# The Antecedent and Consequence of Tourist Satisfaction: An Empirical Study of tourists in Sirindhorn Museum Thailand

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### Abstract

This research examines the relationships among destination image, tourist satisfaction and destination loyalty. Here, 200 tourists in Sirindhorn Museum Thailand were chosen as a sample of the study. The data were analyzed using Structural Equation Modeling (SEM). The results indicate that destination image relates positively to tourist satisfaction. Moreover, tourist satisfaction relates positively destination loyalty as well. Additionally, the potential discussion with the results, theoretical and managerial contributions are described as well.

**Keywords:** Destination image, Tourist satisfaction and Destination loyalty

## 1. Introduction

Tourism is the important industry in the world in terms of the driving force for economical development of a country by turning the potentials of these countries (i.e. natural and cultural heritage) into a profit [1]. Likewise, tourism businesses can make a lot of revenues for the country [2]. Thus, they try to meet tourist's expectations of quality while making a profit that the tourist revisit and suggest the destination to others which is vital for successful

destination tourism development [2]. From the perspective of tourist behavior, it has been commonly recognized in the tourism literature that destination image has influence on tourist behaviors [3]. The tourist behaviors comprise the option of a destination to trip and subsequent assessments and future loyalty [2]. The subsequent assessments include the satisfaction during the stay while the future behavioral intentions include the intention to revisit and the willingness to recommend as destination loyalty. There have been enormous studies focusing on the interrelationship between image, satisfaction and loyalty [2], [4], [5]. However, there are a few empirical researches on the interrelationship among destination image, tourist satisfaction and destination loyalty in Thailand context. Therefore, researcher should conduct more studies in order to have greater knowledge of this concept, to understand the role of destination image, tourist satisfaction and destination loyalty.

## 2. Research objective

The purpose of this paper is to examine the causal relationships among destination image, tourist satisfaction, and destination loyalty. In this article, the research questions are: (1) how does destination

image influence tourist satisfaction?, and (2) how does tourist satisfaction influence destination loyalty? A research model is proposed and tested by using a structural equation modeling approach in this study. Furthermore, it is hoped that the results derived from the model will serve as the basis for the tourism businesses development of destination strategies.

## 3. Relevant literature review and research hypotheses

The research model underlying the subject is presented in Figure 1. In addition, this paper attempts to conceptually link the relationships among destination image, tourist satisfaction and destination loyalty.



Figure 1. The conceptual model of study

The conceptual model in Figure 1 is explained by equity theory. From the tourism literature, an assessment of tourist satisfaction has been concerned with the theory for understanding tourist behaviors as consumer behaviors which will be utilized to evaluate model of expectation. Consequently, this paper was conducted to evaluate tourist satisfaction employing theoretical lens as equity theory which explains how tourist satisfaction has an influence on destination loyalty. In this study, equity theory is applied to explain the tourist's satisfaction which seems interesting in a relationship between the costs of what the tourist pays and the benefits he/she anticipates [6]. Previous study suggested that benefits, endeavor and time are vital aspects in determining satisfaction [7]. Therefore, tourists obtain benefits based on their time, endeavor, and capital for travel which are valuable satisfaction leading to intention to revisit and willingness to recommend as destination loyalty.

## 3.1 Destination image

Destination image is defined as an individual's attitude which is the representative of beliefs, feelings and overall perception of the multiple components of the destination [2],[4]. The destination alternative decision-making procedure is affected by destination image. Also, perceived quality and satisfaction are positively influenced by destination image [2]. Following, more favorable image enable higher tourist satisfaction. Tourist satisfaction is occurred by the results of tourist comparison between past cognition and on-site experience with components of the destination such as restaurants, shops, attractions, trip etc. [8, 9]. Likewise, previous study proposed that tourist behaviors including on-site experience, satisfaction, intention to revisit and willingness to recommend are influenced by destination image [2], [7]. Similarly, prior research suggested that a favorable destination image of tourists is potential possibility to enhance greater satisfaction levels and behavioral intentions [3]. Hence, the hypothesis is proposed as follows:

Hypothesis 1: The destination image will have a positive influence on tourist satisfaction.

## 3.2 Tourist satisfaction

Tourist satisfaction is defined as the extent of tourist's fulfillment pleasure which occurred from the trip experience about a product or service feature to fulfill the tourist's desires, expectations and wants in association with the trip [2], [10]. Tourist satisfaction is essential to successful destination marketing because it influences the selection of destination, the consumption of products and services, and the decision to revisit [9]. Some researchers have also looked at assessment of standards used in service quality and satisfaction and provided different measures of service quality and satisfaction [11], [12]. An understanding of tourist satisfaction must be a basic parameter used to evaluate the performance of destination products and services [13], [14].

## 3.3 Destination Loyalty

Destination Loyalty is defined as the tourist's judgment revisits the same travel place or the willingness to recommend the travel place to others [2]. Tourist who satisfied is more likely revisit to the same destination, because it helps to share tourist positive traveling experience with their friends and others. In addition, tourist's recommendations are particularly important in tourism marketing because they are concerned as information sources for potential tourists [6]. Consistent with prior research suggestion, tourists' satisfaction is a strong indicator of their intentions to revisit and recommend the destination to other people which are termed as destination loyalty in this study [6], [8]. Therefore, the hypothesis is proposed as follows:

H2. Tourist satisfaction will have a positive influence on destination loyalty.

### 4. Research methods

## 4.1 Sample design and data collection

The target population was all the tourists who stopped by Sirindhorn. Here, tourists above 15 years old are the sample of the study. The sample was selected by the convenience method. The questionnaire was administered to each individual during the tour at the Sirindhorn Museum. Finally, 200 respondents were acceptable sample size for the testing of the structural equation model [15].

## 4.2 Questionnaire design and research variables

This research use questionnaires as the instrument for data collection. The questionnaire design was developed from a wide review of the literatures, reviewed by academic improved and chosen the best possible scale of measure. Thus, the content validity of the survey instrument was deemed as adequate. In addition, a pre-test was conducted to test the internal consistency of the questionnaire

items. The first draft of the survey instrument was "distributed to 30 randomly selected tourists who visited Sirindhorn Museum. A reliability analysis (Cronbach's alpha) was performed for 'destination image', 'tourist satisfaction,' and 'destination loyalty' resulting of 0.86, 0.84 and 0.63, respectively. An alpha of 0.6 or above is considered acceptable as a good indication of reliability [16]. Based on the results of the pre-test and feedbacks from Sirindhorn Museum, the final version of the survey instrument was developed. Moreover, all items are measured by five-point Likert scales. Key informants were self-reported in all constructs. All constructs consist of thirty-five items which are developed from Chi and Qu, (2008). First, destination image was measured by seventeen items. Second, tourist satisfaction was measured by sixteen items. Finally, destination loyalty was measured by two items.

## 4.3 Data analysis

Confirmatory factor analysis (CFA) and the structural equation modeling (SEM) technique were used to test the conceptual model that examined the antecedent and consequence of tourist satisfaction.

## 5. Results

### 5.1 Sample Characteristics

Among the samples collected, male respondents (51 percent) were the majority. The range of age of participants is between 15-24 years old (28 percent). The majority of the education level of key informant obtained is high school education (58 percent). Moreover, most respondents receive the average revenues per month less than 5,000 Baht (46 percent). Finally, most respondents' travel objective are relaxation (37 percent).

## 5.2 Measurement model fit

The adequacy of the measurement model was examined by confirmatory factor analysis (CFA). This study assessed the structure of destination image which was set to load on a single latent

factor. The results suggest that this construct provides an adequate fit to the data [17] (see Table 1). Most of the model fit indices from CFA demonstrated a good fit with  $\chi^2$  (df) = 28.93 (20), normed  $\chi^2$  ( $\chi^2$ /df) = 1.45, goodness-of-fit index (GFI)= 0.96, root mean square error of approximation (RMSA) = 0.04, adjusted goodness-of-fit index (AGFI) = 0.93, normed fit index (NFI) = 0.95, and comparative fit index (CFI) = 0.98. Next, tourist satisfaction and destination loyalty as endogenous variable were set to load on the each construct. Moreover, the model fit indices from CFA revealed a good fit with  $\chi^2$  (df) = 26.77 (18), normed  $\chi^2$  ( $\chi^2$ /df) = 1.48, goodness-of-fit index (GFI) = 0.96, root mean square error of approximation (RMSEA) = 0.04, adjusted goodness-of-fit index (AGFI) = 0.93, normed fit index (NFI) = 0.93, and comparative fit index (CFI) = 0.97. Consequently, the results of the CFA satisfy the recommended level of goodness of fit, which implies that the measurement model generally fits the sample data well [18].

Interestingly, the measurement model provides meaning to the constructs (latent variables) in the model. Proper evaluation of the measurement model is a pre-requisite to the evaluation of the structural model [18]. The convergent validity of the measurement scale was examined via the following tests. Scale items of the same construct which are strongly associated with significance showed the convergent validity. The standardized loadings for the measurement items and the constructs were examined as evidences of convergent validity [19]. Significant factor loadings for an exact construct suggest a verification of convergent validity such that indicators for a given construct should be at least moderately associated among themselves. In addition, the convergent validity of the measurement scale was examined using the t-value related with each of the loadings was significant at the 0.05 level, indicating that the specific measurement variables are sufficient in their representation of the constructs [16].

In addition, convergent validity was demonstrated by composite reliability exceeded the recommended level of 0.70. Thus, it can be said that the latent construct are acceptable. The results showed that all variables were significantly related to their specified constructs, verifying the posited relationships among indictors and constructs. Following, evidence of discriminated validity is demonstrated when measures of conceptually different constructs are not strongly.

**Table 1** The results for measurement model

	Std.	CR	Goodness
	loadings		of fit
Exogenous:		0.81	$\chi^2 = 28.93$ ,
destination image			$\chi^2$ /df=1.45,
Travel environment	0.687		GFI=0.96, RMSA= 0.04, AGFI=0.93, NFI=0.95, CFI= 0.98
Natural attractions	0.451		
Entertainment	0.625		
and events			
Historic attractions	0.483		
Infrastructure	0.523		
Accessibility	0.685		
Price and value	0.538		
Relaxation	0.710		
Endogenous:		0.71	X <sup>2</sup> = 26.77, X <sup>2</sup> /df=1.48, GFI=0.96, RMSA= 0.04, AGFI=0.93, NFI=0.93, CFI= 0.97
tourist satisfaction			
Lodging	0.546		
Attractions	0.519		
Shopping	0.526		
Activities and events	0.538		
Environment	0.446		
Restaurant	0.449		
Endogenous:			
destination loyalty		0.64	
Revisit intention	0.667		
Recommend intention	0.699		

## 5.3 Structural model parameters

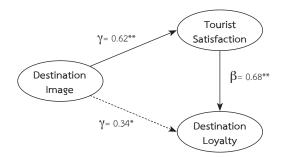


Figure 2 The relationships among destination image, tourist satisfaction and destination loyalty

The most apparent examination of the structural model engages the significance tests for the estimated coefficients, which present the basis for accepting or rejecting the proposed relationships between latent constructs. The structural equation model results demonstrated that all the paths proposed in the conceptual model were statistically significant and of the suitable direction. Figure 2 presents the results of structural equation model of the relationships among destination image, tourist satisfaction, and destination loyalty. Consequently, tourist satisfaction is positively influenced by destination image ( $\gamma = 0.62$ ; t = 5.75). Thus, Hypothesis 1 is supported. Then, tourist satisfaction positively affected destination loyalty ( $\beta$  = 0.68; t = 2.86). Hence, Hypothesis 2 is supported as well. Moreover, the result showed that destination image positively affected destination loyalty ( $\gamma = 0.34$ ; t = 2.04). It can be concluded that tourist satisfaction partially mediated the relationship between destination image and destination loyalty [20]. Furthermore, the results suggest that the fit of the structural model was also assessed by the goodness of fit for structural equations model. Most of the model fit indices of model demonstrated that this model provided an adequate fit to the data a good fit with  $\chi^2$  (df)= 208.13 (99), normed  $\chi^2$  ( $\chi^2$ /df)= 2.10, goodness-of-fit index (GFI)= 0.90, root mean square error of approximation (RMSA) = 0.07, adjusted goodness-of-fit index (AGFI)= 0.85, normed fit index (NFI) =0.90, and comparative fit index (CFI)= 0.94. In summary, Hypotheses 1 and 2 are supported and confirmed the arguments of previous studies.

## 6. Discussion

The present study was motivated by two goals: empirically test the relationship between destination image and tourist satisfaction and investigate the effects of tourist satisfaction on destination loyalty. The results obtained lead to the two conclusions; destination image relates positively to tourist

satisfaction and tourist satisfaction relates positively destination loyalty as well. Additionally, this study presents destination loyalty which is positively influenced by destination image and tourist satisfaction. The results confirm the findings of prior studies [2], [7], [8]. Moreover, this study provides clear understanding that destination image is a critical factor in achieving the tourist satisfaction and loyalty in order to develop tourism industry. The enhancement of the destination image of a place contributes a positive assessment of the travel place. Also, destination image leverages tourist intention to return and to recommend the travel place to the others. Similarly, the finding suggests that tourist satisfaction is an important role which indicates tourist to revisit and recommend to the future as well [6]. In addition, tourist satisfaction enables to return to the same place and concern with to share their positive traveling experience with the others. These evidences are important in tourism industry development. According to the tourism industry which is facing high competitions [2, 4], therefore, it is important to get a better understanding of how destination image enhances tourist satisfaction and destination loyalty. Following, tourism manager should consider the practical implications of these latent variables, which may be essential components in increasing tourist satisfaction and destination loyalty. The findings of this study encourage managerial implications for tourism managers. First, tourism manager should consider the role of image which affects tourist satisfaction with the actual travel experiences [7]. Tourism manager makes greater investments to advertise and promote destination image for tourist attractions. As a result, destination image is potential possibility to attract visitors. Finally, tourism manager should provide tourism infrastructure such as hotels, restaurants, tourist centers in order to establish unique service of the image through the quality of trips offering to tourists [7]. Additionally, the organizing service and product quality appealed

to tourist that affects tourists' satisfaction and their revisit and recommendation in the future.

Furthermore, the findings of this study have significant theoretical implications for academics. This study is proposed to provide a clearer understanding of the relationships among destination image, tourist satisfaction, and destination loyalty which supported by the prior research. The study is intended to expand the theoretical contributions on previous knowledge and tourism literature. Additionally, equity theory is employed to explain the variables in this model. Although, in the tourism literature, there has been acknowledged that destination image, tourist satisfaction, and destination loyalty are vital. Nevertheless, there are a few empirical researches from the existing literature on the relationships among destination image, tourist satisfaction, and destination loyalty in Thailand context. Hence, this study revealedand confirmed the existence of the critical aforementioned relationships in Thailand context. Then, future researches are needed to collect data from other travel places in order to verify the generalizability and increase reliability level of the study.

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