residents' cooperation and support are the key in the successful tourism development in an area.

Different types of tourists would present distinct social, economic, and environmental impacts. Being a small island, there are several sensitive areas in Kinmen that the effects on soil, vegetation, habitats of wild animals, and local culture are a critical issue (Cole, 1978; Jacobson & Lopez, 1994; Klein, Humphrey & percival, 1995). Hess (1990) considered that island tourism was the major economic benefits of many islands, while the resources were limited; large amount of tourism activities, without proper planning and management, could result in impact and damage ecological environment and cultural characteristics on the island. This study finds out the negative correlation between Kinmen residents' perception of tourism impact and attitudes towards sustainable development, which conforms to the author's field interview results. Specific financial groups intervene in the duty-free activity in Kinmen and largely purchase lands to result in rapidly rising land prices and price level. However, ordinary residents remain general economic benefits, while the living costs are enhanced by tourism development and the intervention of financial groups. It is also regarded as a factor in the residents' perception of impact on living conditions; the attitudes would therefore tend to not supporting the sustainable tourism development. Regarding the natural ecological environment, wild animals are often run over on the streets, the construction of public infrastructure, the digging of streets, and the noise of vehicles also damage and interfere in the habitats of animals. The residents would also feel uncomfortable because of the changes in space. This study analyzes that the residents perceive the higher impact on environment conditions would affect the attitudes towards not supporting sustainable tourism development. The research analysis reveals that the higher perception of tourism crowding would deepen the negative correlation between local residents' perception of impact on environment conditions and attitudes towards not supporting sustainable tourism development.

CONCLUSION

Based on the idea of hierarchical regression, gender, marital status, age, residency period, and occupation are regarded as the control variables, perception of tourism impact is the independent variable, and attitudes towards sustainable tourism development is the dependent variable for Multiple Regression Analysis to test Hypothesis 1. As shown in Table 2, negative correlations appear between the residents' perception of tourism impact and attitudes towards sustainable development, under the control variables. When the residents perceive the higher impact on living conditions, the attitudes reveal not to support sustainable tourism development ($\beta = -.374$, $P < .001$); and, the residents' attitudes also show not to support sustainable tourism development ($\beta = -.256$, $P < .01$) when the perceived impact on environment conditions is high. Hypothesis 1 therefore is supported.

Table 2. Regression of Turnover Intention

Dependent variables	Attitudes towards sustainable development	
	M1	M2
Gender	.172*	.157*
Marital status	-.096	-.082
Age	.207**	.192*
Residency period	.312***	.301***
occupation	.193**	.176*
Impact on living conditions		-.374***
Impact on environment conditions		-.256**
F values	45.413	64.237
Adj R ²	.283	.441
ΔR^2		.158

Note. $n=412$; * $p < .05$; ** $p < .01$; *** $p < .001$

To test the moderating effect, the steps suggested by Baron and Kenny (1986) are

Table 3. Moderating effect of perception of tourism crowding

	Dependent variables		
	Turnover Intention		
	M1	M2	M3
Gender	.172*	.155*	.152*
Marital status	-.096	-.081	-.081
Age	.207**	.188*	.175*
Residency period	.312***	.272**	.266**
Occupation	.193**	.153*	.147*
Impact on living conditions		-.347***	-.322***
Impact on environment conditions		-.243**	-.231**
Perception of tourism crowding		.229**	.207**
Impact on living conditions X perception of tourism crowding			-.278**
Impact on environment conditions X perception of tourism crowding			-.239**
F values	45.413	66.237	78.426
Adj R ²	.283	.456	.592
ΔR^2		.173	.136

Note. $n=412$; * $p < .05$; ** $p < .01$; *** $p < .001$

referred. First, the relations among independent variables, moderators, and dependent variables are confirmed. Second, the effect of the interaction between independent variables and moderators on dependent variables is tested. From Table 3, Kinmen residents' perception of tourism crowding would deepen the negative correlation between the perception of tourism impact and attitudes towards sustainable tourism development, under the control variables. The perception of tourism crowding would deepen the negative correlation between local residents' impact on living conditions and sustainable tourism development ($\beta = -.278, P < .01$), the perception of tourism crowding would also deepen the negative correlation between local residents' impact on environment conditions and sustainable tourism development ($\beta = -.239, P < .01$). Accordingly, Hypothesis 2 is supported.

RECOMMENDATIONS

Based on above research results, some suggestions for the relevant sectors are proposed as below.

1. Formulate management acts to maintain local business and reinforce testing: Tourism development would result in certain economic benefits, and the residents also perceive the positive and negative effects of tourism development on local construction and environmental quality. Tourism development encourages the residents to participate in activities, improve local public facilities, and properly preserve relics and the characteristics of history and culture. Meanwhile, it could result in the damage to ecological environment, the pollution on marine resources, and the increase of bad places locally. Consequently, the government must improve and manage such negative effects, regularly test the ecological environment and social environment, and reduce negative impacts to the minimum, but enhance positive impacts to the maximum.
2. Enhance the residents' education about tourism development: So far, about 50000 people permanently reside in Kinmen, and most of them are middle aged and the elderly. Most residents present the educational background of senior high schools and universities, but the tourism knowledge is obviously inadequate. Besides, the perception of local tourism development is different, and a part of them do not understand about environment impact and do not concern about the ecology and the surrounding environment after tourism development. It is therefore suggested that Kinmen County Government should enhance the popularization of science and lectures on tourism development and have the teachers and students of the departments related to tourism in National Quemoy University, based on education, encourage the residents spontaneously changing the behaviors so as to promote the residents' concepts about environmental education and ecological preservation.
3. Respect the residents' opinions and ideas: Tourism impact is permanently accumulated, and the permanent local residents have the deepest perception. The government is suggested to stress on the residents' ideas, understand their opinions and perception of tourism development in Kinmen, adjust the basic life and economic problems, give up the development policy of "seeing but not eating", establish approaches for local residents collaboratively enhance the economic sources, and not to simply allow financial groups making profits and the government increasing taxes so that the tourism activities could be smoothly promoted.
4. Enthuse the residents for tourism activities: The participation in tourism activities allows the residents understanding more of local history, culture, and natural environments, could enhance the residents' identity to the residential areas, and have the relationship among the residents become enthusiastic and united. As a

result, it is suggested to enhance the interaction among the residents by holding tourism related activities and community meetings.

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