# A Study of Indigenous People Perceptive Tourism Impact and Support Attitude in the Tribe


## Abstract

The purpose of this study is to analyze the indigenous people perception impact of tourism and their attitudes for development support in the tribe. In this study, three indigenous tribes (Shanmei, Chashan, and Xinmei) located at the south of Taiwan Alishan were selected as the subjects. The random sample method was used to carry out the survey, and a total of 256 valid questionnaires were collected. After statistical analysis, the findings of this study are as follows: 1. Although the indigenous people's perception development has the highest negative environmental impact, but their attitude towards tourism development tends to support. 2. Indigenous people perception of tourism development is a positive impact of economic and sociocultural, and they have a higher support attitude. 3. Indigenous people perception of tourism development is negative economic impact their support attitude is lower. According to the above results, this study puts forward some suggestions on the management of the development of the indigenous tourism and the future research direction.


Keywords: tourism impact, indigenous tourism, tribe, Alishan, support attitude

## 1. Introduction

Alishan (Ali Mountain) is an important tourism and recreational spot in Taiwan. It not only has natural resources, but also has rich Tsou aboriginal culture, and has become an internationally famous tourist destination. There are eight Tsou tribes, includes: Dabang, Tefuye, Leye, Laiji, Lijia, Shanmei, Xinmei and Chashan. Because of the crossing of Ali Mountain Highway, six indigenous tribes are on the south side of the highway, and only the Laiji tribe are on the north side of the highway. Because Alishan is a famous tourist attraction after the establishment of the national scenic area, it not only promotes the "Tsou culture characteristic" tourism actively, but also localize the tribes according to their characteristics. Three of the three tribes at the southern of Alishan, the "Xinmei tribe" to develop organic agriculture, the "Shanmei" tribe has a famous "Tanayiku Natural Ecological Park, "Chashan " is the Alishan southernmost tribe, the main feature is the wooden thatched pavilion, around the rich ecological resources. At present in the eight tribes of Alishan, only the development of tourism is more successful than the Shanmei tribe, the main attraction is the domestic and foreign well-known Tanayiku, in 2016 the number of tourists reached 227217, a record high number of admission, than in 2015 (159406) increased by 67811 [1]. However, in the Alishan tribes in related research results mentioned or suggested that local tribal development should

take sustainable development as the goal, if excessive demand to tourists while ignoring their tribal culture and tradition, will lose the unique tribal tribe, to the pluralistic development of the best way for tribal economic development [2]. Lee et al. (2015) to investigate the Alishan Tsou Dabang Tribe tourism development and cultural preservation of the state from the authenticity and tourism attraction viewpoint, the visitors' Tsou tribe culture has different degrees of understanding of bias, because there are many things do not belong to the tribe [3]. In the face of the number of tourists growing up in recent years, what is the perception of the positive and negative impact of tourism by the residents of the Alishan indigenous tribes? Are they satisfied with such a situation? What is the support for the development of tourism? Further research is needed to understand.

## 2. Literature Review

### 2.1 Tourism impact

Because tourism development will bring positive and negative impact on the tourist area [4, 5, 6], so the residents whether to support the tourism will highlight its importance [7], whether in the development of the local tourism industry, or for the government to formulate tourism policy is an important reference [8], but also influence the sustainable development of the community is the most important factor [9, 10]. Tourism impact can be divided into three main categories: economic, sociocultural, and environmental impact [11, 12, 13,14].

#### 2.1.1 Economic impact

In the study of related indigenous tribes, positive economic impact caused by tourism development, the most important is to increase employment opportunities [15, 16, 17, 18], the income of residents increased [17, 18, 19], increase the economic income of tribes [16, 20], enhance the material on the welfare, raise living standards [15], increase the local agricultural products sales, to attract outside investment, improve the public facilities and services [21]. While the negative economic impact of tourism development, the major income is not equal, the gap between the rich and the poor is widened [19], residents need to borrow money to invest (liabilities), resources used in traditional production conflict with tourism, loss land ownership, indigenous people become to workers, and tourist are not allowed to pick up the crops [22].

#### 2.1.2 Sociocultural impact

In the study of related tribes, tourism development caused by the positive social and cultural impact, the most important is proud of self-culture [16, 21, 23, 24], cultural recovery [15, 21, 25], the continuation and preservation of culture [18, 20, 26, 27], increase the understanding of different cultures [6, 15], let outsiders know Aboriginal Culture [24, 25, 27], tribe people can work together [15, 21], community residents interaction more closely, leisure

and entertainment opportunities increase, and promotion of local popularity [21, 24]. The tourism development of the cause of the negative social and cultural impact, the most important is the traditional culture gradually disappeared [21, 24], the lack of authenticity of culture [6, 28], cultural devolution [6, 15], the interaction between the tribe people produced conflicts [15], the attitude of the tribe people turned to utilitarianism and the change of traditional values [15], traditional products and ritual commercialization, life is disturbed by outsiders, outsiders do not respect the indigenous living culture, and handicrafts are low quality, and appear to counterfeit or non-local cultural products.

2.1.3 Environmental impact

In the study of related tribes, tourism development caused by the positive environmental impact, the most important species of wildlife habitats are protected [29, 30], increasing awareness of the environment [31], under the protection of the environment and natural resources [31], the appearance of the tribe was beautified and improved [22, 27], tribe to outside traffic was improved [18, 31]. Tourism development of the cause of the negative environmental impact, the main is noise increase [31], leading to the community become overcrowded [31], traffic congestion, environmental pollution [31], garbage increase, natural resources have been destroyed [23], community (tribe) improper development [15].

2.2 Residents support tourism development attitude

Allen, Hafer, Long, and Perdue (1993) take the residents of 10 counties in Colorado as an example, their attitudes towards tourism and recreation development were analyzed. It was found that the attitude towards leisure and entertainment development would be affected by the level of economic activity, but the level of tourism development would not be affected. In addition, the results of the study found that the length of residence time had no significant impact on the residents' attitude to tourism development [9]. Haralambopoulos and Pizam (1996) study tourism impacts and attitudes of the residents on the Greek island of Samos, found that tourism brings negative social impact of high prices, drug abuse, sexual harassment and destruction, affray, crime, but residents not only on the development of tourist satisfaction, but also in favor of expanding the tourist development, mainly because tourism has brought considerable economic benefit. In addition, the study also found that the residents who rely on tourism depend on tourism, they not only have a positive attitude towards tourism development, but also are higher than those who do not rely on tourism [32]. Besculides, Lee and McCormick (2002) pointed out that social and economic factors, such as community attachment, living in a region for a long time, and economic dependence on tourism, will affect residents' perceptions and attitudes towards tourism development [33]. Andereck, Valentine, Knopf, and Vogt (2005) study residents of the community in Arizona, they feel the impact of tourism development, results in a positive impact, residents think that can promote economic

development, increase employment opportunities and local tax. On the negative side, residents believe that tourism development has caused some serious problems to the community. These problems include garbage increase, traffic congestion, community crowding, and crime increase [10]. Ko and Stewart (2002) study Jeju Island residents to feel the impact of tourism development, as well as their support for tourism development attitude, found that the residents feel about the positive and negative impact of tourism and community satisfaction, but also in their established model, found that the above factors will affect the face of tourism development attitude [34]. Gursoy, Jurowski and Uysal (2002) develop of community residents in support of tourism development mode, they in the recreation area around the United States Virginia five county residents as the object of study found that residents in the community care, ecocentric values, and the use of tourism resources based on the local economic status, perceived benefits, and perceived expenditure has positive influence, and affect the residents support the attitude of tourism [35]. Gursoy and Rutherford (2004) study residents for tourism development attitude, and from Washington and Idaho territory of the county residents as the object, after analysis, they found that there are nine factors directly or indirectly determines the residents support the tourist development, including: community care degree, ecocentric values, on the basis of tourism resources, community attachment, local economic status, economic benefits, social benefits and social costs, and cultural interests [8]. Nunkoo and Ramkissoon (2007) study residents' perception the tourism development brought which social and cultural impact in the Mauritius, result found that respondents generally support the development of the tourism industry, but also for tourism development took a positive attitude. The main reason is that the residents rely on tourism, but also found that tourism has a brought negative impact. However, when the positive benefits are greater than the negative, the relative residents in the local communities are more supportive of tourism development [36]. Nunkoo and Ramkissoon (2010) construct of community support integrated resort model research to Mauritius residents as the object, factor analysis of residents' attitudes towards integration. The results found that residents of "community satisfaction" and "local economy" and "environmental attitudes" three factors that affect the residents support the resort plan to integrate the premise, and "interests" and "expenditure perceptual development perceptual development" of these two factors is a direct impact on the residents support attitude [37]. Yu, Chancellor and Cole (2011) studied the attitudes of Orange County residents to sustainable tourism development in 2007, and found that perceived social cost, environmental sustainability and economic benefits were related to impact [38]. Boley, McGehee, Perdue and Long (2014) of empowerment residents for tourism development attitude, analysis results, influence of residents' attitude is the main premise will be affected by the economic benefits, also the influence of psychological empowerment and individual economic interests will direct and positive support for tourism development [39].

According to the above literature, it can be found that when tourists feel that tourism

development is a positive impact, they will be more supportive of tourism, but feel a negative impact, and their support for tourism will also be reduced. Therefore, the following six hypotheses are proposed in this study.

H1. The indigenous perceptive the economic positive impact of tourism development in the tribe, they will hold positive attitude support tourism development.

H2. The indigenous perceptive the economic negative impact of tourism development, they will hold negative attitude support tourism development.

H3. The indigenous perceptive the sociocultural positive impact of tourism development, they will hold positive attitude support tourism development.

H4. The indigenous perceptive the sociocultural negative impact of tourism development, they will hold negative attitude support tourism development.

H5. The indigenous perceptive the environmental positive impact of tourism development, they will hold positive attitude support tourism development.

H6. The indigenous perceptive the environmental negative impact of tourism development, they will hold negative attitude support tourism development.

## 3. Method

### 3.1 Subject and sampling

In this study, the three tribes (main is aboriginal Tsou tribe) in the southern of Alishan National Scenic Area (located at Chiayi County, Taiwan) within the area of the investigation and to all the tribes over the age of 20 indigenous were investigated as the object, according to the government statistics show that in 2016 the number of the tribes of a total of 429 households, however, some households did not living, so this study takes the ratio of the number of households in 50% to conduct a questionnaire survey. The total number of questionnaires 260 was sampled, including Shanmei tribe 104, Chashan tribe 78, and Xinmei tribe 78, the total number of valid questionnaires collected is 256.

### 3.2 Questionnaire

This study questionnaire is divided into three parts, first is the "tribal tourism impact perceptive scale", this part of the scale of a total of 40 questions, mainly to understand the indigenous people perceived tourists brought which positive and negative impact to the tribe. The questionnaire mainly refers to relevant research of tribal tourism impact research [6, 15, 16, 18, 19, 21, 22, 23, 24, 26, 27, 28, 29, 30, 31]. The second part is the "tourism development support attitude scale", this part of the scale of a total of 5 questions, mainly to understand the indigenous people feeling current situation of tourism development for the satisfaction of the tribe, as well as support attitude for future development. The questionnaire mainly refers to relevant research of tribal tourism development support research [7, 8, 35]. The two scales

were measured by the Likert scale of five points, and the scores were given respectively from the "very agree", "agree", "ordinary", "do not agree", "very disagree", respectively, the score of 1 to 5. The third part of this questionnaire is demographic variables, including gender, marital status, age, education level, income, and occupation.

### 3.3. Data Analysis

In this study, the collected of effective questionnaires was utilized of SPSS for Windows 22.0 version package software for statistical analysis, analysis step includes: 1. First, use descriptive statistic methods of frequency distribution and percentage, analysis indigenous of gender, marital status, age, education level, income and occupation. Second, to analyzes the residents' perception of tourism impact and their support attitude for tourism development in the tribe. 2. Use the partial least squares (PLS) statistical method of Warp PLS 6 statistical software, to analyze reliability and validity of tourism impact scale, and causal relationship between seven variables in this study. In terms of reliability index, use composite reliability (CR) and Cronbach 's alpha value to determine the value of constituent reliability and the verification standard of Cronbach' s alpha value must be equal to or greater than.70 [40, 41]. In terms of validity, whether or not the factor loading of each observed variable is or is larger than.50 to determine whether each potential variable has a convergent validity [42]. In discriminant validity, test methods are the use of Chin (1998) put forward the individual latent variable square roots of average variances from extracted, should be greater than the covariation between the latent variable model and other potential variables [43]. In addition, Venkatesh, Thong, and Xu (2012) suggest that the detection standard for the AVE square root should be at least or equal to.70 [44]. In the aspect of schema structure relation analysis (hypothesis mode), see (1) whether standardized path coefficients achieve statistical significance; (2) $R^2$ interpretations the explanatory power of the model [42].

## 4. Result

### 4.1. The effective sample characteristics analysis

In this study, effective 256 questionnaires were collected, of which there were a total of male 124 (48.4%) and female 132 (51.6%). In terms of marital status, married were 146 (57.3%), and unmarried 110 (43%). In terms of age, the age of 21-30 years old residents was the highest, 82 people (32%). In terms of education, the numbers of high school (vocational school) is the highest, 159 people (58.1%). On the occupation, the 109 highest in the service (42.6%). In terms of personal monthly income, the income of NT. 25000 (about US$. 830) or less for the most, accounting for 165 (60.5%). There are 101 people (39.5%), the personal's job is related to the tourism industry, including services, business, and manufacturing.

### 4.2 Analysis of Tourism Impact and Support Attitude

4.2.1 Tourism Impact

Tourism impact analysis shows that the first five are the negative environmental impact, which "caused the garbage" (M=4.03) is the highest, second is "increase of noise" (M=3.98), third "environmental pollution" (M=3.93), fourth is "leads to traffic congestion" (M=3.92), and fifth is "tourists have not been allowed to collect crops" (M=3.89), so it is obvious that the indigenous people perceptive of the impact of tourism most is the negative environmental impact.

4.2.2 Support attitude

The analysis results show that indigenous people attitude towards tourism development is between common and consent. However, after looking at the average value, it is found that indigenous people are still inclined to support attitude. In the five items, first is "I support the tribe tourism development" was the highest (M=3.86), has been close to agree, second is "I support more tourism in the tribe" (M=3.77), third is "I support the indigenous tribes should encourage the development of tourism life improvement" (M=3.75) also close to agree.

4.3 Analysis of reliability and validity

4.3.1 Tourism impact scale

The results from table 1 show that the CR and Cronbach 's alpha values of all variables are equal to or above.70, which is consistent with the verification standard, indicating that the reliability of the tourist impact scale is acceptable. However, a total of 7 items of the factor loading are less than.05, so they are deleted.

Table1 Analysis of reliability and validity of tourism impact scale

| Factors | items | Factor loading | CR | Cronbach's Alpha |
|---|---|---|---|---|
| **Positive economic impact** | 1. Increase in employment opportunities | .63 | .81 | .72 |
| | 7. Increase in residents' income | .70 | | |
| | 13. Increase the income and tax of the tribal economy | .68 | | |
| | 19. Attract outside investment | .66 | | |
| | 25. The increase of local agricultural products sales | .13* | | |
| | 31. Improving living conditions | .68 | | |
| | 40. Standard of living promotion | .72 | | |
| **Negative economic impact** | 2. Widening the gap between the rich and the poor | .55 | .75 | .70 |
| | 8. resources used in traditional production conflict with tourism | .54 | | |
| | 14. loss land ownership | .61 | | |
| | 20. indigenous become to workers | .65 | | |
| | 26. tourist are not allowed to pick up the crops | .45* | | |
| | 32. Rising prices | .68 | | |
| **Positive environmental impact** | 3. species of wildlife habitats are protected | .84 | .86 | .80 |
| | 9. increasing awareness of the environment | .50 | | |

| | | | | |
|---|---|---|---|---|
| | 15. under the protection of the environment and natural resources | .77 | | |
| | 21. the appearance of the tribe was beautified and improved | .80 | | |
| | 27. Improvement of public facilities and services | .72 | | |
| | 33. tribe to outside traffic was improved | .59 | | |
| **Negative environmental impact** | 4. noise increase | .77 | .87 | .83 |
| | 10. leading to the tribe become overcrowded | .73 | | |
| | 16. traffic congestion | .79 | | |
| | 22. environmental pollution | .69 | | |
| | 28. garbage increase | .76 | | |
| | 34. natural resources have been destroyed | .56 | | |
| | 37. occur tribe improper development | .59 | | |
| **Positive sociocultural impact** | 5. identify and proud of self-culture | .61 | .81 | .72 |
| | 11. the continuation and preservation of culture | .60 | | |
| | 17. increase the understanding of different cultures | .66 | | |
| | 23. let outsiders know Aboriginal Culture | .73 | | |
| | 29. Increasing tribal popularity | .66 | | |
| | 35. community interaction more closely | .45* | | |
| | 38. tribe people can work together | .50 | | |
| **Negative sociocultural impact** | 6. traditional culture gradually disappeared | .73 | .70 | .70 |
| | 12. lack of authenticity of culture | .45* | | |
| | 18. the interaction between the tribe people produced conflicts | .46* | | |
| | 24. the attitude of the tribe people turned to utilitarianism and the change of traditional values | .04* | | |
| | 30. traditional products and ritual commercialization | .15* | | |
| | 36. life is disturbed by outsiders | .73 | | |
| | 39. outsiders do not respect the indigenous living culture | .70 | | |

*factor loading less than .05 to be deleted

4.3.2 Support attitude scale

The results from table 2 show that the CR and Cronbach 's alpha values are above.70, which is consistent with the verification standard, indicating that the reliability of the tourist development support attitude scale is acceptable. In addition, the factor load of each factor is more than.50, which shows that all the factors in this research scale have good convergent validity.

Table2 Analysis of reliability and validity of tourism development support attitude scale

| Items | Factor loading | CR | Cronbach's Alpha |
|---|---|---|---|
| 1. I support the current situation of the development of tribal tourism | .85 | .90 | .87 |
| 2. I am very satisfied with the development of our tribe's tourism | .70 | | |
| 3. I support the tribe to attract more tourists | .77 | | |
| 4. Indigenous tribes should develop sightseeing and improve their lives | .85 | | |

| | |
|---|---|
| 5. I support more tourism development in the tribe | .86 |

## 4.4 Analysis of discriminant validity

Table 3 shows that the AVE square roots of all the potential variables in this study model are between .70 and .75, which is greater than .70, and each potential variable of AVE are greater than the standard values associated with all relations, and in accordance with the test standards. Therefore, the measurement model of this study has good discriminant validity.

Table3 Analysis of discriminant validity

| Factors | EPI | ENI | ENPI | ENNI | SPI | SNI |
|---|---|---|---|---|---|---|
| **EPI** | **.73** | | | | | |
| **ENI** | .24 | **.71** | | | | |
| **ENPI** | .56 | .16 | **.71** | | | |
| **ENNI** | -.05 | .48 | -.03 | **.70** | | |
| **SPI** | .66 | .07 | .71 | -.09 | **.76** | |
| **SNI** | .13 | .57 | .09 | .58 | .03 | **.75** |

*Square roots of average variances extracted (AVE); ** Economic positive impact (EPI), Economic negative impact (ENI), Environmental positive impact (ENPI), Environmental positive impact (ENPI), Environmental negative impact (ENNI), Sociocultural positive impact (SPI), Sociocultural positive impact (SPI)

## 4.5 Structural model analysis

In Figure 1, the line represents the value of path coefficient of standard regression coefficient (β value), the economic positive impact (β1=.33, p<.05), negative economic impact (β 2=-.11, p<.05), and the "sociocultural positive impact" (β5=.22, p<.05) are influence on tourism support the development of attitudes, the explanatory power reached 35% ($R^2$=.35). Besides, positive environmental impact (β3=.08, p>.05), negative environmental impact (β4=.06, p>.05) and negative social and cultural impact (β6=.10 p>.05) do not influence on the tourism development support attitude.

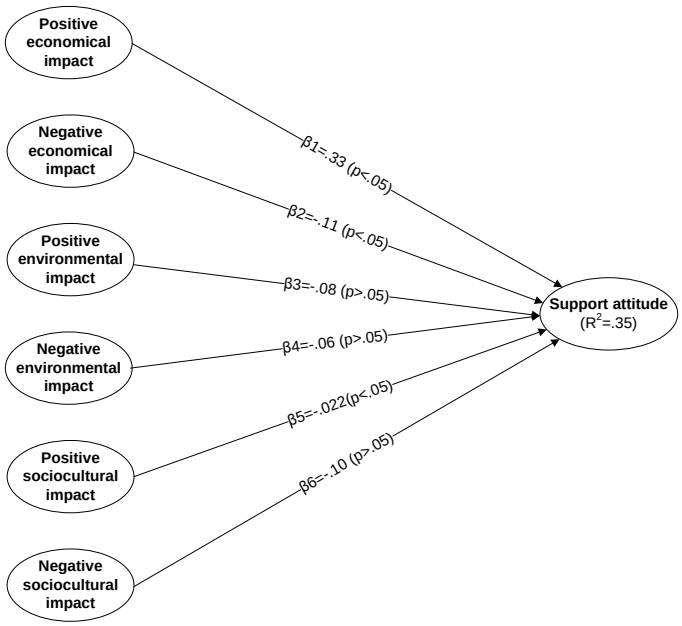


Fig1 Structural model

## 5. Conclusion and Implication

### 5.1 Discussion and conclusion

The results of the analysis show that tourism in the tribal development, with negative environmental impact is the highest. Pointed out that the subjects of indigenous people, these adverse environmental impact, including: caused the garbage is the highest, followed by increase of noise, environmental pollution, leads to traffic congestion, and tourists have not been allowed to collect crops. the results of the research results and related tribes is the same as [10,15,23,31], obviously when a large of tourists visit the tribe, often will cause such negative environmental problems. Although tourists have brought negative environmental impacts to the tribes, but indigenous people hold a supportive attitude towards tourism development. They also hope for more development. The main reason is the relationship between the development of tourism, indigenous people thought "increase the local agricultural products sales" and "increasing employment opportunities", the results also confirmed that tourism can help to increase the income of residents and tribes, improve the economic conditions of the residents, who will support in the development of the local tourism [10,32,36,37,38,39]. The relationship between variables, the analysis found that the positive economic impact and positive sociocultural impact has a positive effect on the development of attitude, this shows that when the tourism development is can bring positive benefits for tribal and indigenous peoples, their support attitude of tourism development will higher, this finding also support previous research [32,36,37,38,39]. However, the study also finds that the indigenous people believe that tourism development has brought negative economic impacts, includes: the rich and the poor is widened [19], residents need to borrow money to invest

(liabilities), resources used in traditional production conflict with tourism, loss land ownership, indigenous become to workers, and tourist are not allowed to pick up the crops [22], so they are opposed to tourism development. They do not want tourists to visit tribe and influence their lives. So that from the above results, it is also known that not all of the indigenous people support the development of tourism in the tribe, even if the positive impact is higher than the negative. So, on the basis of the above discussion, this study has the following conclusions: 1. Indigenous people perception tourism development brings negative environmental impact is the highest; 2. The attitude of the indigenous people to the development of tourism tends to support; 3. Indigenous people's perception tourism brings economic impact and the sociocultural is positive impact, their support for tourism development is higher, and their support for tourism development is more positive. 4. Indigenous people perception of tourism has brought negative economic impact, and they have a lower support attitude for tourism development and hold negative views.

## 5.2 Suggestion

### 5.2.1 For Government sectors and tribes

From the perspective of tourism impact, tourism has brought a positive impact. Therefore, the indigenous people not only satisfied the current tourism development, but also agreed that there would be more development on the future, but it brought a negative environmental impact to the tribes. So, the government sectors and tribes, should be planning travel routes, visitors can make vehicles parked in the tribe, please tourists can walk mining tourism, and setting and trash environment collocation, in order to reduce waste, traffic congestion and noise problems.

### 5.2.2 For future researcher

In the design of the questionnaire, most of the tribes of people are farmers, fill in the "monthly income", there are difficulties, so researchers can be changed to "income" or "income" in the design of the questionnaire, in the survey also easy to subjects to fill out. It is suggested that the following researchers should take the opinions of the indigenous people on tourism development as the research content and understand the way they want to develop in order to promote the sightseeing of the indigenous people.

## 6. Reference

[1] Taiwan Tourism Bureau. Visitors to the principal scenic spots in Taiwan, 2016. Dec 08, 2017. Available: http://admin.taiwan.net.tw/statistics/year.aspx?no=134

[2] Lin, Da-Wei. Economic progress of Taiwan's indigenous tribes: the cases of Alishan's Chashan village and Shanmei village. Unpublished master thesis, National Changchi

University, Taiwan Taipei, 2008. (Chinese)

[3] Lee, Mei-Fen., Hsieh, Chung-Heng., Wang, Yu-Yuan., and Li, Yan-Xi. Tourism development and cultural preservation of the Tsou Tribe Tapangu Village in Alishan from the perspective of authenticity and tourism attraction. Outdoor recreational Research, 28(3):1-35. (Chinese)

[4] Andereck, K. L., and Nyaupane, G. P. Exploring the nature of tourism and quality of life perceptions among residents. Journal of Travel Research, 2011, 50(3): 248-260.

[5] Perdue, R. R., Long, P. T., and Kang, Y. S. Boomtown tourism and resident quality of life: The marketing of gaming to host community residents. Journal of Business Research, 1999, 44(3):165-177.

[6] Liou, Gwo-Bao. Ecotourism cultural impact analysis. Unpublished Doctoral Dissertation, Michigan State University, East Lansing, MI, 2013.

[7] Lankford, S., and Howard, D. Developing a Tourism Impact Attitude Scale. Annals of Tourism Research, 1994, 21:121–139.

[8] Gursoy, D., and Rutherford, D. G. Host attitudes toward tourism: An improved structural model. Annals of Tourism Research, 2004, 31: 495–516.

[9] Allen, L. R., Hafer, H. R. Long, P. T. and Perdue, R. R. Rural residents' attitudes toward recreation and tourism development. Journal of Travel Research, 1993, 31(4):27–33.

[10] Andereck, K. L., Valentine, K. M., Knopf, R. C., and Vogt, C. A. Resident perceptions of community tourism impacts. Annals of Tourism Research, 2005, 32(4):1056-1076.

[11] Ap, J., and Crompton, J. Developing and testing a tourism impact scale. Journal of Travel Research, 1998, 37: 120–130.

[12] Brougham, J. E., and Butler, R. W. A segmentation analysis of resident attitudes to the social impact of tourism. Annals of Tourism Research, 1981, 8(4): 569-589.

[13] Mathieson, A., and Wall, G. Tourism: Economic, physical and social impacts. Hoboken, NJ: John Wiley & Sons, 1982.

[14] Upchurch, R. S. and Teivane., U. T. Resident perceptions of tourism development in Riga, Latvia. Tourism Management, 2000, 21: 499-507.

[15] Dyer, P., Aberdeen, L., and Schuler, S. Tourism impacts on an Australian indigenous community: A Djabugay case study. 2003, Tourism Management, 24, 83–95.

[16] Cole, S. Beyond authenticity and commodification. Annals of Tourism Research, 2007, 34(4): 943-960.

[17] Lin. Ching-Hui., and Chang, Hsiao-Ming. Indigenous Tribe Tourism Development Critical Success Factors – Case by Bokiu in Taiwan. World Academy of Science, Engineering and Technology, 2013, 83: 1072-1078.

[18] Chang., H. M., and Huang, H. C. A Study of Indigenous Tribe Tourism Planning and Developing-Case by Tamalung in Taiwan. Journal of International Management Studies, 2014, 9(2): 87-94.

[19] Ishii, Kayoko. The impact of ethnic tourism on hill tribes in Thailand. Annals of Tourism Research, 2012, 39(1): 290-310.

[20] Rayn, C., and Crotts, J. Carving and tourism- A Maori perspective. Annals of Tourism Research, 1997, 24(4): 898-918.

[21] Chang., H. M., Chang, C. F., and Wu, C. L. Aboriginal tribal tourism development critical success factors-Case by Smangus in Taiwan. World Academy of Science, Engineering and Technology, 2013, 77: 1361-1367.

[22] Huang, H. C., Liu, C. H. and Chang, H. M. Does tourism development bring positive benefit to indigenous tribe? Case by Dongpu in Taiwan. Advances in Research, 2015, 4(4), 235-246.

[23] Kunasekaran, P., Gill, S. S., Talib, A. T., and Redzuan, M. Culture as an indigenous tourism product of Mah Meri community in Malaysia. Life Science Journal, 2013, 10(3): 1600-1604.

[24] Hunter, W. C. Rukai indigenous tourism: Representations, cultural identity and Q method. Tourism Management, 2011, 32: 335-348.

[25] McIntosh, A.J., and Ryan, C. The market perspective of indigenous tourism: Opportunities for business development. In R. Butler and T. Hinch (Eds.), Tourism and indigenous peoples. Issues and implications (pp. 73–83). Boston, MA: Elsevier, 2007.

[26] Colton, J. Indigenous tourism development in northern Canada: Beyond economic incentives. The Canadian Journal of Native Studies, 2005, 1:185–206.

[27] Chang., H. M., and Chang Liao., L. C. A Study of Indigenous Tribe Tourism Planning and Developing– Case by Huanshan in Taiwan. The Journal of International Management Studies, 2014, 9(1):146-155.

[28] Yang, J. J. Tourists' perceptions of ethnic tourism in Lugu Lake, Yunnan, China. Journal of Heritage Tourism, 2012, 7(1): 59-71.

[29] Hipwell., W. T. Taiwan aboriginal ecotourism-Tanayiku Natural Ecology Park. Annals of Tourism Research, 2007, 34(4): 876-897.

[30] Nepal, S. K. Involving indigenous peoples in protected area management: Comparative perspectives from Nepal, Thailand, and China. Environment Management, 2002, 30(6): 748-763.

[31] Amuquandoh, F. E. Residents' perceptions of the environmental impacts of tourism in the Lake Bosomtwe Basin, Ghana. Journal of Sustainable Tourism, 2010, 8(2): 223–238.

[32] Haralambopoulos, N., and Pizam, A. Perceived impacts of tourism-The case of Samos. Annals of Tourism, 1996, 23(3): 503-526.

[33] Besculides, A., Lee, M. E., and McCormick, P. J. Residents' perceptions of the cultural benefits of tourism. Annals of Tourism Research, 2002, 29(2): 303-319.

[34] Ko, Dong-Wan., and Stewart, W. P. A structural equation model of residents' attitudes for tourism development. Tourism Management, 2002, 23: 521-530.

[35] Gursoy, D., Jurowski, C., and Uysal, M. Resident attitudes: A structural modeling approach. Annals of Tourism Research, 2002, 29 (1): 79–105.

[36] Nunkoo, R., and Ramkissoon, H. Residents' perceptions of the socio-cultural impact of tourism in Mauritius. Anatolia: An International Journal of Tourism and Hospitality Research, 2007, 18(1):138-145.

[37] Nunkoo, R., and Ramkissoon, H. Modeling community support for a proposed integrated resort project. Journal of Sustainable Tourism, 2010, 18(2): 257–277.

[38] Yu, C.P., Chancellor, H.C., and Cole, S.T. (2011). Measuring residents' attitudes toward sustainable tourism: A reexamination of the sustainable tourism attitude (SUS-TAS) scale. Journal of Travel Research, 50(1), 57-63.

[39] Boley, B. B., McGehee, N. G., Perdue, R. R., and Long, P. Empowerment and resident attitudes toward tourism: Strengthening the theoretical foundation through a Weberian lens. Annals of Tourism Research, 2014, 49: 33-50.

[40] Fornell, C., and Larcker, D. F. Evaluating structural equations models with unobservable variables and measurement error. Journal of Marketing Research, 1981, 18(1): 39-50.

[41] Nunnally, J. C., and Bernstein, I. H. Psychometric theory (3rd ed.). New York: McGraw-Hill,1994.

[42] Hair, J. F., Black, W. C., Babin, B. J., and Anderson, R. E. Multivariate data analysis (7th ed.). Englewood Cliffs: Prentice Hall, 2010.

[43] Chin, W. W. The partial least squares approach for structural equation modeling, in Modern Methods for Business Research, G. A. Marcoulides (ed.), Lawrence Erlbaum Associates, Hillsdale, NJ, forthcoming, 1998.

[44] Venkatesh, V., Thong, J. Y. T., and Xu. Consumer acceptance and use of information technology: Extending the Unified Theory of Acceptance and Use of Technology. 2012, MIS Quarterly, 36(1): 157–178.