

Determining the Relationship of Tourist Satisfaction and Loyalty

M. Somaskanthan and A. R. Rosmalina*

University Malaysia Sabah, 88400, Kota Kinabalu, Sabah, Malaysia

*somas_89@yahoo.com

Abstract – *Tourist satisfaction is important to ensure the future of a tourist destination. Satisfied tourist would revisit and recommend to others which ensure a chain of event that allows the tourist destination to be visited for years to come. Therefore, to establish tourists' loyalty towards the destination, their satisfaction has to be fulfilled. In this paper, the relationship of tourist satisfaction and loyalty in Tunku Abdul Rahman Park is determined. Exploratory factor analysis was conducted prior to the multiple regression analysis using 8 destination image, 7 attribute satisfaction and 3 loyalty variables. Exploratory factor analysis results showed three dimensions of satisfaction and one loyalty dimension. Multiple regression analysis was used to show and prove the otherwise hypothesized relationship of the variables mentioned. The hypothesis, 'there is a positive relationship between tourist satisfaction and loyalty' was tested through this analysis. The study results showed there is a partially accepted relationship between tourist satisfaction and loyalty. Copyright © 2016 Penerbit Akademia Baru - All rights reserved.*

Keywords: Factor Analysis: Attribute satisfaction, Destination Image, Exploratory Factor Analysis, Loyalty, Multiple Regression Analysis.

1.0 INTRODUCTION

Tourist satisfaction has long been an important requirement in satisfaction studies. This is because tourism industry is one of the main industries promoting the wealth of a country. Hence the need to fulfill the satisfaction is a must for tourist destination managers and providers. [1] and [2] define satisfaction as an evaluation which fulfills the expectation and the need of visitors which is at least good for their experience. When tourists visit a place they would compare the service and experience with their expectation they had before the visit, these is explained as tourist satisfaction [3]. The needs to fulfill satisfaction of these visitors are because tourist destinations apart from various promotions and advertisements, these tourist destinations also depend on the loyalty of the visitors.

From these perspectives, the question arises whether tourist satisfaction affects tourist loyalty? Studies have suggested that there is a positive relationship between tourist satisfaction and loyalty of visitors. Satisfied visitors have been positively induced of their loyalty to a particular destination [4-6]. Meanwhile, [7] and [8] in their study revealed that customers' loyalty is due to high customer satisfaction. This is further supported by [9] and [10] who emphasized that there is a positive relationship between satisfaction and loyalty of these visitors. In addition, an abundance of research supports this statement where satisfaction and loyalty are interrelated and have important implications for each other [11-14]. By understanding this relationship of the given variables, companies deploy various marketing strategies, both internally and

externally, to improve customer satisfaction [15]. This is more so in the service industry where the perceived quality of service is a primary factor that determines customer loyalty. Hence, the importance of the relationship of satisfaction and loyalty is stressed in this research. Given these findings from existing literature, the following hypothesis was proposed:

- **H1: There Is a Positive Relationship Between Tourist Satisfaction And Loyalty**
 - H1a: There Is a Positive Relationship Between Destination Offerings And Loyalty
 - H1b: There Is a Positive Relationship Between Attribute Satisfaction And Loyalty
 - H1c: There Is a Positive Relationship Between Value For Money Services And Loyalty

Previous studies regarding satisfaction and loyalty are done in different settings and fields which include web-based course/designing [16-18], service of low-cost airlines [19], retail banking [20], leisure sport activities [21] and many more. This leaves a gap on how tourists in marine park setting react to satisfaction and loyalty? This prompts the question whether satisfaction have an effect towards loyalty in marine park settings. Hence, to fulfill the gap, this study had been carried out in Tunku Abdul Rahman Park. This study's aim is to determine the relationship between satisfaction and loyalty of the visitors to TARP.

2.0 METHODOLOGY

2.1 Study Area

Tunku Abdul Rahman Park is a state park located in Gaya Bay, 3 kilometres (km) offshore from Kota Kinabalu [22]. The National Park is a cluster of islands comprising Pulau Gaya, Pulau Sapi, Pulau Manukan, Pulau Mamutik and Pulau Sulug. TARP comprises 50 km² with two-thirds of the area are sea, and the rest is surrounded by coral reefs and five islands [23-24]. A very well-known natural tourist destination in Sabah, TARP is easily accessible from the Kota Kinabalu town and the main reason it is very much sought after by tourists local and foreigners. The total tourist arrival to the park has increased by about 400% from year 1997 to 2004 [23-24]. The popularity of the park have attracted high number of tourists per annum, hence it is important to know whether the tourist are satisfied with their visit. It is important to know if the tourists are satisfied and if their loyalty to the place is affected.

2.2 Data Collection

A tourist satisfaction and perception questionnaire was developed and distributed to the tourists of Tunku Abdul Rahman Park to determine the overall satisfaction levels of respondents who choose to visit the islands in Tunku Abdul Rahman Park. The field survey was conducted by convenience sampling technique using questionnaires in Jesselton Point (main Jetty to Tunku Abdul Rahman Park) to returning visitors from the islands of Tunku Abdul Rahman Park. The survey was done from 1st of May 2014 to 10th of June 2014. A total of 407 structured questionnaires based on [25] had been distributed to tourists in who have endured the visit to the islands during the data collection period. The respondents of this study are chosen only after they have visited the Park. Data was taken and analyzed using statistical analysis by SPSS.

2.3 Results and Statistical Analysis

Exploratory factor analysis and multiple regression analysis are used to analysis the data from questionnaires. Factor analysis is used to reduce a large number of variables into small number of dimensions [26]. It is important to reduce the number of variables prior to be used in other analyses such as multiple regression or multivariate analysis of variance [27]. There are two type of factor analyses which are exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). In this paper, EFA is used because of its nature in finding the interrelationship between the variables and normally used in the early stage of a research. Exploratory factor analysis is done adapting Promax oblique rotation in this study. Promax oblique rotation is used in this study because it is suitable for correlated data [28] which is the case in this paper. The factors extracted from EFA are used in the next part of the analysis using multiple regressions.

Multiple regression analysis is used to analyze the relationship between satisfaction (independent variable) and loyalty (Dependent Variable). Multiple regression is a statistical technique that permits the researcher to examine the relationship between a single dependent variable and several independent variables [26 and 29]. In this study, several main assumptions were considered and examined in order to ensure that the multiple regression analysis was appropriate [29].

The assumptions to be examined are as follow:

- Outliers,
- Normality Linearity And Homoscedascitivity, And
- Multicollinearity

3.0 RESULTS AND DISCUSSION

3.1 Factor analysis

Exploratory factor analysis (EFA) in this paper is done to 8 destination image, 7 attribute satisfaction and 3 loyalty dimensions. Three variables which represent satisfaction and 1 variable representing loyalty are extracted from the final run of EFA's component matrix.

The results of EFA's factor loading for satisfaction are shown in Table 1.0. The Final run of EFA for satisfaction dimensions show 3 factors extracted with Eigenvalues more than 0.7. The 3 factors explain 70.5% of the total variance that is more than 60% that has been recommended by [30]. The KMO value is 0.86 where it is indicating that the sample is sufficient to run the Exploratory Factor Analysis. The Bartlett test for sphericity has shown a significant value where the $p < 0.001$. The Anti-image value is more than 0.5 and the communalities also more than 0.5. The factor loading that has been used is 0.35 as the sample used is $n=407$. The Promax oblique rotation is more suitable for the variables because are correlated and the variables are latent variables, thus the variables are selected using Exploratory Factor Analysis and Promax oblique rotation.

Table 1: Factor Loading Of Tourist Satisfaction

Variables	Dimension 1	Dimension 2	Dimension 3
Social environment	0.943		
Relaxation	0.906		
Cultural bio-Diversity	0.800		
Natural Attraction	0.784		
Outdoor Activities	0.776		
Travel Environment	0.644		
Activities		0.961	
Lodging		0.797	
Environment and Events		0.644	
Price and Value			0.909
Accessibility to island			0.855
Eigenvalues	5.32	1.39	1.04
% of Variance	48.36	12.63	9.47
Total Variance Explained	70.46		
Measure of Sampling Adequacy	0.863		
Bartlett's Test of Sphericity	2352.00		
Significant	0.00		

Table 2: Factor Loading of Loyalty and Disconfirmation

Item	Dimension 1	Dimension 2
Complaint	0.932	
Redress	0.904	
Negative Public Comment	0.852	
Revisit		0.919
Recommendation		0.883
Eigenvalues	2.815	1.232
% of Variance	56.30	24.63
Total Variance Explained	80.93	
Measure of Sampling Adequacy	0.703	
Bartlett's Test of Sphericity	10.00	
Significant	0.00	

The results of EFA's factor loading for loyalty are shown in Table 2.0. The factors are extracted from the number of item with Eigenvalues greater than 0.7. The two analyzed factors explain 80.93% of the total variance that is more than 60% that has been recommended by [30]. There is no missing data found in the dataset. The factor loading that has been used is 0.35 as the sample size used in this research is 407. The KMO for the initial run is 0.70 that indicates that sample that has been chosen is sufficient to run the factor analysis. The Bartlett test of sphericity also significant at p value <0.01 and Anti-image correlation for all the variables is more than 0.5. In this paper only loyalty variable is explained and used for further analysis. Table 3.0 summarizes the findings of EFA for satisfaction and loyalty dimensions.

Table 3: Summary of Variables of Satisfaction and loyalty

Variables	Dimensions	Total Variances Explained (%)
Destination offerings	Social environment	48.36
	Relaxation	
	Cultural bio-Diversity	
	Natural Attraction	
	Outdoor Activities	
Attribute satisfaction	Travel Environment	12.63
	Activities	
	Lodging	
Value for money services	Environment and Events	9.47
	Price and Value	
Loyalty	Accessibility to island	24.63
	Revisit	
	Recommendation	

3.2 Multiple Regression Analysis

Multiple regression analysis is used in this section to determine the relationship between satisfaction and loyalty. Table 4.0 summarizes the results of multiple regression analysis between satisfaction and loyalty.

Table 4: Regression Analysis of destination offerings, attribute satisfaction, value for money services with loyalty

Dependent Variable	Independent Variable	Std. Coefficient Beta (β)	t-value
Loyalty	Model :		
	Destination Offerings	0.405**	7.425
	Attribute Satisfaction	0.085	1.593
	Value For Money Services	-0.058	-1.099
	R ²	0.182	
	Adjust R ²	0.176	
	Sig. F	29.948**	

Note: Significant levels: **p < 0.01, *p < 0.05

The main hypothesis (H1) examined whether there is a positive relationship between destination offerings, attribute satisfaction, value for money services and loyalty. Results in Table 4.0 indicated that 18.2% variances in tourist satisfaction can be explained by destination offerings, attribute satisfaction, value for money services ($R^2 = 18.2$, $p < 0.01$). Detail regression results of the aforementioned hypotheses are discussed below.

The first hypothesis (H1) suggested that there is a positive relationship between destination offerings, attribute satisfaction, value for money services and loyalty. Results shown in Table 4.0 illustrated that one of the dimensions of model; namely destination offerings ($\beta = 0.405$, $p < 0.01$) is found to have a positive effect on Loyalty. Therefore, hypotheses H1a is supported.

The effect of attribute satisfaction and value for money services on loyalty is not significant ($p > 0.05$); hence hypothesis H1b and H1c is rejected. In conclusion, the first hypothesis H1 is partially supported. Overall Regression Standardized Residual can be observed in Figure 1.

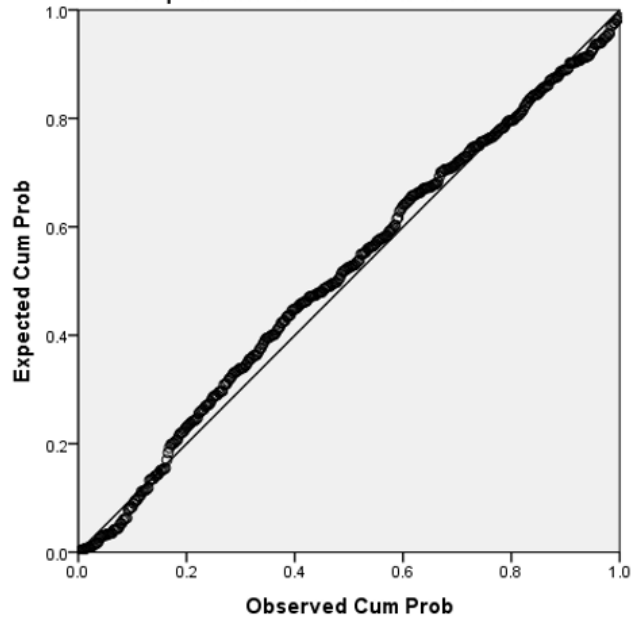


Figure 1: Normal P-P Plot of Regression Standardized Residual
*Independent variable: satisfaction
*Dependent variable: loyalty

The results show that TARP has a genuine tourism product which is enjoyed by the respondents during their visit to TARP. The primary element of a natural tourism destination consists of climate, ecology, culture and traditional architecture [31]. A good destination offering provides satisfaction to the visitors and enhances loyalty of the visitors. This corresponds with [32], and [33] that natural environment is the main attraction in any tourism destination. [33] also stressed that natural areas gives people satisfaction and benefit that might not be available in other types of tourism. Destination offering in this study not only includes the natural areas attractions but also the activities that are tied to it. [34] State that for a tourism sector to add more value to its product, it can only be done by creating and performing activities. This shows the importance of making all the dimensions in line with tourism needs for the benefit of the tourism itself.

In contrary, attribute satisfaction and value for money services have not been a major loyalty determinant for the visitors. The attribute satisfaction and value for money services does not match the expectation of the respondents or most of them do not care about the importance of these dimensions. The importance of a destinations secondary element such as hotels, catering, transport and entertainment [31] in this study is a supporting factor which have less influence to the respondents. This corresponds to the findings of [35] where even though products and resources are widely available, the tourism destination has failed to fulfil its full potential. Overall it is fair to say that there is a partially supported positive relationship between tourist satisfaction and loyalty.

4.0 CONCLUSION

Tourist satisfaction effects loyalty of visitors. In this study, multiple regression analysis results show that hypothesis 'There Is a Positive Relationship between Tourist Satisfaction and Loyalty' is partially accepted. Tourist satisfaction in this study is mainly distributed by the destination offerings. H1a is hence accepted by tourists and shows that if the destination offerings are affected, their loyalty will have effect towards TARP. Destinations offering which shows the natural beauty and the core product of TARP have been recognized as the individual property which can induce tourist loyalty. In spite of that, the results also revealed that there are several areas for improvement including the enhancement of attribute satisfaction and value for money services which can increase loyalty if improved. Hence it is important to preserve this tourist element of TARP to ensure stability of tourist loyalty.

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