Public Motivation for Hiking Activities in Kota Kinabalu, Sabah

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ABSTRACT It is undeniable that the popularity of hiking activities has gradually increased over the years, particularly in Sabah. Therefore, people are looking for activities that will help them both physically and socially. Henceforth, this study aims to investigate the public's motivation for participating in hiking activities in Kota Kinabalu, Sabah. The instrument's reliability was confirmed by Cronbach's alpha test, which generated a result of 0.947. A total of 109 respondents took part in this study, via social media platforms such as WhatsApp. The Chi-square test was used to explain the relationship between the recreation motivation and demographic variables (age, gender, education level). However, the result showed that there was no significant relationship between the public's motivation to participate in hiking activities and demographic variables.

KEYWORDS: Hiking; Outdoor Recreation; Motivation; Public Perception; Chi-square Test Received 1 July 2022 Revised 20 September 2022 Accepted 22 September 2022 Online 26 October 2022 © Transactions on Science and Technology Original Article

INTRODUCTION

Hiking is a basic component of many sports and is a popular type of physical training. Hiking is defined as a natural workout that increases physical health, is inexpensive and convenient, and does not require any additional equipment (Britannica, 2020). The term "hiking" is commonly used in the English language. But it can also be used in a variety of ways, including "walking," "trekking," "rambling," "strolling," and "bushwalking" (Nordbø et al., 2014). Even so, hiking and trekking are common terms in international literature. Like in any part of the world, hiking is one of the most popular recreations and also a popular vacation activity. The author (Waterton et al., 2015) mentioned in the study that the majority of hikers are city dwellers who are looking for unique, inventive, and authentic experiences. People are remaining active and engaged in recreational activities, notably hiking, for a variety of reasons. Manfredo et al. (1996) stated that motivation is the primary concept in determining and comprehending the reason for individuals' leisure time activities and their leisure time. This author (Gnoth, 1997) also pointed out that motivation can be defined as the driving force behind all behaviours. Understanding the motivations for participating in adventure tourism can be greatly aided by studying the motivation for non-consumptive tourism activities such as hiking (Moretti, 2018).

Furthermore, there are many types of motivation for recreation that have been identified in the literature. According to Moira *et al.* (2021) and Mojiol *et al.* (2022) studies, the main reason people go hiking is to get in touch with nature. Other studies have also proven that there is a positive correlation between recreational activities and mental health benefits (Lackey *et al.*, 2021; Zulyniak *et al.*, 2020). Another study by Yuniawati *et al.* (2019) regarding the motivations of tourists in two mountains in Indonesia, which were Ciremai Mountain and Papandayan Mountain in West Java found that learning and socializing were the most dominant indicators informing outdoor activity motivation. Similar to other studies, socialisation is one of the relevant motivation factors. Hence, this study aimed to investigate the public's motivation for hiking activities and to evaluate the correlation between demographic profiles and motivation in Kota Kinabalu, Sabah.

METHODOLOGY

Data Collection

Data collection was conducted via the convenience sampling method, by creating questionnaires using Google Form. The survey was distributed via WhatsApp for around two weeks in April 2021. The majority of target responders were residing in Kota Kinabalu. The questionnaire was separated into two sections. The first part had four questions, including a Likert question regarding public hiking motivation, while the second half had 14 questions about the demographic profile of the respondents.

Data Analysis

The collected data were analysed using IBM SPSS ver. 25, a statistical program. The confidence interval was set at 95%. A descriptive statistical analysis was employed in this study. Sekaran & Bougie (2014) stated that reliability is a measurement to indicate that an instrument is without bias and ensures its consistency in measuring various items at different times. Cronbach's alpha was used to determine instrument reliability for the motivation section which consisted of 11 items. A Cronbach's alpha test was obtained and the instrument's internal reliability was confirmed, which yielded a result of 0.947. This demonstrates that the instruments employed are valid and dependable, resulting in more precise and reliable data. In addition, the Kolmogorov-Smirnov test was used to determine the normality of the data. The result indicated that the data Z = 0.854, p = < .001 (motivation) since the result showed that p<0.05, which also indicated that the data was not normally distributed.

RESULT AND DISCUSSION

Demographic Profile Analysis

A total of 11 statements regarding the public's hiking motivation were used, using a 5-Likert scale from 1 (strongly disagree) to 5 (strongly agree). Descriptive statistics were run to determine the demographics of the sample. Females represented the majority of this sample (65.5%), while males were 34.9%. As for the age group, 85.3% of the sample represents an age range ranging from 21-30 years old, while 7.3% was followed by the age range of 31–40 years old. The least valuable group was the respondents who were older than 60 years old (0.9%). Based on the marital status category, most of the respondents were single (89.0%). The students ranked first in the occupation category (59.6%). Respondents who works in the private sector ranked as the second-highest number in the occupation category, which was 18.3%, while government employees ranked fourth (10.1%). However, the number of self-employed respondents (11.0%) in the sample was slightly higher than those who are working in the government sector. The result also revealed that most of the respondents are degree-level holders (74.3%). Diploma holders came in second only to those with a previous education level (16.5%). College or technical skills held the third-highest percentage value in this category, at 3.7%, followed by secondary school level, master's degree holders, and polytechnic holders, respectively, at 2.8%, 1.8%, and 0.9%.

In terms of income levels, 57 (52.3%) of the respondents do not have income whereas 5 (4.6%) of them are earning RM5,000 and above. 14.7% are earning between RM2,000 to RM2,999 and 13.8 % earning less than RM999 whereas 11.0 % are earning between RM1,000 to RM1,999. There was only one respondent (0.9%) are earning between RM3,000 to RM3,999 while the other three (2.8%) are earning RM4,000 to RM4,999. Then, about 74.3% (n=81) of the respondents are Sabahan natives, followed by Chinese ethnicity which is 15.6%, Malay (5.5%), and 0.9% are in category of "Others".

In terms of locality of the activity, 51.4 % of respondents stated the nearest hiking hills are 5 to 15 kilometres distant, while 25.7 % claimed they are less than 5 kilometres away. Table 1 summarises the socio-demographic profile of all the respondents.

Table 1. Socio-demographic profiles of the respondents

Items		Percentage (%)		Percentage (%)	
Gender	Male	34.9	Education Level	Secondary school	2.8
	Female	65.1		College/technical skills	3.7
Marital Status	Single	89.0		Diploma	16.5
	Married	11.0		Degree holder	74.3
Age	10-20	1.8		Master's degree	1.8
	21-30	85.3		Polytechnique	0.9
	31-40	7.3	Income Level	No income	52.3
	41-50	0.9		<999	13.8
	51-60	3.7		1000-1999	11.0
	> 60	0.9		2000-2999	14.7
Ethnicity	Sabah Natives	74.3		3000-3999	0.9
	Malay	5.5		4000-4999	2.8
	Chinese	15.6		5000 and above	4.6
	Others	4.6	Origin	Sabah	83.5
Occupation	Self employed	11		Peninsular	16.5
	Student	59.6	Hiking hills nearby	Less than 5km	25.7
	Public sector	10.1		5 - 15km	51.4
	Private sector	18.3		16 - 25km	11.0
	Other	0.9		More than 25km	11.0
				Backyards	0.9

The Hiking Motivation Among Public

Table 2. The list of motivations to participate in hiking activities based on 5-point Likert scale

Statements	Min*	Max*	Mean Score (μ)	aS. D
Enhanced relationships with friends and family	1	5	4.24	0.922
Lower stress levels, improved mood, and enhanced mental wellbeing	1	5	3.39	1.895
A better quality of life	1	5	3.24	1.919
Increases in flexibility and coordination	1	5	3.12	1.923
Improved control over a healthy weight	1	5	3.06	1.911
Reduced risk for heart disease	1	5	3.06	1.929
Lower body fat	1	5	2.96	1.88
Lower blood pressure	1	5	2.88	1.829
Lower cholesterol levels	1	5	2.88	1.85
Improved bone density	1	5	2.74	1.782
Improved osteoarthritis outcomes	1	5	2.78	1.787
Total			3.122	1.784

^{*}Note: (Mean-score: 5 = Very high; 4 = High; 3 = Medium; 2 = Low; 1 = Very Low); aS.D= Standard Deviation

A 5-point Likert scale was used to measure public motivation and is shown in Table 2. It can be seen that the respondents perceived hiking as beneficial as they agreed that this recreational activity is social, whereas its enhanced relationships with friends and family (mean score, μ =4.24) and

provided a better quality of life (μ =3.24). Additionally, the study also attempts to determine whether health benefits influence the respondents' motivation to participate in hiking activities during their leisure time. In general, respondents believed that the following mental and physical health benefits influence them: increases in flexibility and coordination (μ =3.12), lowering stress levels, improved mood, and enhanced mental well-being (μ =3.39). Besides, it reduced the risk for heart disease (μ =3.06), lowered blood pressure (μ =2.88), cholesterol level (μ =2.88), control over healthy weight (μ =3.06), lowered body fat (μ =2.96), improved bone density (μ =2.74), and osteoarthritis symptoms (μ =2.78).

In Table 3, there was not much disparity in preference among the respondents to go for a hike. A total of 27.5% (n = 30) of the respondents were more likely to go for a hike at the weekend only, while 25.7% (n = 28) seldom engage in hiking activities. In the meantime, 22.9% (n = 25) did their hiking activities once or twice a week, followed by those who hiked once a month (18.3%, n = 20). Two categories had the same percentage value in the sample, 2.8%, whereby the value represented those who chose to go for a hike every day (n = 3) and those who chose the "others" category (n = 3) in the survey. Apart from that, the survey also revealed that most of them prefer to hike in the morning (39.7%, n = 40). Some of them (31.2%, n = 34) prefer to go either in the morning or evening, while 27.5% (n = 30) of the sample like to hike in the evening. The majority of those surveyed have hiked more than once.

Table 3. Hiking frequency

Number of hike/s in a week	n	%
Once or twice a week	25	22.90%
Everyday	3	2.80%
Weekend only	30	27.50%
Once in a month	20	18.30%
Seldom	28	25.70%
Others	3	2.80%
TOTAL	109	100%

Chi-square test for Age, Gender, and Education Level

Based on Table 4, Chi-square goodness-of-fit at a 95% accuracy level was used to examine the differences between hiking frequency concerning nominal variables such as age, gender and education. The chi-square test result indicates that there is no significance for three nominal variables. While another chi-square test of independence was performed to examine the relation between Motivation and the other three variables. Based on table 4, the relation between these variables was insignificant, Gender $\chi^2(4, N=109) = 6.002$, p=0.199; Age, $\chi^2(20, N=109) = 26.932$, p=0.137, and Education level. $\chi^2(20, N=109) = 26.335$, p=0.437.

Table 4. Chi square test result between gender, age and hiking frequency variables

Variable	Age		Gender		Education	
	χ^2	р	χ^2	р	χ^2	р
Hiking Frequency	6.072	0.299	29.598	0.240	34.930	0.089
Motivation	26.932	0.137	6.002	0.199	20.335	0.437

CONCLUSION

This study revealed that the highest mean score for motivation in participating in hiking activities was the enhancement of relationships with friends and family, similar to the finding by Ariani

(2017). In addition, good peer relationships and social support are essential for developing motivation when participating in recreational activities. Friendship is also an important aspect of a relationship because friendship can provide emotional support and companionship, whereas, in terms of recreation participation, enjoyment and achievement of goals are equally important, and this is similar to the study by Ahmed *et al.* (2020).

This study has explored the public's hiking motivation to stay engaged in recreational activity. This research adds to the existing literature about hiking motivation, especially in Kota Kinabalu, Sabah, where there is a growing interest in adventure tourism. The result pointed out that the item "Enhanced relationships with friends and family" had the highest mean score among the 11 items, and it was the main motivator for the respondents to participate in hiking activities. By surveying 109 respondents, the result also revealed that there is no significant relationship between the public's motivation to participate in hiking activities and the demographic variables.

ACKNOWLEDGEMENTS

The authors would like to extend their appreciation to the all anonymous respondents who volunteered to assist in improving the accuracy and quality of the information in this article. This study was supported and funded by the Ministry of Higher Education under grant number FRGS1/2020/WADB01/UMS/02/1.

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