Island Tourists, Destination Tourism Information Sources, Service Quality, Satisfaction and their Loyalty

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Abstract: *The purpose of this study was to analyze the island tourists, their tourist destination information sources, perceived service quality, satisfaction, and the loyalty for destination. In this study, from Taiwan tourists as objects who visit Penghu Island, non-random sampling method was used, and 394 effective questionnaires were collected. After statistical analysis, the findings of this study are as follows: 1. Tourists destination tourism information sources form 'have visited Penghu's friends and relatives to word-of-mouth' as the highest; 2. Destination service quality of "local residents friendly" has more predicted power for tourists of loyalty. 3. Tourists overall satisfaction in destination has more predicted power on loyalty. According to the above findings, this study for Penghu Government Sector, tourism industry and for future research gives forward specific proposals and reference.*
Keywords *Island tourism, information source, service quality, satisfaction, loyalty*

I. INTRODUCTION

Taiwan is surrounded by ocean, have abundant marine resources, very suitable for development of marine-based recreational sports. Penghu is Taiwan's largest islands, and has a wealth of natural resources, including natural tourism resources, cultural tourism resources, etc., provide an important basis for the development of tourism. Due to the winter northeast monsoon, Penghu differences are significant seasonal tourist crowds. Currently Penghu tourism entrepreneurs operating in the tourist season, most based on marine-based activities, and these activities are related to sports, such as snorkeling, scuba diving, banana boat, jet skiing, aerial towed umbrella [1]. As the tourist destination, not only is the main tourist destination of tourism, but also the longest place to stay, tourists usually have highest consumption in the region, and for local economy have the more positive impact. According to Mathieson and Wall (1982) that tourists choose a tourist destination, the main process consists of five stages [2], namely: (1) tourism needs; (2) information search; (3) decision travel itinerary; (4) before prepare for trip; (5) tourism experience and satisfaction assessment, so tourists before the tour, the information collection is very important. Although many studies have confirmed that the destination information source has an importance influence on the tourist to decision-making [3], and the service quality of the destination has a causal relationship with the tourist 's satisfaction and loyalty, but for the government tourism sector and industry management, the most likely to understand are those who have the greatest influence on the decision-making of the destination information and the factors that affect the quality of service and satisfaction of the tourists' loyalty to the destination. Therefore, based on the above description, the main purpose of this study is to analyze the tourist's destination information sources, analysis of the influence of tourists in the destination satisfaction of the service quality items, and analysis of tourists for the destination loyalty of satisfaction items. Hope that the results of the analysis can provide government sectors and tourism industry operations reference.

II. LITERATURE REVIEW

2.1 Tourism Information Resources

According to Hyde (2008) studied found that tourists search product information the most important objective is to determine the destination, planning a trip, and booking the hotel [3]. Thus, the actual visiting attractions experience of tourists that word of mouth recommendation, for want to select visitors to tourism is a very important source of information [4][5][6]. However, in addition above to the sources of information, with the progress of science and technology, the use of internet to search information is the most common [7], and the search of information sources in the tourist itinerary planning before, including the use of internet search for

the destination presentation website [8], from the social media view has been visited the destination of peoples, they for local services and attractions comment [9][10][11], travel agencies, newspapers, television, broadcast, travel magazines and books [6][12][13] and local residents recommendation [14]. So from the above analysis, it can be found in tourists planning a trip before, they travel information sources are very extensive. And when tourists gather information completed, they will evaluation and selection of all of the information, to decide to go to the destination.

2.2 Concept of Service quality and Satisfaction

Parasuraman, Zeithaml and Berry (1988) pointed out that "quality of service" is the subjective nature of the services provided; we can see the situation, that is, the customer service provided by the actual experience and expectations of the gap between. So the quality of service is also the interaction between consumers and service providers, the service expectations and the actual experience of the difference between the processes [15]. Shonk and Chelladurai (2008) have pointed out that the quality of service for sports destinations includes the following: access to quality (destination, sports venues, hotels), quality of accommodation (staff interaction, environment, value), quality of sports facilities (Personnel interaction, environment, value), and the value of the competition (process, product quality) [16]. Oliver (1981) defines satisfaction as the difference between customer expectation and actual consumption of customer (consumer), and this gap is personal subjective cognition [17]. Yoon and Uysal (2005) argue that the measure of visitor satisfaction is the degree of satisfaction of the visitor's expectations, the value of sightseeing and the comparison with past experience in the tourism area [18]. In the study of Singapore's visitor satisfaction, recommendation and re-visit willingness, Hui, Wan and Ho (2007) studied the satisfaction, price, accommodation and diet, goods, attractions, culture, climate and imagination and other projects as a measure of [19].

2.3 Relationship of Service quality and Satisfaction and Loyalty

Hepworth and Mateus (1994) point out that consumer are willing to buy again or recommend the product to others and make a positive reputation as "loyalty" [20]. Backman and Crompton (1991) argue that the concept of loyalty can be divided into two parts of behavior and attitudes, which refer to the number of tourists participating in specific activities, facilities and services, and the consistency of visitors' participation. Attitude is part of the emotional preference of tourists [21]. According to the consumer behavior intention scale developed by Zeithaml, Berry, and Parasuraman (1996), the loyalty of consumer loyalty to the subject matter, respectively, the product recommended other people, inform the other product positive meaning, encourage friends and family to purchase product, and the future will come to consumption [22]. Tourism service quality and satisfaction are important indicators of tourism destination. In the relevant study[23][24], tourists are found to visit the attractions after the destination, the intention of the future behavior (then visit, recommend to others or friends and so on) will be affected by the impact of local services and consumer satisfaction, and the satisfaction of visitors will affect their loyalty to the destination [25]. Kim, Holland and Han (2013) found that the relationship between service quality, perceived value, satisfaction and loyalty of visitors to Auckland City in the United States found that quality of service and perceived value had a positive effect on satisfaction and loyalty Exist, and satisfaction has a positive effect on loyalty and the effect of existence [26].

III.   METHOD

3.1Subjects and Sampling

In this study, residents of the island of Taiwan Province went to Penghu County for tourism activities, and those who had attained the age of 18 years were the subjects of the study. The method was non-random sampling, during the period from 26 to 31 May 2017, to survey. A total of 450 questionnaires given tourist fill in and 412 questionnaires were collected. After deducting the unrecovered 38 and 18 useless, were collected 394 effective questionnaires. The effective questionnaires rate was 87.56%.

3.2 Questionnaire

This questionnaire was divided into five parts, first part is destination tourism information source scale, the main purpose is to understand the tourists visit Penghu source of travel information. There are 16 questions in this part, main refer to Jacobsen and Munar (2012) and Hydes, (2008) tourism information research, and researchers practical experience [3] [27]. The second part is the "quality of service", mainly to understand the tourists for their Penghu tourism service quality is good or bad feeling, this part of the scale of a total of 21 questions, this part of the scale is mainly based on the study of the quality of tourism services [16] [23][24]. The third part is the "satisfaction scale", mainly to understand the tourists for tourism services staff, facilities, venues and other satisfaction in the Penghu, this part of the scale of a total of 8 questions, the main reference to the relevant study of tourism satisfaction [25] [26]. The fourth part is the "loyalty scale", mainly to understand the wishes of tourists to visit Penghu, or the future will visit again and recommended to other people's wishes,

this part of the scale of a total of 3 questions, the main reference Zeithaml, Berry, and Parasuraman (1996) developed the Consumer Loyalty Scale [22]. Above scale all adopted five point Likert-type scales to measure, from "strongly agree"(5) to "strongly disagree"(1). In this study, the demographic variables include: gender, age, residence, education level, occupation, marital, and past travel in Penghu experience.

3.3 Data Analysis Method
1. Use the SPSS for Windows 21.0 software to describe the demographic background variance of the tourist and the distribution of the destination tourist information source. 2. Apply statistical methods of Cronbach's Alpha to test the scale reliability. 3. The multiple regression analysis was used to understanding the predictive power of service quality and satisfaction on the touristic loyalty.

3.4 Reliability and Validity
Since the service quality scale, satisfaction scale and loyalty scale mentioned in this study have good construction and content validity, this study only carries out the reliability analysis of the above three scales. After the analysis, the service quality scale Cronbach's Alpha = .93, satisfaction scale Cronbach's Alpha = .89, loyalty scale Cronbach's Alpha = .88, so from the above results can be found in the scale has a good reliability.

IV. RESULT

4.1 Respondent Profile
Of the 394 valid samples collected from this study, 178 were male (46.5%) and 205 were female (53.5%). There were 11 missing values in this section. In the marital status, 313 (85.3%) were married, 54 were married (14.7%). There were 21 (5.5%) in junior high school (including the following), 75 (19.6%) in high school, 31 (8.1%) in college 221 (57.9%), master 32 (8.1%), and doctor 2 (.5%), the missing value of 12. In terms of occupation, the highest number of students, 144 (37.9%), the lowest is famer only one person (.3%). In the case of individual average monthly income, there were no income are 57 (15.3%), income of NT. 20000 or less (24.7%), of NT. 20001-40000 are 156 (41.8%), NT. 40001-60000 are 44 (11.8%), NT. 60001-80000 are 14 people (3.8%), NT. 80001-100000 are 4 people (1.1%), and NT.100001 more than are 6 people (1.6%). In terms of tourism behavior, there are 247 (77.2%) for the first time visit Penghu, and 39 (12.2%) for the second time, 12 (3.8%) third times, 4 times or more than are 6 (1.9%), and 16 (5%) did not fill in.

4.2 Destination Tourism Information Resources
Table 1 Analysis of Destination Tourism Information Sources

Tourism Information Sources	Mean	Std. Deviation
12. Have visited Penghu's friends and relatives to word-of-mouth	4.07	1.06
10. Tourism Bureau website	3.96	1.07
11. The portal and travel website for tourist information	3.84	1.07
13. The comments made by users on the Internet	3.74	1.11
04. TV travel program	3.65	1.12
07. Penghu National Scenic Area web site	3.63	1.12
16. Penghu residents or friend recommendation	3.44	1.19
03. Tourism Magazines	3.40	1.13
14. Travel agents recommended	3.36	1.16
15. Penghu's tourism business website	3.31	1.05
08. Travel books	3.30	1.13
05. TV news report	3.23	1.10
01. Newspaper local news reports	3.13	1.15
02. Travel op-Ed report in newspaper	3.10	1.11
09. The Government Agency published tourism brochures	2.96	1.13
06. Penghu County Government website	2.76	1.10

Table 1 analyses of results showed that 16 sources of information listed in this study, among ranked among five items, highest is "have visited Penghu's friends and relatives to word-of-mouth" (M=4.07), second place is "Tourism Bureau website" (M=3.96), third is "the portal and travel website for tourist information" (M=3.84), fourth is "the comments made by users on the internet" (M=3.74), fifth is "TV travel programs" (M=3.65).

4.3 Regression Analysis of Service Quality and Loyalty
In this study, use service quality 16 items for the predictor variables, the "loyalty" factor as a criterion variable, adopted enter method of regression analysis, result found that the "local residents are warm and welcoming to tourists" (t=3.06, p<.05), "marine recreational activities are diverse" (t=4.27, p<.05), "local

residents are friendly" (t=3.34, p<.05), "there are many tourist attractions" (t=3.31, p<.05), "public toilet clean" (t=3.23, p<.05),and "visitor center staff is well served" (t=2.57, p<.05), 6 items has predictive power, and R^2=.46, it means above items able to predict tourist loyalty for destination reach to46, see Table 2.

Table 2 Regression Analysis Results of Service Quality on Loyalty

Variables	B	Std. Error	Beta	T value	Sig
Local residents are warm and welcoming to tourists	.485	.159	.170	3.055	.002
Marine recreational activities are diverse	.494	.116	.188	4.267	.000
Local residents are friendly	.538	.161	.185	3.344	.001
There are many tourist attractions	.379	.114	.150	3.313	.001
Public toilet clean	.375	.116	.144	3.238	.001
Visitor Center staff is well served	.316	.123	.112	2.569	.011
R =.68 R^2=.47 adjusted R^2=.46, F=56.32*					

a.*p<.05, b. Dependent variable: loyalty

4.4 Regression Analysis of Satisfaction and Loyalty
In this study, use satisfaction 8 items for the predictor variables, the "loyalty" factor as a criterion variable, adopted enter method of regression analysis, result found that the "the overall tourist services" (t=7.74, p<.05), "tourist attractions" (t=4.13, p<.05), "residents are kindly and friendly" (t=3.52, p<.05), "various commodity prices" (t=3.24, p<.05), and "marine recreational activities" (t=2.26, p<.05), among 5 items has predictive power, and R^2=.56, it means above items able to predict tourist loyalty reach to 56%, see Table 3.

Table 3 Regression Analysis Results of Satisfaction on Loyalty

Variables	B	Std. Error	Beta	T value	Sig
The overall tourist services	1.153	.149	.354	7.737*	.000
Tourist attractions	.621	.150	.203	4.134*	.000
Residents are kindly and friendly	.418	.119	.146	3.518*	.000
Various commodity prices	.357	.110	.133	3.235*	.001
Marine recreational activities	.364	.161	.111	2.258*	.025
R =.76 R^2=.57 adjusted R^2=.56, F=104.18*					

a.*p<.05, b. Dependent variable: loyalty

V.   CONCLUSION
5.1 Destination Tourism Information Resources
Analyses of results showed that 16 sources of information listed in this study, among ranked among five items, highest is "have visited Penghu's friends and relatives to word-of-mouth", this finding support the actual visiting attractions experience of tourists that word of mouth recommendation, for want to select visitors to tourism is a very important source of information [4][5][6]. Based on the above, it can be found that when the tourists identify the tourist destination, they are the basic motivations for the tourist word of mouth recommendation, and further hope that the word-of-speech recipients have the opportunity to travel to the tourist destinations they have visited, so on the whole, Travel experience word of mouth recommended motives do have a clear connotation, in addition to personal identity of the tourist destination, but also shows obvious features of liberalism. Second place is "Tourism Bureau website", third is "the portal and travel website for tourist information", fourth is "the comments made by users on the internet", from the above results can be found and support, due to technological progress, the network has become an important source of tourism information, and is an important basis for tourism decision-making [7] [8] [9] [10] [11]. The fifth is "TV travel programs", because the content of the program production, are all in-depth reports, but also want to engage in tourism, for the destination have a deeper understanding, and then to visit the place[6][12][13]. According to the above discussion, the first conclusion is that the tourist's their destination tourism information, base on the have visited the destination of relatives friends, and family members their recommendation. In addition, the travel website for the destination of the reports, evaluation, advertising, other people's recommendations, etc., for people's tourism decision-making has an important impact on the role.

5.2 Service Quality and Loyalty

Result found that the "local residents are warm and welcoming to tourists", "marine recreational activities are diverse", "local residents are friendly", "there are many tourist attractions", "public toilet clean", and "visitor center staff is well served" items able to predict tourist loyalty for destination reach to 46%. From the above results can be found in which two are related to the local residents, it is clear that the residents of the friendly level, and tourism development has an important link[28][29]. Because in the summer, tourists to the island vacation, mainly based on marine recreational activities [30], so you can find why "marine recreational activities are diverse" are tourists to revisit the future, and even recommend to others have an important influence. In addition to tourists to the island tourism, they are not only engaged in "marine recreational activities", they will visit many tourist attractions, so the tourist attractions for tourists travel behavior have an important influence [16]. The other two "public toilet clean" and "visitor center staff is well served" is an item belonging to the government public facilities. Therefore, it is also found that public facilities are also affected by tourists' visits and recommended destinations. According to the above discussion, the second conclusion is that the residents' friendly degree, the diversification of activities, and the quality of service of public facilities have an influence on the loyalty of tourists.

5.3 Satisfaction and Loyalty

Result found that the "the overall tourist services", "tourist attractions", "residents are kindly and friendly", "various commodity prices", and "marine recreational activities" items able to predict tourist loyalty reach to 56%. From the above results to support the relevant tourism satisfaction study, the common point of view of tourists in the destination satisfaction, for future visits and recommended destinations to other people the same results[23] [24]. These will affect the tourist satisfaction of the items, includes: the local residents of the friendly, public safety, transportation, commodity prices, accommodation, communications, night entertainment, tourist attractions services, and tourists' activities diversity [25] [26]. According to the above discussion, the third conclusion is that the overall tourist services in the destination have an influence on the loyalty of tourists.

5.4 Suggestion
5.4.1 for Government Sectors

From the results of this study, the government agency published tourism brochures and Penghu County Government website is the lowest source of information for tourists, so it is clear that the content of the information is enhanced. In the service quality part, the government sectors not only help the tourism industry to carry out professional training, but also to strengthen the local infrastructures construction, as well as the maintenance of tourist attractions. In addition, it should always be through various publicity channels, the establishment of local residents to develop tourism consensus, with a friendly and friendly attitude facing the reception with tourists.

5.4.2 for Tourism Industry

In the tourism industry, should strengthen the attitude of specialty sales staff, catering service staff attitude, souvenir sales and a variety of reasonable prices. In addition to increase the shopping sites and opportunities, provided by the marine recreational activities varied, and to strengthen the catering services. Especially when the tourists engaged in marine leisure activities, we must ensure that they are safe, to avoid accidents. In the sale of goods and souvenirs, the price should be reasonable, and the signs clear, to avoid occur deceptive tourists situation.

5.4.3 for Future Researcher

As the study is based on "practice" as the starting point, unlike other related research, is based on the construction model. Therefore, for future research, the researchers suggest that the item of the destination information source can be increase, especially in the "word of mouth" section, which can be reanalyze the influence of positive and negative word of mouth. In addition, the service quality of the destination, because the situation is not necessarily the same everywhere, so the future researchers can then according to the local situation, and then increase the quality of service items.

REFERENCES

[1] Hsiao-Ming Chang, Study of tourist cognized on costal sport tourism attractions, travel experiences, perceived values, and behavioral intension, *Journal o f Leisure and Recreation Industry Management*, *2(3)*, 2009, 31-51.

[2] A, Mathieson, and G, Wall, *Tourism: Economic, physical and social impacts* (London: Longman, 1982).

[3] K. F. Hyde, Information processing and touring planning theory, *Annals of Tourism Research*, *35 (3)*, 2008. 712-731.

[4] E. Beckman, A. Kumar, and Y.K. Kim, The impact of brand experience on downtown success, *Journal of Travel Research*, *52(5)*, 2013, 646-658.

[5] S. W, Litvin, R. E. Goldsmith, and B. Pan, Electronic word-of-mouth in hospitality and tourism management. *Tourism Management*, *29(3)*, 2008, 458-468.

[6] N. M. Raya, and M. E. Ryder, ''Ebilities'' tourism: an exploratory discussion of the travel needs and motivations of the mobility-disabled. *Tourism Management*, *24*, 2003, 57-72.

[7] S. C. Jang, The past, present, and future research of online information search. *Journal of Travel & Tourism Marketing*, *17*(2-3), 2004, 41-47.

[8] E. J. Jordan, W. C. Norman, and C. A. Vogt, A cross-cultural comparison of online travel information search behaviors. *Tourism Management Perspectives*, *6(1)*, 2013, 15-22.

[9] A. Bilgihan, C. Peng, and J. Kandampully, Generation Y's dining information seeking and sharing behavior on social networking sites: An exploratory study. *International Journal of Contemporary Hospitality Management*, *26(3)*, 2014, 349-366.

[10] I. S. Pantelidis, Electronic meal experience: a content analysis of online restaurant comments. *Cornell Hospitality Quarterly*, *51(4)*, 2010, 483-491.

[11] Z. Xiang, and U. Gretzel, Role of social media in online travel information search. *Tourism Management*, *31*, 2010, 179-188.

[12] J. S. Chen, and D. Gursoy, Cross-cultural comparison of the information sources used by "first-time and repeat travelers and its marketing implications. *International Journal of Hospitality Management*, *19(2)*, 2000, 191-203.

[13] D. Gursoy, and W. T. Umbreit, Tourist information search behavior: cross-cultural comparison of European Union member states. *International Journal of Hospitality Management*, *23*, 2004, 55-70.

[14] I. Arsal, K. M. Woosnam, E. D. Baldwin, and S. J. Backman, Residents as travel destination information providers: An online community perspective. *Journal of Travel Research*, *49(4)*, 2010, 400-413.

[15] A. Parasuraman, V.A. Zeithaml, and L.L. Berry, SERVQUAL: A multiple item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, *64(1)*, 1988, 14-40.

[16] D. J. Shonk, and P. Chelladurai, Service quality, satisfaction, and intent to return in event sport tourism. *Journal of Sport Management*, *22*, 2008, 587-602.

[17] R. L. Oliver, Measurement and evaluation of satisfaction processes in retailing setting. *Journal of Retailing*, *57(3)*, 1981, 25-48.

[18] Y. Yoon, and M. Uysal, An examination of the effects of motivation and satisfaction on destination loyalty: A structural model. *Tourism Management*, *26(1)*, 2005, 45-56.

[19] T. K. Hui, D. Wan, and A. Ho, Tourists' Satisfaction, recommendation and revisiting Singapore, *Tourism Management*, *28*, 2007, 965–975.

[20] M. Hepworth, and P. Mateus, Connecting customer loyalty to the bottom line. *Canadian Business Review*, *21(4)*, 1994, 40-43.

[21] S. J. Backman, and J.L. Crompton, The usefulness of selected variables for predicting activity loyalty. *Leisure Sciences*, *13*, 1991, 205-220.

[22] V. A. Zeithaml, L. L. Berry, and A. Parasuraman, The behavioral consequences of service quality. *Journal of Marketing*, *60*, 1996, April, 31-46.

[23] C. Chi, and H. Qu, Examining the structural relationships of destination image, tourist satisfaction and destination loyalty: an integrated approach. *Tourism Management*, *29(4)*, 2008, 624–637.

[24] K. Kaplanidou, and H. J. Gibson, Predicting behavioral Intentions of active event sport tourists: The case of a small-scale recurring sports event. *Journal of Sport & Tourism*, *15(2)*, 2010, 163–179.

[25] S. McDowall, International tourist satisfaction and destination loyalty: Bangkok, Thailand. *Asia Pacific Journal of Tourism Research*, *15(1)*, 2010, 21-42.

[26] Soon-Ho, Kim, S. Holland, and Hye-Sook. Han, A structural model for examining how destination image, perceived value, and service quality affect destination loyalty: A case study of Orlando. *Int. J. Tourism Res. 15*, 2013, 313–328.

[27] J. K. Jacobsen, S. and A. M. Munar, Tourist information search and Destination choice in a digital age. *Tourism Management Perspectives*, *1*, 2012, 39-47.

[28] Cheng-Lung. Wu, and Hsiao-Ming. Chang, Island marine tourism development critical success factors – Case by Wangan in Taiwan. *The Journal of Global Business Management*, *9(3)*, 2013, 126-135.

[29] Cheng-Lung. Wu, and Hsiao-Ming. Chang, Winter marine sport tourism development critical success factors- Case by Penghu Island Recreation Area in Taiwan. *The Journal of International Management Studies*, *9(1)*, 2014, 79-88.

[30] G. Jennings, (Ed). Water-based tourism, sport, leisure, and recreation experiences. (Burlington, MA: Elsevier, 2007)