

## TOURIST SATISFACTION DIMENSION IN KINABALU PARK, SABAH, MALAYSIA

Timothy Ajeng Mereng<sup>1</sup>, Hamimah Talib<sup>1\*</sup> and Jennifer Chan Kim Lian<sup>2</sup>

<sup>1</sup> Forestry Complex,  
Faculty of Science and Natural Resources,  
Universiti Malaysia Sabah

<sup>2</sup> Borneo Tourism Research Centre,  
Faculty of Business, Economics and Accountancy,  
Universiti Malaysia Sabah

Corresponding author; Hamimah Talib, Cell; +6016 9980701,  
Email; [hamima@ums.edu.my](mailto:hamima@ums.edu.my)

**ABSTRACT.** *This paper aims to identify the tourist satisfaction dimensions in Kinabalu Park as a World Heritage Site, to come out with the tourist satisfaction indicators for responsible rural tourism framework at Kinabalu Park, Sabah, Malaysia, in terms of satisfaction and dissatisfaction dimension. One of the data sources to achieve this aim is the in-depth interview session with the tourist in Kinabalu Park, specifically the mountain climbers. The interview was conducted with Herzberg's Critical Incident Technique (CIT), which is a method that asks the respondents to recall their exceptionally good feeling as well as their exceptionally bad feeling during their experience in Kinabalu Park. The data were analyzed thematically based on Driver's Recreation Experience Preference (REP) scale to identify the tourists' satisfaction dimension. Our study found that "scenery enjoyment" was the most prevalent domain for a satisfying experience or the source of good feeling. Along with the "scenery enjoyment", there were other three emerging experience domains that could contribute to understanding the tourist satisfaction dimensions in Kinabalu Park.*

**KEYWORDS.** Tourist Satisfaction Dimension, Kinabalu Park

### INTRODUCTION

Kinabalu Park, with Mount Kinabalu as its epicenter, is undoubtedly a tourism hotspot which attracts both tourists and industry players that benefits both local industries and surrounding communities. With the increasing number of visitors every year but limited number of climbers allowed per day to climb Mount Kinabalu, visitors' satisfaction should be monitored and improved. One of the baseline indicators for tourist satisfaction as suggested by the World Tourism Organisation (WTO, 1985) is tourists' satisfaction upon leaving the place they have visited. Although two earlier papers on tourist satisfaction level in Kinabalu Park (Talib *et al.*, 2014; Mereng *et al.*, 2016) have identified that tourists, specifically the mountain climbers, are generally satisfied with their experiences in Kinabalu Park, the dimension of their satisfying experience were not elaborated.

Herzberg (1966) proposed that "satisfaction" and "dissatisfaction" are two different dimensions and should be accounted for separately in explaining and understanding tourist satisfaction. This concept of different dimensions of satisfaction-dissatisfaction is also shown through the impact certain products/services have on satisfaction (Faleye *et al.*, 2000; Fuchs and Weiermair, 2004; Fuller and Matzler, 2008; Matzler *et al.*, 2003; Mitthal *et al.*, 1998; Slevitch and Oh, 2010; Tontini and Silveira, 2007). The presence of certain factors that generate satisfaction does not necessarily determine the absence of dissatisfaction. Nevertheless, the reverse can also occur when the presence of certain factors that influences the dissatisfaction does not entirely make the tourist dissatisfied (Kano, 1984; Kano, Seraku, Takahashi and Tsuji, 1984). This study examines the dimensions of tourist satisfaction and dissatisfaction amongst climbers of Mt Kinabalu, Sabah, Malaysia.

## MATERIAL AND METHODS

### The study area

The study was conducted in Kinabalu Park area, Ranau, Sabah, Malaysia. The park was established in 1964 as one of the earliest parks in Malaysia. In 2002, Kinabalu Park was designated by UNESCO as the first World Heritage Site for Malaysia because of its outstanding universal values in terms of species biodiversity and endemism, as well as its role as one of the most important biological sites in the world. Located in the West Coast of Sabah, Kinabalu Park covers an area of 753 square kilometers (75,370 ha) encompassing 3 districts (Ranau, Kota Belud, and Kota Marudu). Mount Kinabalu's tallest peak is the Low's Peak at 4,095 meters. The park is administered by Sabah Parks, a statutory body under the State Tourism, Cultural and Environment Ministry. There are five main types of natural vegetation, classified according to its altitudinal range. The rich tropical lowland and hill rainforest cover 34.8% of park in the lower parts. Tropical montane forest covers another 37.3%, followed by tropical lower sub-alpine forest which covers another 1.3%. Tropical upper sub-alpine forest covers 0.6 % and tropical alpine forest wraps 0.04% of the upper area (Kitayama, 1991).

The duration of the mountain climb is normally 2 days. The climb starts with registration at the Kinabalu Park headquarters at 1,563 meters (5,128 feet) altitude, at as early as 7.00 a.m. Climbers need to hike to the Laban Rata hut at 3,300 meters (10,800 feet) and spend the night there. The climb to Laban Rata hut normally takes between 6 to 8 hours. Climbers must be accompanied by guides at all times. The climb to Low's Peak, Mount Kinabalu's summit, commences as early as 3.00 a.m. This part of the climb would take between 2 to 4 hours. Certain parts of the summit climb require the use of ropes to overcome steep sections. The last part of the climb is on naked granite rock with a station called Sayat-Sayat (Phillipps and Liew, 2005).

### Data Collection

Data collection was conducted from the 10<sup>th</sup> to the 16<sup>th</sup> April 2016. The research team was stationed at two main points, which were the Timpohon Gate and the headquarters office. Climbers that have just descended from their climbing trip were interviewed using interview guide based on Herzberg's Critical Incident Technique (CIT) (Herzberg, 1966). The sample size was considered sufficient when data saturation point is achieved where there is no more new information given by the respondents or informants (Walker, 1985). The interviews were recorded and transcribed at the end of every data collection day.

The analysis consists of two parts to understand the factors of tourist satisfaction dimensions (Alegre and Garau, 2010) The first part comprised the analysis of the satisfaction dimension by using Driver's (1983) Recreation Experience Preference (REP) Scale. All responses were compared with Driver's REP scales and domains to identify the satisfying elements and to understand the whole dimensions of their experience. The second part comprised the analysis of the respondents' dissatisfaction, where thematic content analysis was conducted on the data and dissatisfaction factors were categorized based on the listed identified themes.

### Tourist satisfaction analysis

Adopting Herzberg's CIT, respondents were asked to recall the time when they felt exceptionally good and bad. The responses were analyzed using REP scales to determine the emerging domains. This was done by identifying the source of satisfying feeling from the respondents' narration and comparing them with Driver's (1983) list of recreational experience domains indicated by the description of their experience. The REP scales were developed within the context of motivation theory. Early conceptualization (Driver and Tocher, 1970; Knopf *et al.*, 1973) suggested that recreation activities are behavioral pursuits that are instrumental to attaining certain psychological and physical goals. According to this view, people participate in recreation when a problem state exists; when an existing state does not match a preferred state (Knopf *et al.*, 1973). For example,

stress caused by day-to-day burdens and responsibilities might motivate an individual to choose to go fishing (a recreation behavioral pursuit) because it is instrumental in attaining temporary escape from stress and therefore fulfills a motivating force (Knopf *et al.*, 1973; Manfredo, 1984; Wellman, 1979; Tarrant, 1996). Thus, REP is considered to be a good reference scale in analyzing the dimensions of satisfying experience.

**Tourist dissatisfaction analysis**

Bad experience in the form of feelings that the climbers felt exceptionally bad during their climb was taken into account to have a better understanding of the dimension of their satisfaction. The tourist dissatisfaction is divided into two categories, uncontrollable and controllable factors. Uncontrollable factors include the weather, paranormal occurrence and damaged natural resources/landscape, while the controllable factors include climbing fee, services, facility, climber’s safety and physical restraint.

**RESULTS AND DISCUSSION**

Data saturation was achieved after 8 respondents where there was no more dissimilar information received from the respondents. The percentage of respondents are equal in gender, which is 50% male and 50% female (Table 1). Fifty percent of the respondents are between 25-30 years old. The respondents are 87.5% Malaysian whereas 12.5% are foreigner. In terms of educational background, 75% of the respondents have a Diploma or a Degree. In terms of travelling party, 50% of the respondents are in a group of 1-5 people. Among the respondents, 75% mentioned they were repeat climbers and 25% said it was their first climb.

**Table 1:** Respondents’ profile

<b>Components</b>	<b>Items</b>	<b>Percent (%)</b>
<b>Gender</b>	Male	50
	Female	50
<b>Age</b>	Below 25	25
	26-30	50
	31-35	12.5
	36 and above	12.5
<b>Nationality</b>	Malaysian	87.5
	International	12.5
<b>Education level</b>	Primary	0
	Secondary	12.5
	Diploma/Degree	75
	Master/PhD	12.5
<b>Traveling party</b>	1-5	50
	6-10	12.5
	More than 10	37.5
<b>First timer</b>	Yes	25
	No	75

**Tourist satisfaction result**

Four domains of recreation experience emerged from the analysis to indicate the satisfying experience dimensions, namely “achievement/stimulation”, “nature learning”, “enjoy scenery”, and “pleasant temperature” (Table 2). Under the four domains, six indicators emerged from the climbers

responses, namely “reinforcing self-image”, “excitement”, “nature learning”, “exploration”, “enjoy scenery” and “pleasant temperature”. Among the six indicators of satisfying experience dimensions, “enjoy scenery” was mentioned the most, where majority (75%) of the respondents have mentioned it when describing their exceptionally good experience. This made the experience of “scenery enjoyment” the strongest satisfaction domain in Kinabalu Park. The next prevalent indicator for satisfaction dimension in Kinabalu Park after “scenery enjoyment” is “reinforcement of self-image” and “excitement” with both mentioned by about 38% of the respondents. The next indicator for satisfaction dimension is “nature learning” and “exploration” (mentioned by 25% of the respondents).

**Table 2:** Tourist satisfaction

<b>Recreation Experience Preference Scale</b>		
<b>Domains</b>	<b>Indicator (% of respondent)</b>	<b>Example of Responses</b>
<b>Achievement/ Stimulation</b>	Reinforcing Self-image (37.5%)	“when you reach the summit, it shows that we can do it and reach it.”
	Excitement (35.5%)	“When I made it to the peak.. It was a very touching experience..”
<b>Learning</b>	Learn about nature (25%)	“What I noticed was there was a type of bird, which according to my guess is very rare to be seen in a crowded place... We saw a few Nephentis species along the way.”
	Exploration (25%)	“..the fun part is the new trail, at the ravine part. The renovation process can be seen after the recent earthquake.”
<b>Scenery</b>	Enjoy Scenery (75%)	“..and when you go down after reaching the peak and the sun is up, you can see the beautiful view. You can even see Mesilau from there.”
<b>Temperature</b>	Pleasant Temperature (12.5%)	“it’s cold here..the atmosphere here feels like New Zealand.”

**Tourist dissatisfaction result**

This study found that the respondent dissatisfying experience could be divided into controllable and uncontrollable factors. In the uncontrollable category, In the controllable category, indicators that have emerged were “climbing fee”, “service”, “facility”, “climber’s safety” and “physical restraint” (Table 3).

**Table 3:** Tourist Dissatisfaction

<b>Factors</b>	<b>Indicator (% of respondent)</b>	<b>Responses</b>
<b>Uncontrollable</b>	Weather (50%)	“it was foggy and we couldn’t really see the peak. Not even the sunrise too. It was disappointing.”
	Paranormal (12.5%)	“there’s ghost. That place is a bit spooky. A friend of mine told me about it later once we reach down”.
	Damaged landscape (12.5)	“there’s a lot of flora that were damaged due to the earthquake..spots were severly bald..rock are moving around 5cm whenever there’s a small scale earthquake happenes..there’s a big rock which located above Laban Rata which concerns me..the view was not the same as before”.
<b>Controllable</b>	Climbing fee (12.5%)	“another thing is the climbing fee. I’ve climbed four times and the fee is getting expensive, even for a Sabahan”.
	Bad services (12.5%)	“when we climb and reach a part of the mountain, the guide left us”.
	Facility (25%)	“the heater at the lodge wouldn’t function after using it an hour. So need to shower early and in a hurry.”
	Safety (12.5%)	“Mountain search and rescue (MOSAR)..when we climb, there weren’t any of them around. What if there’s any casualties happened?..there’s suppose to be 1 or 2 at the peak, but there was none”.
	Physical restraint (25%)	“I had cramps but it didn’t get worse. Only when we came down it was a bit tough”.

All five indicators from the controllable category were detected from the narration of a minority of the respondents. As shown in Table 3, the highest mentioned by the respondents were “facility” and “physical restraint” (mentioned by 25% of the respondents respectively). Dissatisfaction caused by “facility” was referring specifically to the water heater at their hostel. While dissatisfaction caused by “physical restraint” was referring to body cramps due to insufficient physical preparation. The other three indicators for dissatisfaction, namely “climbing fee”, “service”, and “climber’s safety” were mentioned by only 12.5% of the respondents respectively. While there might be nothing much that could be done for the uncontrollable factors of dissatisfying experience (bad weather, paranormal, damaged landscapes), something could be done for the controllable factors, for instance, regarding facility, specifically water heater condition should be checked regularly if it is in the facility list. Interpretation could be improved to explain to the participants everything they need to know and understand so that appropriate preparation could be made.

## DISCUSSION

This study has come out with four domains of satisfying experience as a result from the analysis using the Recreation Experience Preference scale (Driver, 1983) namely “achievement/stimulation”, “nature learning”, “enjoy scenery”, and “pleasant temperature”; with six indicators to support, namely “reinforcing self-image”, “excitement”, “nature learning”, “exploration”, “enjoy scenery” and “pleasant temperature”. Two categories of dissatisfying experience factors, the controllable (climbing fee, bad services, facility and safety) and the uncontrollable factors (weather, paranormal and damaged landscapes). These identified domains of satisfaction and dissatisfaction could serve to explain the overall dimensions of tourist experience in Kinabalu Park. This study found that despite the occurring of bad or undesirable experiences, the good or desirable experiences did not falter, thus supporting that tourist satisfaction and dissatisfaction could exist at the same time and are caused by different factors (Herzberg, 1966; Alegre and Garau, 2010). Nevertheless, the occurrences of bad experiences can be used as a point of reference to improve and manage any shortfalls.

## CONCLUSION

This study identified the satisfaction and dissatisfaction dimensions of tourists climbing Mt Kinabalu. Scenery enjoyment was the most prevalent experience domain in the satisfaction dimension while uncontrollable factors specifically the bad weather was the main source of negative experiences in the dissatisfaction dimension. Overall, satisfying experiences were formed by the content of program or activity (scenery enjoyment, self-achievement and self-enrichment), while dissatisfying experiences were due to the context of program or activity (weather and facility condition, physical restraints, safety, and services). Improving the content as well as the controllable context of the program or activity is crucial in enhancing visitation experience, hence sustainable recreation management in the long run.

## ACKNOWLEDGEMENT

The funding for this project was made possible through a research grant obtained from the Ministry of Higher Education, Malaysia under the Long Term Research Grant Scheme 2001 [LRGS Grant No.: JPTS.S(BPKI)2000/09/01/015Jld.4(67)].

## REFERENCES

- Alegre, J. and Garau, J. (2010). Tourist Satisfaction and Dissatisfaction. *Annals of Tourism Research*, Vol. 37, No. 1, pp. 52-73.
- Driver, B.L. (1983). Master list of items for Recreation Experience Preference scales and domains. Unpublished Document. USDA Forest Service, Fort Collins, CO: Rocky Mountain Forest and Range Experiment Station.
- Faleye, O., Hoitash, R. and Hoitash, U. (2000), Improving your measurement of customer satisfaction. A guide to creating, conducting, analyzing, and reporting customer satisfaction measurement programs, *Journal of the Academy of Marketing Science*, Vol. 101, No. 2, p. 490.
- Fuchs, M. and Weiermair, K. (2003). New perspectives of satisfaction research in tourism destinations. *Tourism Review*, 58(3), 6–14.
- Fuller, J. and Matzler, K. (2007). Customer delight and market segmentation: An application of the three-factor theory of customer satisfaction on life style groups. *Tourism Management*, 29(1).

- Herzberg, F.W. (1966). *Work and the nature of man*. Cleveland: World Publishing.
- Kano, N. (1984). Attractive quality and must-be quality. *Journal of the Japanese Society for Quality Control*, 1(4), 39-48.
- Kano, N., Seraku, N., Takahashi, F. and Tsuji, S. (1984). Attractive quality and must-be quality. *Quality: The Journal of the Japanese Society for Quality Control*, 14(April), 39-48.
- Kitayama, K. (1991). *Vegetation of Mount Kinabalu Park Sabah, Malaysia: A Project Paper*. Protected Areas and Biodiversity Environment and Policy Institute.
- Knopf, R.C. (1976). *Relationships between desired consequences of recreation engagements and conditions in home neighborhood environments*. Unpublished doctoral dissertation, University of Michigan, Ann Arbor.
- Knopf, R.C. (1983). Recreational needs and behavior in natural settings. In J. F. Wohlwill (Ed.), *Behavior and the Natural Environment*, pp. 205-240. New York: Plenum Publishing.
- Knopf, R.C., Driver, B.L. and Bassett, J.R. (1973). Motivations for fishing. In *Transactions of the 28th North American Wildlife and Natural Resources Conference*, pp. 191-204. Wash., DC: Wildlife Management Institute.
- Knopf, R.C., Peterson, G.L. and Leatherberry, E.C. (1983). Motives for recreational river floating: Relative consistency across settings. *Leisure Sciences*, 5(3), 231-25
- Lo, M.C., Songan, P., Mohamad, A.A. and Yeo, A.W. (2011). Rural destination and tourists' satisfaction, *Journal of Services Research*. Pp. 58-74.
- Matzler, K., Sauerwein, E. and Heischmidt, K. (2003). Importance-performance analysis revisited: The role of the factor structure of customer satisfaction. *The Service Industries Journal*, 23(2), 112-129.
- Mereng, T.A., Talib, H. and Chan, J.K.L. (2016). *Tourist Satisfaction Indicators for Responsible Rural Tourism Framework: A Case of Kinabalu National Park*. Proceeding of the International Social Sciences Academic Conference (ISSAC 2016), ISBN 978-967-13637-5-1.
- Mittal, V., Ross, W.T. and Baldasare, P.M. (1998). The asymmetric impact of negative and positive attribute-level performance on overall satisfaction and repurchase intentions. *Journal of Marketing*, 62(1), 33-47.
- Phillipps, A. and Liew, F. (2005). *Globetrotter Visitor's Guide – Kinabalu Park*, New Holland Publishers (UK) Ltd.
- Slevitch, L. and Oh, H. (2010), Asymmetric relationship between attribute performance and customer satisfaction: A new perspective, *International Journal of Hospitality Management*, Vol. 29, No. 4, pp. 559-569.
- Talib, H., Chan, J.K.L. and Mereng, T.A. (2014). *Sustaining Tourist Satisfaction in Mt. Kinabalu, Sabah*, EDP Sciences, SHS web of Conferences, Vol.12, 2014, <http://dx.doi.org/10.1051/shsconf/20141201024>, 19 Nov.2014.
- Tontini, G. and Silveira, A. (2007), Identification of satisfaction attributes using competitive analysis of the improvement gap, *International Journal of Operations Production Management*, Vol. 27, No. 5, pp. 482-500.
- Walker, R. (1985). *An Introduction to Applied Qualitative Research*, in R. Walker (ed) *Applied Qualitative Research*. Vermont, Gower Publishing.
- World Tourism Organization (WTO). (1985). *Identification and Evaluation of those Components of Tourism Satisfaction and which can be Regulated and State Measures to Ensure Adequate Quality of Tourism Services*. World Tourism Organisation, Madrid.