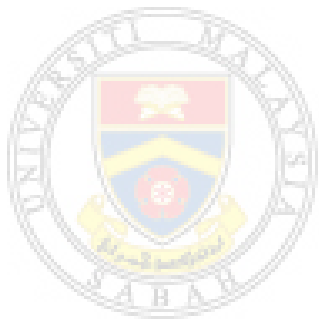


**TROPICAL FOREST RECREATION: VISITORS'
EXPERIENCE AND SATISFACTION IN
KINABALU PARK, SABAH**



HAMIMAH TALIB

UMS
UNIVERSITI MALAYSIA SABAH

**SCHOOL OF INTERNATIONAL TROPICAL
FORESTRY
UNIVERSITI MALAYSIA SABAH
2011**

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EXPERIENCE AND SATISFACTION IN
KINABALU PARK, SABAH**

HAMIMAH TALIB



**THIS THESIS SUBMITTED IN PARTIAL
FULFILLMENT FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY**

**SCHOOL OF INTERNATIONAL TROPICAL
FORESTRY
UNIVERSITI MALAYSIA SABAH
2011**

DECLARATION

I hereby declare that the material in this thesis is my own except for quotations, excerpts, equations, summaries and references, which have been duly acknowledged.

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Hamimah Talib
August 2011

ABSTRACT

TROPICAL FOREST RECREATION: VISITORS' EXPERIENCE AND SATISFACTION IN KINABALU PARKS, SABAH

The use of tropical forest parks as recreation resource is receiving increasing response from the public. Although its contribution as a recreational resource is apparent, more in-depth information on how it relates to and benefits the users are still unclear. The purpose of this study is to understand the recreation experience and satisfaction of visitors in a tropical forest park setting with the use of mixed method approach (quantitative and qualitative techniques) incorporating two models/theories as the research framework. Six hundred and nine questionnaire surveys and forty-two interviews were conducted with purposively sampled visitors in two specific sites and activities in Kinabalu Park: 1) Mt. Kinabalu (MK) climbing in Kinabalu Park headquarters area, and 2) Canopy Walkway (CW) visit in Poring Hot-Spring Station. The Recreation Experience Preference (REP) scale was used to elicit visitors' experience types gained through participation, and in-depth interview analysis based on Motivation-Hygiene Theory was conducted to understand their experience and satisfaction. This study found that the experience for MK ranges from "*Achievement-Stimulation*" (highest mean score) to "*Security-Comfort zone*" (lowest mean score), and experience for CW ranges from "*Enjoy Nature-Learning*" (highest mean score) to "*Socialization*" (lowest mean score). In-depth interview analysis findings lend credence to the Motivation-Hygiene Theory, where visitors' satisfying experience involved attributes originated from personal psychological needs to grow, intrinsic and intangible in nature (motivation factors). Meanwhile, visitors' dissatisfaction involved attributes originated from physical conditions, extrinsic, and tangible in nature (hygiene factors). This study contributes to the understanding of visitors' recreational experience and satisfaction in tropical forest parks context, especially how the experiences satisfy personal psychological needs, which highlights the values and importance of this resource. This study however limits itself to focus on the interrelationship between recreation experience and satisfaction, thus did not look in detail into the phenomenological elements of recreation experience. Recommendations for park management and avenues for future studies were identified and discussed.

ABSTRAK

Penggunaan taman hutan tropika sebagai sumber rekreasi semakin mendapat sambutan di kalangan awam. Walaupun sumbangannya sebagai sumber rekreasi adalah ketara, maklumat yang lebih mendalam bagaimana ianya berkait rapat dan memberi manfaat kepada pengguna masih tidak jelas. Kajian ini bertujuan untuk memahami pengalaman dan kepuasan pengunjung di dalam taman hutan tropika dengan menggunakan pendekatan 'mixed-method' (teknik kuantitatif dan kualitative) menggabungkan dua model/teori sebagai rangka-kerja kajian. Enam ratus sembilan borang soal selidik dan empat puluh dua temuramah telah dijalankan dengan pengunjung yang dipilih menggunakan persampelan 'purposive' di dua tempat dan aktiviti spesifik di Taman Kinabalu, Sabah: 1) pendakian Gunung Kinabalu (MK), di Kawasan ibu pejabat Taman Kinabalu, dan 2) lawatan ke laluan kanopi (CW) d Stesen Air Panas Poring. Skala "Recreation Experience Preference" (REP) digunakan untuk mengenalpasti pengalaman yang diperolehi pengunjung, dan analisis temuramah berdasarkan "Motivation-Hygiene Theory" dijalankan untuk memahami pengalaman dan kepuasan pengunjung. Kajian ini mendapati bahawa pengalaman untuk MK adalah dari "Achievement-Stimulation" (skor min tertinggi) ke "Security-Comfort zone" (skor min terendah), dan pengalaman untuk CW adalah dari "Enjoy Nature-Learning" (skor min tertinggi) ke "Socialization" (skor min terendah). Penemuan daripada analisis temuramah memberi sokongan kepada "Motivation-Hygiene Theory", di mana kepuasan pengunjung melibatkan unsur-unsur yang berasal daripada keperluan psikologi peribadi untuk berkembang, bersifat intrinsik dan "intangible" (faktor motivasi). Manakala ketidakpuasan pengunjung melibatkan unsur-unsur yang berasal daripada keadaan fizikal, bersifat ekstrinsik dan "tangible" (faktor "hygiene"). Kajian ini menyumbang kepada pemahaman tentang pengalaman dan kepuasan rekreasi pengunjung dalam konteks taman hutan tropika, terutamanya bagaimana pengalaman tersebut memuaskan keperluan psikologi peribadi, yang mengetengahkan nilai dan kepentingan sumber ini. Kajian ini terbatas kepada tumpuannya terhadap perhubungan di antara pengalaman dan kepuasan rekreasi, oleh itu tidak melihat secara terperinci elemen-elemen "phenomenological" pengalaman rekreasi. Cadangan untuk pengurusan taman dan peluang untuk kajian seterusnya telah dikenalpasti dan dibincangkan.

TABLE OF CONTENTS

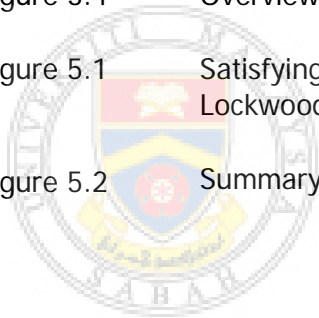
	Page
TITLE	i
DECLARATION	ii
CERTIFICATION	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
<i>ABSTRAK</i>	vi
TABLE OF CONTENTS	vii
LIST OF FIGURES	x
LIST OF TABLES	xi
LIST OF ABBREVIATIONS	xv
CHAPTER 1: INTRODUCTION	1
1.1 Research Background	1
1.2 Problem Statement	4
1.3 Research Question and Objectives	7
1.4 Justification of Research	8
CHAPTER 2: LITERATURE REVIEW	11
2.1 Introduction	11
2.2 Consumer Behavior and Tourist Behavior	11
2.3 Experiences as Tourism and Recreation Product	13
2.4 Tourism and Leisure Experience Dimensions	16
2.5 Motivation for Tourism and Leisure Participation	18
2.6 Marketing for Parks and Recreation	21
2.7 Understanding the Nature of Recreation Experiences	22
2.8 Measurement of Forest Recreation Experience	25
2.8.1 End-state Frameworks	25

2.8.2	Process-Oriented Frameworks	28
2.9	Theoretical Framework of the Study	29
2.9.1	The Recreation Experience Preference (REP) Scales	29
2.9.2	Herzberg's Two Factor Theory	33
2.10	Concluding Remarks	39
CHAPTER 3: RESEARCH METHODOLOGY		41
3.1	Theoretical Framework of the Study	41
3.2	Research Design	44
3.2.1	Mixed Method Approach	45
3.3	The Study Sites	49
3.3.1	Study Site 1 – Kinabalu Park Headquarters (MK)	51
3.3.2	Study Site 2 – Poring Canopy Walkway (CW)	52
3.4	Sampling Plan	53
3.5	Data Collecting Instrument	56
3.5.1	Questionnaire Survey Form	56
3.5.2	In-depth Interview Questions	57
3.6	Procedure for Data Collection	57
3.7	Data Analysis	58
3.7.1	Statistical Analysis	60
3.7.2	Qualitative Analysis	61
3.7.3	Triangulation	63
CHAPTER 4: RESULTS AND FINDINGS		65
4.1	Introduction	65
4.2	Quantitative Data	66
4.2.1	Demographic characteristics	66
4.2.2	Experience Ratings	71
4.2.3	Dimensions of Visitors' Experience	75
4.2.4	Significance Testing for Experience Attainment Comparison Between Groups of Visitors from Different Background	85
4.3	Qualitative Data (Interview Response)	102

4.3.1	Demographic Background for Mount Kinabalu Participants	103
4.3.2	Demographic Background for Poring Canopy Walkway Participants	104
4.3.3	Results of Satisfaction and Dissatisfaction Experience Attributes for MK	106
4.3.4	Results of Satisfaction and Dissatisfaction Experience Attributes for CW	128
4.3.5	Quantitative and Qualitative Data Triangulation	150
4.4	Summary of Outcome	102
CHAPTER 5: DISCUSSION AND CONCLUSION		156
5.1	Chapter Overview	156
5.2	Study Findings	157
5.2.1	Types of Tropical Forest Recreation Experience	157
5.2.2	Tropical Forest Recreation Experience in Relation with Driver's REP (1991)	161
5.2.3	Experience Attainment Comparison Between Groups of Different Background	165
5.2.4	Tropical Forest Recreation Descriptions for Satisfying and Dissatisfying Experience Dimension	172
5.2.5	Tropical Forest Recreation Experiences' Key Attributes	176
5.2.6	Tropical Forest Recreation Experience in Relation with Herzberg's Motivation-Hygiene Theory (1972)	180
5.3	Triangulation between Quantitative and Qualitative Result	182
5.4	Implications of Study	186
5.4.1	Recommendations for Management	191
5.5	Limitations and Strength of Study	194
5.5.1	Avenues for Future Research	197
5.6	Conclusion	198
REFERENCES		203
APPENDICES		218

LIST OF FIGURES

		PAGE
Figure 1.1	Visitors Arrival to Sabah 2002 - 2009	3
Figure 2.1	The Four Realms of Experience (Pine and Gilmore, 1999)	15
Figure 2.2	Herzberg's Motivation-Hygiene theory	34
Figure 3.1	Research theoretical framework	42
Figure 3.2	Approximate Location of Kinabalu Park Area (the Mt. Kinabalu at Kinabalu Park Headquarters and the Poring Hot Spring Station), Ranau, Sabah	50
Figure 3.3	Data Analysis Flow-Chart	59
Figure 3.4	Overview of Qualitative Analysis	62
Figure 5.1	Satisfying and Dissatisfying Factors (Based on Lockwood, 1994, p.78)	179
Figure 5.2	Summary of Findings	190



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LIST OF TABLES

		PAGE
Table 1.1	Visitor arrivals to Sabah 2002-2009	3
Table 2.1	Comparison of QOS and QOE Frameworks	15
Table 2.2	Construct Domain of Service Experience	17
Table 2.3	Recreation Experience Preference (REP) domains and scales	31
Table 2.4	Factors Affecting Job Attitudes	36
Table 3.1	Strengths and Weaknesses of Mixed Method Research	47
Table 3.2	Four categories of sample subgroups	54
Table 3.3	Visitors to Mt. Kinabalu (climbers), 2003-2007	55
Table 3.4	Visitors to Poring Canopy Walkway, 2003-2007	55
Table 3.5	Mannell's (1996) Construct of Optimal Experience	63
Table 4.1	Distribution of respondents by nationality	66
Table 4.2	Distribution of respondents by gender	67
Table 4.3	Distribution of respondents by age group	67
Table 4.4	Distribution of respondents by level of education	68
Table 4.5	Distribution of respondents by level of income	68
Table 4.6	Distribution of respondents by cost of visit (MK)	69
Table 4.7	Distribution of respondents by cost of visit (CW)	70
Table 4.8	Distribution of respondents by frequency of visit	70
Table 4.9	Mean scores and rank of responses to REP scales (MK)	72
Table 4.10	Mean scores and rank of responses to REP scales (CW)	74

Table 4.11	Rotated Factor matrix for climbers (MK)	76
Table 4.12	Dimensions of visitor's experience for MK	77
Table 4.13	Mean scores and ranks of dimensions of visitors' experience for MK	79
Table 4.14	Rotated Factor matrix for CW	80
Table 4.15	Dimensions of visitors' experience for CW	82
Table 4.16	Mean scores and ranks of dimensions of visitors' experience for CW	83
Table 4.17	Dimensions of Visitors Experience for MK and CW in Ranking Order	84
Table 4.18	Summary of Key Experience Gained for Tropical Forest Recreation that Emerged from the Two Sets of Data	85
Table 4.19	Comparisons of Experience Dimension Acquisition Between Malaysian and Non-Malaysian Group (MK)	86
Table 4.20	Significance Testing for Experience Attainment Comparison Between Malaysian and Non-Malaysian for MK Participation (Independent Samples T-test)	86
Table 4.21	Comparisons of Experience Dimensions Acquisition Between Malaysian and Non-Malaysian (CW)	87
Table 4.22	Significance Testing for Experience Attainment Comparison Between Malaysian and Non-Malaysian for CW Participation (Independent Samples T-Test)	88
Table 4.23	Significance Testing for Experience Attainment Comparison by Gender for MK Participation (Independent Samples T-Test)	89
Table 4.24	Significance Testing for Experience Attainment Comparison by Gender for CW Participation (Independent Samples T-Test)	89
Table 4.25	Mean Comparison of Experience Attainment by Age Group (MK)	90

Table 4.26	Significance Testing for Experience Attainment Comparison by Age Group for MK Participation (ANOVA)	91
Table 4.27	Mean Comparison of Experience Attainment by Age Group (CW)	92
Table 4.28	Significance Testing for Experience Attainment by Age Group for CW Participation (ANOVA)	93
Table 4.29	Mean Comparison of Experience Attainment by Level of Education (MK)	94
Table 4.30	Significance Testing for Experience Attainment Comparison by Level of Education for MK Participation (ANOVA)	95
Table 4.31	Comparison of Experience Attainment by Level of Education (CW)	96
Table 4.32	Significance Testing for Experience Attainment Comparison by Level of Education for CW Participation (ANOVA)	97
Table 4.33	Mean Comparison of Experience Attainment by Frequency of Visit (MK)	98
Table 4.34	Significance Testing for Experience Attainment Comparison by Frequency of Visit for MK Participation (ANOVA)	99
Table 4.35	Mean Comparison of Experience Attainment by Frequency of Visit (CW)	100
Table 4.36	Significance Testing for Experience Attainment Comparison by Frequency of Visit for CW Participation (ANOVA)	101
Table 4.37	Demographic background (MK)	104
Table 4.38	Demographic background (CW)	105
Table 4.39	"Achievement-Stimulation" as the satisfying experience dimension in MK	108
Table 4.40	"Enjoy Nature-Learning" as the satisfying experience dimension in MK	110

Table 4.41	“Physical Body Limitation” as the dissatisfying experience dimension in MK	116
Table 4.42	“Weather and Environment” as the dissatisfying experience dimension in MK	117
Table 4.43	Overall experience in MK	121
Table 4.44	Summary of dimensions of satisfying and dissatisfying experience for Mount Kinabalu climbers	125
Table 4.45	Satisfiers and dissatisfiers as the recreation experience attributes (MK)	126
Table 4.46	“Enjoy Nature-Escape Stressors” as the satisfying experience dimension in CW	129
Table 4.47	“Achievement-Stimulation” as the satisfying experience dimension in CW	132
Table 4.48	“Maintenance Factors” as the dissatisfying experience dimension in CW	138
Table 4.49	Overall experience in CW	142
Table 4.50	Summary of Dimensions of satisfying and dissatisfying experience for Poring Canopy Walkway	146
Table 4.51	Satisfiers and dissatisfiers as the recreation experience attributes (CW)	148
Table 4.52	Interview excerpts supporting the statement of “Achievement-Stimulation” and “Enjoy Nature-Learning” as the dominant experience types in MK	151
Table 4.53	Interview excerpts supporting the findings of “Enjoy Nature-Escape Stressors”, “Nature Learning-Appreciation”, “Reduce Tensions-Escape Stressors”, and “Achievement-Stimulation” as the dominant experience in CW	152
Table 4.54	Comparison of Visitors’ Experience between Quantitative and Qualitative	154
Table 5.1	Comparisons Between CW Experience Dimensions (Elements) with Otto and Ritchie’s Domains of Service Experience	160

Table 5.2	Comparison of Recreation Experience Attainment in CW and MK with REP scale (Driver <i>et al.</i> , 1991)	163
Table 5.3	Dimensions of Satisfying Experience for MK that Emerged from Interview Responses	173
Table 5.4	Dimensions of Dissatisfying Experience for MK that Emerged from Interview Responses	174
Table 5.5	Dimensions of Satisfying Experience for CW that Emerged from Interview Responses	175
Table 5.6	Dimensions of Dissatisfying Experience for CW that Emerged from Interview Responses	176
Table 5.7	Key Attributes of Tropical Forest Recreation Experiences	177



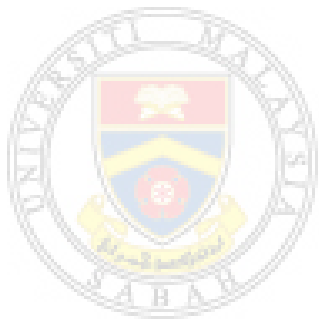
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LIST OF ABBREVIATIONS

CW	(Poring) Canopy Walkway
ESM	Experience Sampling Method
HQ	Headquarters
IPA	Interpretative Phenomenological Analysis
MK	Mount Kinabalu
NA	Not Available
NIL	Not In List
QOE	Quality of Experience
QOS	Quality of Service
REP	Recreation Experience Preference
RM	Ringgit Malaysia
ROS	Recreation Opportunity Spectrum
UNESCO	United Nations Educational, Scientific and Cultural Organization
VCD	Video Compact Disc

LIST OF APPENDIX

	Page
APPENDIX A Questionnaire Survey Form	218
APPENDIX B Interview Guide	225
APPENDIX C Qualitative Data Display and Analysis	229



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CHAPTER 1

INTRODUCTION

1.1 Research Background

Tropical forests are characterized by green, lush forests that support a tremendous amount of biodiversity. Despite the fact that these forests only constitute about 6 percent of the Earth's surface (Mastrantonio and Francis, 2007), they hold the vast majority of the world's plant and animal genetic resources. Besides their main role to counteract the global warming effect by utilizing carbon dioxide and giving off oxygen, as well as other functions such as source of water and hydroelectric power, to name a few, tropical forests' scenic beauty, educational value, and opportunities for outdoor recreation support tourist industries (Mastrantonio and Francis, 2007).

Tropical forest recreation is hence, characterized by the uniqueness of its varied environments. In Malaysia, the national parks and protected areas, including rivers, streams, waterfalls, mountains and hills, together with all their wildlife and various types of vegetations are among the attractions offered to visitors. Recreational parks with forest background such as the Kinabalu National Park were first established for the people of Sabah to enjoy because of its attractions. Then further, recognizing its universal values and the role it plays as one of the world biological sites among others, it is preserved as a national park and later on a world heritage site. The main idea is that such resources as forest parks were set up because of its attractions and other universal values for the people to enjoy and to manage sustainably.

Since forest parks were established for the park users to enjoy and in return to take care of, it is crucial to understand the users in various aspects. Information on what have the visitors gained or experienced during their time in the park could play as an important role to highlight the benefits of this forest resource, which might further convince them to appreciate the resource more

effectively than any kind of enforcement. This notion is supported by Chan (2006) in her study on nature tourist experience, which posited that making an effort to understand the dimensions that contribute to the tourists' experience is paramount in the delivery of quality experience, as well as contributing to sustainable management of resource. It is also supported that the use of forest resources as recreational areas could result in attracting visitors who are characterized by their natural "ecological-environmental" interests which will lead to the promotion of nature related recreational activities such as hiking and mountaineering, and subsequently becoming aware of the role played by the resource (Arabatzis and Grigoroudis, 2010).

With the increasing demand for forest recreation and nature-based activities, production of timber or other forest products are no longer the only motivation to keep forests (Gadaud and Rambonilaza, 2010). In the context of Sabah, as the appreciation of nature is growing, recreational parks which are located in a tropical forest setting such as the Kinabalu Park (headquarters area), Poring Hot Spring Station, Tunku Abdul Rahman Island Parks, and many others, have become visitors' attractions. Overall, statistics show that there is an increase in visitors' arrival to this state from 2002 through 2009 (Figure 1.1, Table 1.1). However, little understanding on tourist experience and satisfaction is available. A slight drop is shown in the overall total of visitors' arrival from 2007 to 2009 because of the decrease in the international visitors' arrival to this state. While factors that have caused this decrease might be numerous, the need to understand the visitors' experience and what satisfies them is still viewed as imperative, specifically their experiences in a tropical forest park setting.



Figure 1.1: Visitors Arrival to Sabah 2002 – 2009

Table 1.1: Visitors Arrival to Sabah 2002 - 2009

Visitor /Year	2002	2003	2004	2005	2006	2007	2008	2009
International	528,264	569,712	792,308	761,094	750,923	987,660	701,198	562,144
Malaysian	579,092	681,742	980,963	1,067,677	1,340,735	1,490,783	1,599,230	1,683,924
Total	1,107,356	1,251,454	1,773,271	1,828,771	2,091,658	2,478,443	2,300,428	2,246,068

Source: Sabah Tourism Board (www.sabahtourism.com)

It is also shown in Figure 1.1 and Table 1.1 that the total of tourist arrival has increased up to over 2 million from 2006 to 2009. Of the average of these figures, about ten percent are those who went to Kinabalu Park which include the surrounding of Mount Kinabalu at Kinabalu Park Headquarters, Poring Hot Spring Station, and Mersilau Station (data from The Sabah Parks, 2009). This shows the increasing response from the public for recreational parks specifically of tropical forest background. Although the contribution of tropical forest park as a recreational resource is apparent, more in-depth information on how it relates to and benefits the users are still not readily available.

In recent years, a large number of studies in forest recreation or nature tourism focused on visitors' experience. The focus had been varied from investigating experience dimensions and attributes (Chan and Baum, 2007; Chan, 2006) to the meaning of recreation or tourism experience (Garst, 2005; Markwell, 2001). In a number of instances in various fields of recreation, tourism, and service industry, experience has been discussed as being the antecedent of satisfaction (Vitterso *et al.*, 2000; Uysal, 2003; Akama and Kieti, 2003).

Herrick and MacDonald (1992) and Lee *et al.*, (2005) are among the researchers who have specifically examined the relationships between the two concepts of experience and satisfaction recreation. Herrick and MacDonald's (1992) reported that setting dimension is one of the most important variables in explaining differences in visitor satisfaction, apart from group behavior, perceived crowding, parking, encounters, and past experience. Whereas, Lee *et al.*, (2005) reported that there are linkages among self-identity, emotions, and episode-specific evaluation to overall satisfaction. However, discussion specifically about the relationship between experience and satisfaction, in particular, their underlying dimensions and attributes in the context of a tropical forest park setting is scarce. As such, this study seeks to understand the recreational experience and satisfaction of visitors in tropical forest park setting, with the focus on the type or range of experience attained, understanding how they are experienced, as well as their satisfaction and dissatisfaction dimensions and attributes.

1.2 Problem Statement

Recreation and tourism can be described as consisting of tangible and intangible elements which make up the overall tourism experience (Swan and Comb, 1976). In terms of marketing thinking, Xu (2009) also cautioned developers and marketers of tourism product of what is normally included in a tourism product, which are both tangible and intangible elements. Tangible elements can be described as the functionality or performance of service providers which involved physical or instrumental aspects such as the facilities and services provided. On the other hand, intangible elements are described as the experiential aspects which are brought by the emotional state of the consumers. Uysal (2003) explained these

emotional states as the “psychological or social benefits derived from participating in a recreational goal, such as fishing, swimming, sightseeing and so forth” (Uysal, 2003: 35). In the context of tourism products, although tangible elements are seen as more influential on overall customer satisfaction as they are more easily modifiable or renewable than intangibles (Albayrak *et al.*, 2010), intangible aspects are equally important as it contributes to the experiential aspects of consumers which could enhance the quality of experience (Chan, 2006).

However, in the tropical forest recreation context, focus has been given more on the resource management. This has been largely shown through the inclination of previous studies done in this field which is more towards researching the tangible elements of which is the resource and its management. In addition, empirical evidence on the understanding of visitors’ experience and satisfaction (intangible elements) is still lacking (Chan, 2006). As a result of this lack of understanding on visitors experience and satisfaction especially in tropical forest park setting, what do the visitors really look for in their participation in the local recreational setting is still not known. This information is important to highlight the role of recreation, especially the tropical forest park as a recreation resource.

O’Sullivan (1991) advocates that the core product of any park and recreation site is the primary benefit sought after by consumers. It addresses the questions: “i) what is the participant really looking for from a recreational experience? ii) what need is the individual attempting to satisfy through involvement with this service?” (O’Sullivan, 1991: 70). These two questions indicate the primary need of park and recreation management to understand participants’ recreational experiences in order to design a recreational product that could satisfy visitors’ needs. The identification of the primary benefit is the core portion of the product being offered.

One study that provides empirical evidence on the understanding of experience and satisfaction of tourist in almost similar context, is the study by Chan (2006) in nature tourism context with tropical rainforest background, which investigates tourist experience attributes, explaining the interrelation between

experience and satisfaction by linking the experience attributes with Herzberg's "satisfiers" and "dissatisfiers" theory. The exploratory and qualitative nature of the study, however, limits the generalization of the findings (Chan, 2006). It is this study's attempt, therefore to provide empirical evidence on the understanding of visitors' experience and subsequently relate it with the satisfaction in the tropical forest setting, using quantitative as well as qualitative assessment.

The Kinabalu National Park area was chosen as the study area of this study, as it is one of Sabah's major attractions for recreational park with tropical forest as its predominant background and because of the fact that it is well-established, as well as well-promoted by local tour operators, which presumably contribute to quality experience of visitors. In the context of Kinabalu National Park, there is no specific study done yet that provide evidence on the understanding of visitors experience and their satisfaction. As such, the question of what are the types of experience attained or that the visitors are looking for in their participation, and whether they are satisfied or not with their experience are still ambiguous. Unofficial information from the park management however, provides a clue that most of the complaints or dissatisfactions are regarding the price of accommodation and meal which the visitors considered as expensive. But still, information on what are the types of experience obtained or that they are looking for when they participate is scarce. Hence, this study on the understanding of visitors' recreational experience and satisfaction in the study area is crucial, not only to highlight the important role of this forest resource, but also to overcome dissatisfaction and further enhance satisfaction.

Apart from the aim to overcome management or the ground problem related to local recreational forest park, this study on the quest to understand the recreational experience and satisfaction of visitors are aiming to contribute to the existing body of knowledge by using recreational scale or model that has never been applied in the local tropical forest park setting before. The Recreation Experience Preference (REP) scale (Driver *et al.*, 1991) has been used by many researchers such as Manfreda *et al.* (1996), Payne *et al.* (2004) to measure