

Products Attributes as Attraction and as Pull Factor towards Sustaining Visitation to Putrajaya Botanical Garden

Asmah Yahaya* and Abdullah Mohd

Department of Forest Management, Faculty of Forestry, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia

ABSTRACT

Park visitation is a popular recreational activity among urban residents. The decision to visit a park is related to the park's attraction as the pull factor. The attractions include park's products such as its facilities, services and programmes provided by the management. In many situations, lack of attractive products or recreational opportunities contributes to the decline in its visitation. Since year 2005, Putrajaya Botanical Garden has faced a similar situation, whereby its low visitation could be associated to unexciting product features offered by the park's management. In this study, an evaluation was carried out on the products' performance in attracting people to visit the park. Hence, 18 park attributes were chosen as attractions or pull factors to determine their relationships with socio-demographic background of visitors and their visitation attributes. Income and education attainment were identified as the significant reasons of visitation to Putrajaya Botanical Garden. Among the most important findings is the "park tranquil setting", which is considered to be the park's biggest attraction, among other attributes. Based on the factor analysis, three key factors were identified and labelled as "facilities and park settings", "services and key visitors' attractions" and "programmes and activities". Meanwhile, "facilities and park setting" also showed the strongest positive relationships to the visitors' extent of visitation. The study revealed the attractiveness of the park's products would have the influence on people's decision to visit it. These findings therefore contribute to the important idea to the current understanding of pull factors that influence park visitation to Putrajaya Botanical Garden as a thematic nature park.

ARTICLE INFO

Article history:

Received: 11 July 2011

Accepted: 23 November 2011

E-mail addresses:

asmahyahaya@gmail.com (Asmah Yahaya),

amohdm@gmail.com (Abdullah Mohd)

* Corresponding author

Keywords: Park attractions pull factor, park visitation, and park product

INTRODUCTION

Parks play an important role as a venue and a nature resource site for leisure and recreational needs of the people. In some localities, parks are set up with special theme offered as attractions and as tourism products. Hence, the ability of a park to draw continuous number of visitors throughout the years is crucial for its sustenance and able to serve its function. Park visitation is associated with an individual who seeks an outlet for open spaces or other amenity areas such as gardens, parks or wilderness to enjoy them during his or her leisure time. The activities and outcomes from the experience on-site and off-site of those areas could bring satisfaction to visitors (Abdullah *et al.*, 1999).

There are several factors associated to park visitation, and these are socioeconomic background, recreational opportunities and attributes of the park that attract people (Cohen *et al.*, 2009; McCormack *et al.*, 2010). These factors, along with societies' needs and lifestyle, are therefore considered among the determinants of visitors' arrivals. For example, some attractions such as the recreational facilities or activities, designed and developed during the planning stage, are no longer desirable due to the lack of support by visitors or are not up to their satisfaction. Such a situation seemed relevant previously but after a period of time, the products became no longer attractive. In many situations, however, thematic parks which are usually associated with products' niche as their main attractions have experienced difficulty in maintaining their visitor base

(McClung, 1991). Hence, reviewing the performance of product attributes (pull factors) will provide relevant information for the park management to better offer the opportunities to visitors.

In Malaysia, several nature thematic parks were found to be lacking in attracting or sustaining visitation (Fernandez, 2010; Baharuddin, 2006; Perumal, 2008). Most of the parks in this country involved significant investment for development. These include Paya Indah Wetland in Dengkil, Selangor (Fernandez, 2008; Fernandez, 2010), Agriculture Park Malaysia in Shah Alam, Selangor (Hassan, 1997; Baharuddin, 2006), and Mimaland Recreation Park in Gombak (Perumal, 2008). There are occasions where those parks are quite successful in drawing visitors at the initial stages but they have failed to sustain visitation after a period of time. With this concern in mind, the current study was undertaken to understand how such thematic parks are being perceived by visitors in relation to their attractiveness and products offered, and their influence on visitation.

THEORY RELATED TO PARK VISITATION

In recreation, the decision to visit a park with specific purposes is related to push and pull theory of human behaviour and motivation. Push factors refer to specific forces that influence one's decision to go out from his or her everyday environment, while pull factors refer to the forces that influence the person's decision in choosing the specific decision to go. The push and

pull theory is influenced by the way people see and understand the world around them (Klenoski, 2002). The roles of site attractions, advertising, flow of information and activities have influenced people's decision making process, whereby they are more likely attracted to visit the places that have a good appeal or possess distinctive attributes such as beautiful scenery, lots of recreational opportunities or special attractions. The location that possesses those kinds of attributes is more likely to be chosen as a destination.

Meanwhile, many researchers claimed that push and pull factors should be considered as independent constitutions as they are related to two separate decisions made by two separate points at a time, such as one that focuses on whether to go while the other about where to go (Dann, 1981; Klenoski, 2002). Pull factors are the attractiveness of a destination as it is perceived by people with the propensity to travel (Uysal & Jurowski, 1994). According to Hu and Ritchie (1993), visitors' destination comprises of facilities and services based on a number of multidimensional attributes related to their attractiveness to a particular individual in a given choice destination. It reflects the feeling, beliefs and opinions that somebody has about the destination's perceived ability to provide satisfaction in relation to her or his visitation needs.

Previous research on push and pull factors in tourism carried out by Kim *et al.* (2003) concluded that the relationships existed between the three pull factor domains, whereby 12 pull item attributes

were studied on a sample of 2,720 visitors in Korean National Parks. The factors identified constituted attractions of the park, namely, "key tourist resources", "information and convenience of facilities" and "accessibility and transportation". Meanwhile, a study by Uysal and Jurowski (1994) on the Attribute and Motivation Survey of Canadian Tourism related to specific type of destination identified four pull factors out of 23 items that motivated tourism in Canada and these were "Entertainment/Resort", "Outdoor/Nature", "Heritage/Culture" and "Rural/Inexpensive". The findings suggest that the pull factor attributes differed according to the study location as well as the background of visitors as the respondents.

PRODUCTS' INFLUENCE ON PARK VISITATION

Studies on park visitation have shown that the contributed attributes are influenced mainly by the parks' attractions. These attractions are related to facilities, programmes and services that enable the visitors to enjoy their visiting experience. Howard and Crompton (1980) define facilities, programmes and services as products which are attractive enough to sell to people to visit the locality. The visitors to the parks are therefore the consumers of the products that are essential and important as elements of visitation (Scott & Jackson, 1996; Cohen, Marsh *et al.*, 2010). The success of these parks depends not only on good planning and execution of the design, but also on the delivery of the products to the visitors as clients (Howard & Crompton, 1980). In other words, visitors'

satisfaction towards the products in the park has implications on their extent of park visitation. This is because satisfied visitors are more likely to stay longer on-site, as well as to revisit and promote the park to others (Tian-Cole & Crompton, 2003). Therefore, the pull factors as parts of push and pull theory provide a useful framework in examining the performance of the park's products in attracting visitors to the area.

*Product Attributes as Attractions
(Pull Factors)*

Park products are made up of facilities, programmes and services where most times, they are in combination and interrelated while providing recreation opportunities to visitors. As pull factors, these product attributes can be both or either in tangible forms such as beaches, recreational facilities, and cultural attractions, and in intangible forms such as visitors' experiences, perceptions and expectations (Howard & Crompton, 1980; Kelly & Nankervis, 2002; Fyall *et al.*, 2008).

Past research on visitation and facilities found that parks having more facilities are more frequented by visitors (McCormack *et al.*, 2010). The facilities include natural resources found in a vicinity or manmade structures that are constructed such as playgrounds or water features for recreation (Mull *et al.*, 2009). A study by Hollenhorst *et al.* (1992), which employed the Important Performance Analysis, found visitors' satisfaction on provision of state cabin as a facility in the West Virginia State Park System found comfort as a necessity and

the experience of using such facility is the most important. The success of a park is therefore depending on bringing the visitors to the park to enjoy the facilities and to gain good or positive experience as the outcome. The goal of the agency is to provide an experience which meets user's expectations that will encourage return visits.

Park programme provided by management is another pull factor attribute that has impact on park visitation. The purpose of a programme is to offer products in which people get the opportunities to interact with one another by having creative objects in a leisurely environment to derive a rewarding sense of meaning and self-worth experience (DeGraaf *et al.*, 1999). Successful park programme includes a wide range of different activities that provide values and are able to meet customers' needs (Greenhalgh & Worpole, 1996; DeGraaf *et al.*, 1999). Programming is a continual process of planning, implementing, and evaluating leisure experiences (Howe & Carpenter, 1985). Consistent evaluation is necessary to ensure that all products offered are within the customers' needs and satisfaction. Studies on the importance of programmes and activities that lead to increase use of parks involve strategies such as provisions of more activities held concurrently with the park information (Mowen *et al.*, 2005; Moore *et al.*, 2010). In addition, a study by Cohen *et al.* (2009) in Los Angeles found that public parks' supervised activities were able to draw more people as special events like sport competitions attracted not only the players

but also spectators. The same study also suggested that changes in programming and events might have a significant impact on park usage.

Meanwhile, services provided in the park ranging from disseminating the information to visitors, offering venues or events and programmes or any other activities as a means of participation, could make the visiting experiences of recreationists more meaningful and memorable. Hamilton (1991) identified four dimensions in service quality; namely, tangible, reliability, responsiveness and assurance of the products and services. The most important dimension is tangible which consists of the physical aspect of the park such as the condition and adequate number of the facilities, convenience of the location, as well as compatibility among the programmes planned in the park. High quality services mean delivering leisure that consistently conforms to, or exceeds consumer's desire. Thus, service quality may be defined as the gap between what visitors' desire from a service and what is perceived to be received. A study by Backman and Vieldkamp (1995) on service quality on participants in two aquatic programmes of YMCA in Escondido found a strong association between users' activity loyalty and the perception of recreation service quality. Therefore, emphasizing on service quality in destinations like parks appears to be a determinant to the extent of visitation. In other words, visitors who are satisfied with the service in the park have high potential to make a return visit and

recommend the park to others. Level of satisfaction also was also found to have the biggest influence on the decision of whether to revisit one destination (Campo-Martínez *et al.*, 2009).

In summary, this section presents the results of past research that are related to the products as attractions and their influence on park visitation, thus provides the framework for this study. The focus of this study is Putrajaya Botanical Garden, a thematic nature park that features some product attributes as its attractions. The park has been experiencing a decline in its visitation since 2005 until recently. This may be related to the products offered, which are not attractive enough to draw visitors to the park and to satisfy their leisure needs and experience. Therefore, the main objective of this study was to assess the performance of the product attributes in attracting visitors (pull factors) and their correlation to park visitation.

MATERIALS AND METHODS

Study Site and Data Collection

Putrajaya Botanical Garden is located in Putrajaya, the administrative capital of Malaysia. It covers an area of 93 hectares, where two third of the park's area is opened to visitors (Putrajaya Corporation, 2009). A field survey using questionnaires was administered to gather data on socioeconomic and demographic backgrounds of the respondents, visit characteristics, and park's attributes (product items attracting people to visit) related to pull factor. A pilot study was conducted to pre-test and refine the

list of park attributes as pull factors and questionnaires in general.

The field data collection involved on-site self-administered questionnaires at the two main entrance or exit points in Putrajaya Botanical Garden. This data collection exercise was carried out from December 2010 to January 2011. A systematic sampling procedure was administered, where every third visitor was approached to fill in the questionnaires. Some refusals occurred during the survey but were compensated by selecting the next person in a row. A total of 400 sample questionnaires were distributed, out of which, 384 were completed and used for analysis.

The questions were prepared in both the Malay and English languages, using a continuous score of 5-point Likert scale to measure the respondents' agreement-disagreement with the statement describing the product items as the pull factors. For each item identified as a park attraction, the question asked whether the item was indeed contributing to the decision to visit the park. For example, Moroccan pavilion was identified as one of the park main attractions and the relevant question was, "I come to the park to visit the uniqueness of Moroccan pavilion". The level of agreement to the statement shows the performance of particular items in drawing visitors to the park. The same kind of strategy was also used for the rest of the items listed in the questionnaires.

Analysis of Data

Descriptive statistics was used to describe

the composition of the socio-demographic of visitors and their responses relating to the promotion of the park based on the product's attributes that are the most appealing to them. In addition, analysis of variance (ANOVA) was used for continuous scale answers and to examine the significant difference of the product attributes (pull factors) related to socio-demographic groups.

Multivariate procedure, i.e., factor analysis, was conducted to group all the 18 product attribute items to delineate the underlying dimensions. This was done to evaluate the products' attributes as pull factors and their correlation to park visitation. Only the factors with Eigen values greater than 1 were retained, while the items with communalities of 0.4 were included in the final factor structure. The factors' internal consistency within each dimensions were confirmed by the computation of reliability alphas. Later, Pearson's correlation coefficients were computed to identify the degree of interrelations among the pull factors dimension to the extent of visitation to the park.

RESULTS AND DISCUSSION

Demographic Profile of the Respondents

Socio-demographic factors are important to form the basis of park visitation. Through identifying variables, such as gender, age, income and educational level, the visitors' group homogeneity was determined within the broader heterogeneous population of visitors (Kelly & Nankervis, 2002). Results of this study showed that the demographic profile of the visitors as a mix of males

(42.4%) and females (57.6%). Almost half of the visitors to Putrajaya Botanical Garden aged between 18 and 24 (49%), and more than a third (34%) were from 25 to 34 years. Occupation wise, students (38.5%) represent the majority of visitors, followed by working adults who are attached with the private sector (27.3%) and government agencies (20.3%). Majority of visitors had completed their tertiary education. In term of ethnicity, almost three quarter of the visitors (72.7%) are Malays. Most of the visitors are earning between RM1001-RM2500 a month. Among the visitors, Putrajaya

residents formed the minority, while the rest (82.3%) are from areas outside Putrajaya (Table 1). The results support the study by (Oguz, 2000) that leisure and recreation are participated more by the young people. A study by McDonald (2009) showed that people are willing to travel to parks if there are some good products available for their consumption and suit their leisure needs. However, the finding is inconsistent with that of other researches who that claimed parks are visited more by people who are staying closer to the area (Mowen *et al.*, 2007).

TABLE 1
Profile of the respondents (N=384)

		Frequency	Percentage
Gender	Male	163	42.40
	Female	221	57.60
Age Category	Less than 29 years	279	72.70
	29-39 years	77	20.10
	40-49 years	20	5.20
	50 years and above	8	2.10
Ethnicity	Malays	279	72.70
	Chinese	76	19.80
	Indians	11	2.90
	Others	18	4.70
Level of Education	SPM/ O Level	93	24.20
	STPM/ A Level	31	8.10
	Diploma	89	23.20
	Degree	140	36.50
	Master/ PhD	19	4.90
	Others	12	3.10
Occupation	Government Servants	78	20.30
	Private	105	27.30
	Self-employed	27	7.00
	Pensioners	3	0.80
	Unemployed	18	4.70
	Students	148	38.50
	Others	5	1.30

TABLE 1 (continue)

Estimated Income	below RM1000	14	7.40
	RM1001-RM2500	100	52.90
	RM2501-RM4000	50	26.50
	RM4001-RM5500	15	7.90
	RM5501 and above	10	5.30
Residency	Putrajaya residents	67	17.40
	Non-putrajaya residents	317	82.60

Product Attributes' Performance as Park Attractions

An evaluation on 18 products performance in attracting people to visit the park was conducted. These product attributes that served as the pull factors were chosen based on the literature, and parks advertorial materials including the website and onsite interviews with visitors and park management. By indexing attractions through the overall mean score, it was obvious that park's tranquil setting is the highest reason why people choose to visit the park (mean=4.258) compared to other attractions. This was followed by the availability of bicycle rental service (mean=4.117). The findings also showed that some of the main park's attractions, such as the Moroccan Pavilion which are featured in park brochures and the website, received among the lowest score (Table 2). This finding indicates that what are being considered by park management as the park's main attractions and promoted and displayed in the park's advertorial materials were not given the expected attentions by people. The above finding on park's tranquil setting as the biggest park attraction, however, supports Chiesura's

(2004) earlier study which pointed out that the major reasons people chose to go to the park was to be closed with nature.

A Comparison of the Pull Factor Items for Different Socio-economic Background of the Visitors

A test was conducted to check for normality and homogeneity of variances of pull factors score. The differences in the mean of pull factor attributes for a different socio-demographic background of the visitors were examined using ANOVA procedure (Table 3). In this analysis, the means of pull factor attributes are treated as the dependent variables, while the socio-demographic background of the visitors (age, income, occupation and education group) are treated as independent variables.

The results showed significant differences in the mean pull factors among the visitors with different income levels ($F = 4.926, p = 0.003$) and different education attainments ($F = 4.107, p = 0.001$) (Table 3). For the income group, the mean pull factors among the income categories indicated that the visitors with the high income perceived the park as the least attractive. Bonferoni Post Hoc multiple comparisons test revealed

TABLE 2
Product attributes performance as park attractions (pull factors)

Rank	Attributes	Mean score
1	Park's tranquil setting	4.258
2	Bicycle rental facilities	4.117
3	Park's cleanliness	3.992
4	Conducive environment for exercise	3.917
5	Cheap fees	3.706
6	Good service	3.745
7	Picnic facilities	3.745
8	User friendly facilities	3.706
9	Plants collection	3.662
10	Canopy walk	3.630
11	Availability of the information	3.620
12	Tram service	3.620
13	Recreational programme	3.544
14	Interpretation centre	3.497
15	Moroccan pavilion	3.388
16	Educational programme	3.388
17	Restaurant	3.357
18	Organized event	3.159

TABLE 3
ANOVA result for the comparison of pull factors by age, income and occupation and education categories

Pull factors Attributes	Mean	SD	F	<i>Sig-f</i>
Age Group				
< 29 yrs old	3.611	.538	1.029	.380
29 – 39 yrs old	3.541	.588		
40 – 49 yrs old	3.778	.496		
> 50 yrs	3.590	.552		
Income Group				
< RM1500	3.620	.579	4.926	.003
RM1500 – RM3000	3.796	.507		
RM3001 – RM4500	3.536	.520		
> RM4500	3.374	.541		
Occupation Group				
Government servant	3.750	.538	1.714	.116
Private sector	3.538	.533		
Self employed	3.654	.555		
Pensioner	3.852	.746		
Unemployed	3.713	.345		
Students	3.554	.574		
Others	3.478	.128		
Education Group				
SPM/ O Level	3.658	.606	4.107	.001
STPM/ A Level	3.527	.616		
Diploma	3.760	.473		
Degree	3.539	.526		
Master/ PhD	3.228	.462		
Others	3.616	.355		

that there was a statistically significant difference for those in the bracket income of RM1500-RM3000 and the visitors who are earning \geq RM4500 a month (Table 4). Meanwhile for education attainment groups, the mean pull factors among the education level categories indicated that the visitors with the highest degree perceived the park as the least attractive. The results from the Bonferoni Post Hoc multiple comparison test revealed the statistically significant difference for those who completed their SPM/O Level and Master/PhD degree, between Diploma and Degree holders and between Diploma and Master/PhD degree holders (Table 5).

These results indicate the types of occupation they hold and the level of education attained by visitors have influence on the way they perceive the park. These findings also suggest that the visitors with higher education attainment are accessible

to wider variety of recreational products due to the better job opportunity, as well as better income which have allowed them to travel and to experience more of leisure opportunities (Mowen, Payne, & Scott, 2005).

Factor Analysis of the Products' Attributes

The park's product attributes were examined based on their relationships using Principal Component Analysis (PCA). The procedure is used to reduce the large number of related variables to a more manageable grouping (Pallant, 2007). An inspection of the correlation matrix found the data for this assumption met with the number of items showing the correlation above 0.3, whereas Kaiser-Meyer-Olkin (KMO) value was found to be 0.888, and Bartlett's Test is highly significant (sig-p; $0.000 < 0.05$). Therefore, the factor analysis was appropriate for these data.

TABLE 4
Post-Hoc Test results for the multiple comparison of pull factor attributes among the different income groups

	(I) Income categories	(J) Income categories	Mean Difference (I-J)	Sig.
Bonferroni	<RM1500	RM1500 – RM3000	-0.176	0.415
		RM3001 – RM4500	0.084	1
		> RM4500	0.246	0.45
	RM1500- RM3000	<RM1500	0.176	0.415
		RM3001 – RM4500	0.261	0.132
		Above RM4500	.423*	0.005
	RM3001- RM4500	< RM1500	-0.084	1
		RM1500 – RM3000	-0.261	0.132
		> RM4500	0.162	1
> RM4500	< RM1500	-0.246	0.45	
	RM1500 – RM3000	-.423*	0.005	
	RM3001 – RM4500	-0.162	1	

* The mean difference is significant at 0.05 level

In this study, the component factor analysis which included 18 pull factor items yielded three factors with the Eigen value greater than 1.4. These factors explained 53.18% of the variance and labelled as “facilities and park setting”, “services and

key visitors’ attractions” and “programmes and activities”. All the 17 items with loading factors of over 0.46 were retained. The reliability alpha to check the internal consistency of the items within each dimension greater than 0.78 were accepted

TABLE 5

Post-Hoc Test results for the multiple comparisons of pull factor attributes among the different education attainment groups

(I) Level of Education	(J) Level of Education	Level of Education (I-J)	Sig.
SPM/O Level	STPM/ A Level	.131	1.00
	Diploma	-.103	1.00
	Degree	.118	1.00
	Master/ PhD	.430*	.024
	Others	.042	1.00
STPM/A Level	SPM/ O Level	-.131	1.00
	Diploma	-.233	.562
	Degree	-.012	1.00
	Master/ PhD	.299	.847
	Others	-.089	1.00
Diploma	SPM/ O Level	.103	1.00
	STPM/ A Level	.233	.562
	Degree	.221*	.038
	Master/ PhD	.532*	.002
	Others	.145	1.00
Degree	SPM/ O Level	-.118	1.00
	STPM/ A Level	.012	1.00
	Diploma	-.221*	.038
	Master/ PhD	.311	.271
	Others	-.077	1.00
Master/PhD	SPM/ O Level	-.430*	.024
	STPM/ A Level	-.299	.847
	Diploma	-.532*	.002
	Degree	-.311	.271
	Others	-.388	.758
Others	SPM/ O Level	-.042	1.00
	STPM/ A Level	.089	1.00
	Diploma	-.145	1.00
	Degree	.077	1.00
	Master/PhD	.388	.758

* The mean difference is significant at 0.05 level

(Table 6). These coefficient were above the standard of 0.7, as recommended by the factor analysis procedure (George & Mallery, 2010).

According to the key group mean score, the main groups that acted as the pull factors were “facilities and park setting” (Mean=3.950), followed by “services and key visitors attractions” (Mean=3.604) and “programmes and services” (Mean=3.261). This finding suggests that currently “facilities and park setting” play the most important role in attracting people to visit the park as compared to “services and key visitors attractions” which were supposed to be the main park’s attractions, as have been promoted and publicized widely in the park’s brochures and websites.

Relationship between Pull Factors and the Extent of Visitation

The relationships between the three key factors from the factor analysis, “facilities and park setting”, “services and key visitors’ attraction”, “programme and activities” and the extent of park visitation were examined using Pearson product-moment correlation coefficients. Preliminary analyses were also performed to ensure no violation of the assumptions of normality and linearity. Since there were three (3) bi-variate pairs, the Bonferroni adjusted alpha of 0.1667 (0.05/3) was used to test the null hypothesis of the bivariate correlations. The strongest linear relationship was found to exist between “facilities and park setting” and the extent of park visitation ($r = 0.379$, $p = .0001$). The positive correlation coefficient

of 0.379 indicates that as the score for “facilities and park setting” as a pull factor increases, so do the extent of the park visitation (Table 6). The second highest was found between “services and key visitors’ attractions” ($r = 0.226$, $p = 0.0001$) and the correlation coefficient of 0.226 indicated a low positive linear relationship between “services and key visitors’ attractions” and the extent of park visitation (Table 7). However, “programmes and activities” do not show any significant linear relationship. This result showed that “programmes and activities” do not correlate with park visitation. Even though this study is not intended to measure the strength of the existing relationship, the results seem to suggest that the extent of park visitation is more likely to increase when two pull factor dimensions “facilities and park setting”, as well as “services and key visitors’ attraction” improve accordingly.

CONCLUSION

This study offers findings which can explain the role of products as park attractions (pull factors) towards bringing in visitors to the park, and thus, sustain visitation. The findings revealed the tranquil setting of the park as the biggest pull factor item and the main visitation motive to Putrajaya Botanical Garden. Therefore, this attribute should be recognized as the park’s best asset and promoted accordingly to improve visitation. On the contrary, despite being identified as key attractions, certain product attributes in the park such as Moroccan Pavilion and Park Interpretation Centre have failed

TABLE 6
Rotated Component Matrix^a

	Factor Loadings			Communalities	Mean
	1	2	3		
Facilities and Park Setting					3.950
Conducive environment for exercising	.717			.558	
Cleanliness of the facilities	.663	.336		.554	
Availability of bicycle rental facilities	.663			.467	
Picnic's facilities	.618			.500	
User friendly facilities	.589	.427		.539	
Park's tranquil settings	.584	.487		.611	
Services and Key Visitors' attractions					
The canopy bridge walk		.749		.574	3.604
Plants collections		.711		.542	
The information and education centre		.637	.379	.591	
The uniqueness of the Moroccan Pavilion		.567	.352	.450	
Easy to obtain information	.451	.543		.583	
Good service	.446	.463		.414	
Programmes and Activities					
Participating in organized event			.735	.554	3.261
Availability of educational programmes	.308		.718	.686	
Availability of tram service		.355	.637	.553	
Availability of recreational programmes	.454		.593	.565	
Affordable programme fees	.419		.535	.486	
Eigen Value	6.287	1.832	1.453		
Variance Explained	34.93%	10.18%	8.08%		
Reliability coefficient	.793	.795	.781		

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 8 iterations.

TABLE 7. Relationship between pull factors with the extent of park visitation

Extent of Visitation	Pearson Correlation	Sig. (2-tailed)
1. Facilities and Park Setting	.379**	.000
2. Services and Key Visitors' Attractions	.226**	.000
3. Program and Activities	.031	.545

** Correlation is significant at 0.01 level (2-tailed).

to attract visitors. The results demanded further in-depth investigation in order to identify the contributing factors leading to this outcome. Socio-demographic factors, income level and education attainment showed significant differences among the groups of visitor. Therefore, in order to satisfy the leisure needs and experience of the highly income and educated groups of park visitors, the park management must ensure that products provision in the park must meet their expectations and knowledge level at all time. Meanwhile, “facilities and park setting” proved to have the highest positive correlation with the extent of park visitation. This finding supports the pull theory that the degree of attraction influences the level of visitation. Therefore, park management should focus on “facilities and park setting” as key attractions and promote them accordingly in order to improve visitation.

The results of this study provide the management of Putrajaya Botanical Garden with valuable information on understanding their visitors and managing their resources in a more specific manner. Based on these findings, park management is now able to identify the performance of selected products in attracting visitors. Meanwhile, mitigation measures can be undertaken to improve some of the product items that ranked low in terms of their attractiveness. The focus is not only to provide good products but also on product delivery to customers’ needs and satisfaction. This study can be used to lay the groundwork

for future research on identifying and improving product items so as to increase the pulling factors, thus sustaining visitation level to the park.

REFERENCES

- Abdullah, M., Amat Ramsa, Y., & Mohd Ariff, J. (1999). Recreational Opportunities for Public Use in Ayer Hitam Forest: Setting the Stage and Park Management Approach. *Pertanika Journal of Tropical Agriculture Science*, 22(2), 161-166.
- Backman, S. J., & Veldkamp, C (1995). Examination of the Relationship between service quality and user loyalty. *Journal of Park and Recreation Administration*, 13(2), 29-41.
- Baharuddin, N. F. (2006). Visitor’s Evaluation of Facilities and Services at Taman Pertanian Malaysia, Shah Alam, Selangor: Serdang, Master Thesis, Universiti Putra Malaysia.
- Campo-Martínez, S., & Garau-Vadell, J.B. (2009). Factors influencing repeat visits to a destination: The influence of group composition. *Tourism Management*, 31(6), 862-870.
- Cohen, D. A., & Golinelli, D. (2009). Effects of Park Improvements on Park Use and Physical Activity: Policy and Programming Implications. *American Journal of Preventive Medicine*, 37(6), 475-480.
- Cohen, D. A., & Marsh, T. (2010). Parks and physical activity: Why are some parks used more than others? *Preventive Medicine*, 50(Supplement 1), S9-S12.
- Dann, G. M. S. (1981). Tourist motivation an appraisal. *Annals of Tourism Research*, 8(2), 187-219.
- DeGraaf, D. G., & Jordan, D.J. (1999). *Programming for parks, recreation, and leisure services: a servant leadership approach*, Venture Pub.

- Fernandez, C. (2008). All is quiet at regenerated Paya Indah Wetlands. *The Star*. Kuala Lumpur, Star Publication (M) Sdn. Bhd.
- Fernandez, C. (2010). *Paya Indah fails to attract*. Star Publication (M) Sdn. Bhd.
- Fyall, A., & Leask, A. (2008). *Managing Visitor Attractions*. Burlington, USA, Butterworth Heinemann.
- George, D., & Mallery, P. (2010). *SPSS for Windows step by step : a simple guide and reference, 17.0 update*. Boston: Allyn & Bacon.
- Greenhalgh, L., & Worpole, K. (1996). *People, parks & cities: a guide to current good practice in urban parks : a report for the Department of the Environment*. HMSO.
- Hamilton, J. A., & Crompton, J.L. (1991). Identifying the dimensions of service quality in a park context. *Journal of Environmental Management*, 32(3), 211-220.
- Hassan, C. H. (1997). *Tanggapan pelawat terhadap Taman Pertanian Malaysia Bukit Cahaya Seri Alam sebagai destinasi perlancongan tani: Serdang*. (Master Thesis dissertation). Universiti Putra Malaysia.
- Hollenhorst, S., & Olson, D. (1992). Use of importance-performance analysis to evaluate state park cabins: the case of the West Virginia state park system. *Journal of Park & Recreation Administration*, 10(1), 1-11.
- Howard, D. R. & Crompton, J.L. (1980). *Financing, Managing and Marketing Recreation & Park Resources*. Dubuque, Iowa: Wm. C. Brown Company Publishers.
- Howard, D. R., & Crompton, J.L. (1980). *Financing, managing, and marketing recreation and park resources*. Dubuque, Iowa: William C. Brown Company Publishers.
- Howe, C. Z., & Carpenter, G. (1985). *Programming leisure experiences: A cyclical approach*. Eaglewood Cliffs, NJ: Prentice-Hall.
- Kelly, I., & Nankervis, T. (2002). *Visitor Destinations*. Milton, John Wiley & Sons Australia, Ltd. Melbourne: Pearson Education
- Kim, S. S., & Lee, C.K. (2003). The influence of push and pull factors at Korean national parks. *Tourism Management*, 24(2), 169-180.
- Klenosky, D. B. (2002). The Pull of Tourism Destinations: A Means-End Investigation. *Journal of Travel Research*, 40(4), 396-403.
- McClung, G. W. (1991). Theme park selection: Factors influencing attendance. *Tourism Management*, 12(2), 132-140.
- McCormack, G. R., & Rock, M. (2010). Characteristics of urban parks associated with park use and physical activity: A review of qualitative research. *Health & Place*, 16(4), 712-726.
- Moore, S., & Gauvin, L. (2010). Associations among Park Use, Age, Social Participation, and Neighborhood Age Composition in Montreal. *Leisure Sciences: An Interdisciplinary Journal*, 32(4), 318 - 336.
- Mowen, A. J., & Payne, L.L. (2005). Change and Stability in Park Visitation Constraints Revisited. *Leisure Sciences: An Interdisciplinary Journal*, 27(2), 191 - 204.
- Mull, R. F., & Beggs, B. A. (2009). *Recreation Facility Management: Design, Development, Operation, and Utilization, Champaign, IL: Human Kinetics*.
- Oguz, D. (2000). User surveys of Ankara's urban parks. *Landscape and Urban Planning*, 52(2-3), 165-171.
- Pallant, J. (2007). *SPSS Surviving Manual: A step by step guide to data analysis using SPSS*. New South Wales: Allen & Unwin.
- Perumal, E. (2008). Mimaland now a ghost town. *The Star*. Kuala Lumpur, Star Publications (M) Sdn. Bhd.
- Putrajaya Corporation (2009). *Parks Monthly Progress Report*. Taman Botani Putrajaya.

- Scott, D., & Jackson, E.L. (1996). Factors that limit and strategies that might encourage people's use of public parks. *Journal of Park & Recreation Administration*, 14(1), 1-17.
- Tian-Cole, S. & Crompton, J. (2003). A conceptualization of the relationships between service quality and visitor satisfaction, and their links to destination selection. *Leisure Studies*, 22(1), 65 - 80.
- Uysal, M., & Jurowski, C. (1994). Testing the push and pull factors. *Annals of Tourism Research* 21(4), 844-846.
- Yangzhou, H., & Ritchie, J. R. B. (1993). Measuring Destination Attractiveness: A Contextual Approach. *Journal of Travel Research*, 32(2), 25-34.