

Sustaining Tourist Satisfaction on Mount Kinabalu, Sabah

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Abstract. An increase in demand specifically for Mt. Kinabalu climbing activity has seen a significant influx of tourist to the Kinabalu Park. The main purpose of this study is to determine the tourist satisfaction level and to identify issues that might affect tourist satisfaction while participating in mountain climbing activity on Mt. Kinabalu, Sabah. Data collection was conducted using a structured questionnaire around the Kinabalu Park headquarter complex. There were 24 items listed out in the questionnaire on which tourists satisfaction level measurement were based on – resource (mountain trails, facilities, scenery), activity (climbing experience), guide and staff service performance as well as satisfaction towards crowding. This study found that respondents rated their satisfaction “towards their achievement” the highest. Items with the lowest ratings were satisfaction “towards the facilities at Laban Rata” and “facilities along the trail”. This finding suggests that, although the tourists are generally satisfied with their experience in Mt. Kinabalu, there is room for improvement in the aspects of facilities. This study has also identified “water insufficiency” and “traffic congestion” as alarming issues which could also serve as indicators for satisfaction. This study serves as the pilot study to come out with the baseline indicators for tourist satisfaction issues.

1 Introduction

Past studies have shown that tourists' satisfaction is one of the most important determinants in the quality management of an industry [1]. As for the Kinabalu Park in Sabah, Malaysia, there has been an increasing demand for Mt. Kinabalu climbing activity and although high visitation has marked substantial revenue generated through tourism activities at the park, it has also caused rapid influx of tourist to this world heritage site. Mt. Kinabalu is located in the Kinabalu Park which was designated a world heritage site by UNESCO in 2000 for its outstanding universal values and its role as one of the most important biological sites in the world. The most commonly done activity at the Kinabalu Park is mountain climbing related activities other than sightseeing. The current number of daily climbers is approximately 190 climbers with the only limiting factor being the available accommodation on the mountain. There has been limited information about key indicators used to monitor the park impacts such as the level of visitor satisfaction in relation to park attractions and facilities, the amount of budget allocation for nature park conservation activities and staff training. According to UNWTO [2], indicators are measures of the existence or severity of current issues, signals of upcoming situations or problems, measure of risk and potential need for action and means to identify and measure the results of a specific action for a destination. Hence, a major challenge for Kinabalu Park is to ensure the world

heritage site is managed sustainably while at the same time making sure that tourists are still satisfied with their experience.

To deliver a quality tourism experience without compromising the integrity of the resources, a better understanding of visitors and a proper visitor management framework to structure and guide decision-making is necessary. Level of satisfaction, perception/motivation value for money and tourist complaints are the baseline environmental responsible indicators [3]. This study serves as a pilot study to come out with the baseline indicators for tourist satisfaction issues, as part of a bigger effort to come up with the environmental responsibility and management framework for Mt. Kinabalu. The main purpose is to determine the tourist satisfaction level as well as to identify issues that might affect tourist satisfaction while they participate in mountain climbing activity on Mt. Kinabalu. Thus, data concerning tourist satisfaction indicators would be specific for mountain climbing activity only.

1.1 Mountain tourism

There is no coherent definition of mountain tourism [4]. Thus, mountain tourism is best generalized as visits to places of interest or operation of holidays in the mountains. The mountains are second only to coasts and islands as popular tourism destinations, making up 15 to 20 percent of annual global tourism, or US\$70 to 90 billion per year [5]. Tourists are attracted to mountain destinations for many reasons, which include the cool climate, clean air, unique landscapes and wildlife, scenic beauty, local culture, history and heritage, and the opportunity to experience snow and participate in snow-based or nature-related activities and sports. While modern forms of transportation have made even remote mountain areas accessible to an increasing number of visitors, mountain tourism tends to be very unevenly distributed, with only a small number of locations having significant tourism infrastructure. For example, in the European Alps, where tourism now exceeds 100 million visitor-days per year, 40 percent of communities have no form of tourism whatsoever, whereas 10 percent have extensive and specialized tourism infrastructure [6].

According to the United Nations Environment Programme (UNEP) handbook [7], the most common activities done in the mountains are nature walk (canopy walk, nature interpretation programme), land-based adventure activities (cycling, mountain biking, quad-biking, horseback riding, canyoneering, rock climbing, ice climbing, hand gliding and caving), freshwater-based recreational activities (river tours, canoeing, sailing, windsurfing, kite surfing, kayaking, rafting and freshwater fishing) and snow-dependent recreation activities (cross country, downhill and glacier skiing, heli-skiing, snow scootering, snowboarding, snowshoe walking and sledding). Generally, mountain tourism offers subsidies for community development projects, especially those concerning communications, roads, water pipes and treatment, waste disposal, schools, professional training, leisure, public health, culture, and sports [5]. All mountains have one major common characteristic: rapid changes in altitude, climate, vegetation and soil over very short distances that lead to dramatic differences in habitat and high levels of biodiversity. Mountain weather can be unpredictable, and rainfall varies significantly. Mountains usually comprise a montane, subalpine and alpine zone. In terms of Malaysian tourism, although the term “mountain tourism” is not yet a mainstream, but the fact that Mt. Kinabalu has been one of the icon to Malaysia’s tourism especially in the state of Sabah, has made it too important to be ignored.

1.2 Sustaining tourist satisfaction

Customer satisfaction is a psychological concept that involves the feeling of well-being and pleasure that results from obtaining what one hopes for and expects from an appealing product or service [8]. Customer satisfaction is the leading criterion to determine the quality delivered to customers through the product and by the accompanying servicing [9]. Over the years, countless studies have explored a destination’s performance through tourist satisfaction analysis where results suggest that overall tourist satisfaction and a tourist’s decision whether to return is partially determined by one’s

assessment of the destination's different characteristics [10]. This shows that in order for a destination to be sustainable, it is vital to understand visitors' perception and satisfaction factor for the destination.

Tourist satisfaction is one of the important determinants in the quality management of organizations [1]. Hence, this study attempts to establish an empirical data for tourist satisfaction that will lead to the identification of the current situation at the world heritage site in order to achieve sustainability in terms of tourist demand as well as resource availability. Yoon and Uysal [11] stressed the importance of tourist satisfaction that "tourist satisfaction has an important role in planning marketable tourism products and services for destinations and its assessment must be a basic parameter used to evaluate the performance of destination products and services".

WTO [12] outlined two main components of issue to guide identification of indicators for tourist satisfaction that should be tailored to the needs of a particular destination. The two components are "determining whether tourists were satisfied upon leaving", and "measuring the impact of satisfaction levels on the industry and destination". As for the purpose of this study, only the first component, which is "determining whether tourists were satisfied upon leaving" was used as a guide. Outlined under this component are 3 indicator categories namely the level of satisfaction by visitor on exit; perception of value for money; and complaints received, as shown below.

Component of the issue	Indicators
Determining whether tourists were satisfied upon leaving	<ul style="list-style-type: none"> - Level of satisfaction (including specific question/s to key activities and attractions) - Perception of value for money - Complaints received

2 Study method

The population of interest for this study is the tourists or climbers of Mt. Kinabalu. Data collection was conducted between 23 December 2013 and 14 January 2014. Interviews using a structured questionnaire were conducted mainly around the Kinabalu Park headquarter complex, intercepting climbers who have just descended from the summit. Fifty nine respondents participated in this pilot study. The total amount of respondents was considered sufficient particularly for a pilot survey. Roscoe [13] and Sekaran [14] contended that a sample size of between 30 to 500 samples would be sufficient for most studies, depending on the types of analysis to be performed on the data [15].

The questionnaire comprises two main sections. The first section is for the purpose of collecting background information of respondent. The second section is regarding satisfaction level based on experience in the park, using a 5-point Lickert scale, ranging from 1 indicating "bad" to 5 indicating "excellent". The baseline indicators for tourist satisfaction issues were elicited based on the construct adapted from WTO [12]. Attributes of a product can influence consumer satisfaction [16]. As such, for construct validity, discussions with the park management were done to ensure all important park components were included. There were 24 items listed out in the questionnaire on which the tourist satisfaction level measurement were based on under four main elements, namely the resource (mountain trails, facilities, scenery), activity (climbing experience), guide and staff service performance as well as satisfaction towards crowding. Additional questions were also included to find out whether respondents experienced traffic congestion and water insufficiency as well as open ended questions to gauge visitor complaints other than open ended questions. Finally questions regarding visitor's willingness to pay were asked to elicit respondents' perception of value [17].

3 Result

Table 1 is a summary of respondents' background. A majority of the respondents are in the age group of 31-40 years old (41%), followed by age group of 21-30 (37%). Slightly more than half (58%)

were male. In terms of nationality, majority of the respondents were non-Malaysian (66%). In terms of education level, majority of the respondents hold Diploma or Bachelor degree (60%), followed by those who have postgraduate degree (36%). About 75% of the respondents stated that they are in a packaged tour. Asked whether the payment they made for the activity was expensive, reasonable, or cheap, majority (61%) stated that it was reasonable. The majority of the respondents were also on their first time visit (83%).

Table 1. Demographic Characteristics of Respondents

Variables	Frequency	%	Variables	Frequency	%
Age			Education Level		
Below 20	2	3	Master / PhD	21	36
21 -30	22	37	Diploma / Bachelor	35	60
31 - 40	24	41	Secondary Education	2	4
41 – 50	8	14	Primary Education	0	-
Above 50	3	5	Tour Package		
Gender			Yes	37	75
Male	34	58	No	12	25
Female	25	42	Perception on Tour Package		
Nationality			Expensive	15	37
Malaysian	20	34	Reasonable	25	61
Non-Malaysian	39	66	Cheap	1	2
			First Visit		
			Yes	47	44
			No	10	56

Before the data were analysed for satisfaction rating, items' reliability measurement was extracted using Cronbach's Alpha reliability coefficient. The reliability measurement shows that the reliability coefficient for all items ($r = 0.949$) was well above the minimum acceptable standard for reliability ($r = 0.60$) [18].

Table 2 shows the respondents' satisfaction level rated based on a 5-point Lickert scale and issues identified from the study. Overall, the satisfaction level rating for all items ranges from 3.64 to 4.65, which indicates that tourists are generally satisfied with their experience involving specified items (approaching scale 4.0 and well above 4.0). The highest rating for satisfying experience is the satisfaction "towards their achievement" with a mean score of 4.65. The next highest items were satisfaction "towards the scenery at the summit" (4.39) and "towards scenery at Laban Rata" (4.30). Items with the lowest ratings were satisfaction "towards the facilities at Laban Rata" and "facilities along the trail" with mean scores 3.64. With regard to traffic congestion and water insufficiency, slightly more than half of the respondents indicated that they did not experience such problems, where about 55% stated no traffic congestion and about 56% stated they did not experience water insufficiency.

Question concerning visitors' willingness to pay were inquired on the amount they are willing to pay for entrance fee as the indicator to respondents' perception of value for the resource. It is found that the majority (43%) of the respondents stated that they are willing to pay RM10 to enter the park, followed by about 39 percent willing to pay a premium of RM30. The five-point Lickert scale was also used to find out the motivation for willingness to pay, with 1 indicating the main motivation and 5 the least motivation. It is found that the main motivation for the willingness to pay is "to conserve and preserve this national park for future generations", while the least motivating factor is "I get satisfaction from paying to help Kinabalu Park".

Table 2. Satisfaction Ratings and Issue

Variables	Mean score	Variables	N	%
Level of Satisfaction				
		Traffic Congestion	25	45
Towards your achievement		Yes	30	55
Low's peak scenery	4.6545	No		
Laban Rata scenery	4.3889			
Towards your whole experience	4.3036	Experience Water Insufficiency		
Trail to summit scenery	4.2679			
Towards park staff service	4.2545	Yes		
Towards mountain guide service	4.1964	No	23	44
Headquarter scenery	4.1607		29	56
Trail to Laban Rata scenery	4.1455			
Timpohon Gate scenery	4.1296	Willingness to Pay		
Towards park operation and management	4.1250	RM3		
Towards the trail condition	4.0179	RM10	11	21
Crowding at Timpohon Gate		RM30	23	43
Crowding at the trail to Laban Rata	4.0175		19	39
Crowding at headquarter	3.9074			
Towards sufficiency of water supply	3.8214	Motivation of Willingness to Pay		
Towards the facilities at the park headquarter area	3.8214			
Crowding at Laban Rata	3.8036	To conserve and preserve this national park for future generations	1.4390	
			Mean score	

Crowding at Low's Peak	3.7818	To use the recreational facilities and to enjoy the scenery	
Towards waste management			
Towards the travel agency services	3.7778	I feel responsible for the local community	1.9535
Crowding at the trail to summit	3.7778	I want better facilities	
Towards the facilities along the trail	3.7091	I get satisfaction from paying to help Kinabalu Park	
Towards the facilities at Laban Rata	3.6923		2.2571
	3.6909		
	3.6379		
	3.6364		2.3684
			2.9187

4 Discussions and Conclusion

The state of Sabah, Malaysia has been widely promoted as a prime tourist destination for those seeking to experience unique nature, culture and adventure due to its unique natural and cultural resources as well as pristine landscape and environment. In view of the importance of environmentally-responsible tourism, especially in the context of Sabah, it is important to identify the key indicators and a holistic environmental responsible framework that can be applied to mountain tourism destinations in Sabah, in particular the world heritage site Kinabalu National Park. Tourist satisfaction has been supported by many researchers as one of the important indicators in the quality management of organizations [1], to determine the quality delivered to customers [9], and that its assessment must be a basic parameter used to evaluate the performance of destination products and services [11].

The findings of this study show that although tourists are generally satisfied with their experience on Mt. Kinabalu, there is room for improvement in the aspect of facilities especially at the Laban Rata rest house and along the mountain trail. The Laban Rata rest house is located 3,272 metres above sea level and is where the climbers would normally stay overnight before proceeding to the summit. Although crowding is one of the issues thought to have effect on tourist satisfaction, it is evident through this study that the more critical issues to look into are the facilities on the mountain and along the trail. Apart from satisfaction levels, this study also identified "water insufficiency" and "traffic congestion" as worrying issues which could also serve as indicators for satisfaction. Although the results indicated that slightly more than half of the respondents did not encounter problems with the two issues, they were experienced by almost half of the total respondents and therefore should not be left out.

This study serves as the pilot study to come out with the baseline indicators for tourist satisfaction issues in Mt. Kinabalu involving only mountain climbing activity. Thus, the findings are restricted to indicators for tourist satisfaction specifically on the mountain and along trail. Further study to include all aspects in this world heritage site is needed to be used for future reference to facilitate a proper tourist management framework.

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