

ID08

MOTIVATIONS FOR OUTDOOR RECREATION IN TROPICAL URBAN PARKSHuda Farhana Mohamad Muslim¹, Nik Azyyati Abdul Kadir, Noor Azlin Yahya & Mohd Parid Mamat**Abstract**

The modern urban environments generally limit people's access to nature has resulting in reduced human–nature interaction. Thus, establishment of urban parks are potential resource for a diversity of urban people to interact with nature including in urban tropical cities. This article will determine individual or the park characteristics has influenced the park users' level of satisfaction in selected five public parks including Penang Municipal Park and Taiping Lake Garden, Perak. The park users' strongly agreed that peaceful attribute as the main attraction in urban parks (Mean = 4.21). Daily trips to the parks had reduce their stress (M= 4.42); strengthen relationships with families and friends (M = 4.20) and they felt happier (M= 4.13). The Malay, male, youth group (15 to 24 years old), single and people with lower income (< MYR 3000) were dominated in the urban parks, and many of them were universities and higher grade levels. The statistical analysis confirmed socio-demographic characteristics (age, ethnicity, and education attainment) significantly influenced the satisfaction on nature attractions. Peaceful surrounding and outdoor recreation activities in urban parks enrich urbanities psychological and social benefit (stress reduction, become happy and strengthen relationships), which positive reflect people's well-being and quality of life. Urban people also prefer park with a variety of recreation activities instead attractive natural areas. Notably, it fulfils the needs of open spaces increment in sustainable cities for positive community transformation in social and psychological benefits.

Keywords; public parks, satisfactions, quality of visit, socio-demographic, users

INTRODUCTION

Sustainable landscape management is indeed essential for the well-being of mankind as it protects and enhances the ecosystem system (flora and fauna), besides providing the future generations an opportunity to fulfil their tourism needs (Ayeni, 2012). The urban green spaces developed in cities, along with their necessary ecosystem services, range from maintenance of biodiversity to regulation of urban climate. Therefore, through biodiversity conservation, a viable solution is available to maintain a balance between the conservation of threatened species and further urbanization phases. For example, parks and other green spaces offer numerous ecosystem benefits, such as regulating ambient temperatures, filtering air, reducing noise pollution, sequestering carbon, and attenuating storm water.

With hectic lifestyles nowadays the individual preferred to be escape and reduces their stress in nature environment and nearby the nature and shady trees. Other than that, as Kaplan (2004) theory stressed out that people is engaged with the natural environment is just to be an "active engagement". They engaged with their nearby natural surrounding as a way to get closer with trees and the presence of natural elements make the peaceful of mind.

People were more value the environment in a physical design and appearance rather than its functions (Fatin et.al, 2013). This showed that the aesthetic value or quality influences people's perceptions towards the green infrastructure. Parks are peaceful,

¹ Forest Research Institute Malaysia, FRIM

tranquil, beautiful spaces to which people are intrinsically attracted (Cornelis & Hermy, 2004). Schroeder (1991) stated that natural environments in urban parks include vegetation and water elements can induce relaxed and less stressful. Although there is an increasing interest in urban recreation area, it also has an evident that some people do feel insecure and gave negatives feedback such as; the place is untidy, lack of facilities and plants maintenance, unsafe for women and sometimes too crowded at certain time (e.g.; Ozguner & Kendle, 2006; Cohen et. al., 2007). Park users were dissatisfied with the sounds coming from the urbanization activities which would break their concentration while visiting the recreational park Noralizawati (2010) and the professional respondents did not like denseness because it would result to an environmental destruction around the recreation area (Azlin & Sabri, 1997).

A core set of motives for visiting, which includes contact with nature, attractive environments or landscapes, social contact, recreation and play, privacy, active participation in community design, and a sense of community (Matsuoka & Kaplan, 2008) and the attributes were derived as the motives for visiting UGS vary across counties. In Swiss, visitors insist to experience themselves in nature for rejuvenation, while social bonding is determined as the weakest motive (Home et. al, 2012). In Netherlands, the most important motive is to relax followed by to listen and to observe nature, and to escape from the city (Chiesura, 2004). An Australian study found that common motives include enjoying nature, escaping various pressures, and enjoying the outdoor climate (Weber & Anderson, 2010). In Turkey, their purposed were to while away, to feel relax, to meet and chat with friends, and to release stress of urban life constitute the main motives for visiting parks (Oguz, 2000). In Asia, the acknowledgement comes from the recognition of countries that highly urbanized and industrialized such as Singapore, Hong Kong, and Taiwan. Lo and Jim (2012) revealed that Hong Kong people visit UGS principally motivated by their need for physical exercise and be in natural surroundings, peace, and relaxation. Singaporean typically nurture for social interaction, enjoyment of nature, relaxation, and exercise as their main motives (e.g.; Yuen, 1996).

Malaysia is similarly among tropical countries has been developed and categorized as urbanities. The properly designed park is an asset to the entire city. Thus it is a contributor towards green neighborhood ideal. In addition, since the 1990's, the need and demand for urban parks has grown in Malaysia, Thailand, Indonesia, and Philippines, as these countries have become more urbanized and industrialized, and have undergone massive demographic changes (Salina & Abdul Hadi, 2006). Urban parks can be regarded as public spaces and become needs to the urban citizens and the community as a whole (Abdul Malek & Mariapan, 2009). These parks with a limited space contribute social, environmental, ecological, aesthetic, and health benefits as well as recreational opportunities to urban residents or visitors (e.g., Cohen et al., 2014; Dwivedi et. al, 2009) and thus as an effective medium for contribute positively to urban quality of life (Shan, 2014).

However, a public user's assessment on their motives related to the nature attractions while visiting urban parks limited only to small size of sample. The different social group gathered at the urban parks relate with the mix environment. Thus, understanding the park users' motives and the factors influence motives is importance because such nature attributes are globally declining due to urbanization (Grimm et al., 2008; Yaakob et al., 2010), landscape changes (Abdullah & Hezri, 2008) and the trend of sedentary lifestyle (Ballouard et al., 2011). The issues and challenges in urban parks and open spaces were determined as vital and it a needs to do a further investigation on the limited spaces available for urban communities to have their leisure activities and to be close to the nature surroundings'.

RESEARCH OBJECTIVES

Park user's motivations with nature attractions in the urban parks were evaluated. This paper included an examination on the relationships between type of parks, park user characteristics and nature attributes. The association between visitor's characteristics and motives of nature in urban parks were carried out to fulfil the specific research objectives (i) to determine the motives of nature that differing between each of the urban park. Next (ii) to investigate which are the individual factors related to the nature attractions of the urbanities in tropical country parks.

METHODS

Study areas

The expert discussion group choose six urban parks within the four main regions in Peninsular Malaysia. The regions are central, south, north and east regions and selected urban parks namely Shah Alam Lake Garden (Selangor), Kuala Lumpur Botanical Garden, Taiping Lake Garden (Perak), Penang Municipal Park (Penang), Gelora Park (Pahang) and Mutiara Rini Urban Forestry Municipal Council Park (Johor) were chosen. With high frequencies of visitors' parks yearly, a public assess and offer important recreational activities to its communities the parks were selected based on Malaysian political boundaries. The six urban parks were selected to represent the range of public parks available to city dwellers, managed by the municipal council. The parks also have natural features and semi-natural character (e.g., open spaces, lake, artificial ponds, playgrounds, siting areas, football field, and an amphitheatre).

Survey participants and procedure

The face to face interviews were done using a dual language questionnaire surveys were conducted over a four-month period (February to June). The surveys were done by using a structured questionnaire and the questionnaire forms consisted scaled, pre-coded (closed-ended) and open-ended questions. This study used primary data collected through eight pages' standard questionnaire which were interviewed face-to-face survey at the parks. Questionnaires also included questions about the respondents' socio-demographic characteristics such as gender, age, monthly gross income (Malaysian Ringgit), marital status and their visit characteristics. Degree of motivation is measured using Level of satisfaction-5 point, where "1= not at all important, to 5= very important follows a thumb rule by Vagias (2006). Park users were asked their agreement on how important in terms of motivation value between the urban parks. Sampling frame for the study based on total of park user size of monthly visitors in six parks. The non-probability convenience sampling with total of respondents 2139 were interviewed. Quantitative data analysis using the R tool statistic has been carried out.

RESULTS AND DISCUSSION

Profile of Respondents

Table 1: Sociodemographic and visit characteristics of respondents

| Variable | n (2139) | Percentage (%) |
|--|----------|----------------|
| Gender | | |
| Male | 1134 | 53 |
| Female | 1005 | 43 |
| Nationality | | |
| Malaysian | 2114 | 98 |
| Non-Malaysian | 25 | 2 |
| Ethnic Group | | |
| Malay | 1715 | 80 |
| Chinese | 297 | 14 |
| Indian | 91 | 4 |
| Others | 36 | 2 |
| Marital status | | |
| Married | 1038 | 49 |
| Single | 1101 | 51 |
| Age group (years) | | |
| 17-25 | 765 | 47 |
| 26-36 | 585 | 26 |
| 37-47 | 54 | 17 |
| 48-58 | 27 | 8 |
| >59 | 9 | 3 |
| Monthly Household Income (RM) | | |
| < 1000 | 921 | 43 |
| 1001- 3000 | 949 | 44 |
| 3001- 5000 | 186 | 9 |
| 5001- 7000 | 41 | 2 |
| >7001 | 42 | 2 |
| Primary activities | | |
| Recreational/Green activities (Jogging, walk, sports) | 1219 | 57 |
| Stationary activities (Picnic, watching others, hanging around) | 920 | 43 |
| Time spent per visit (hour) | | |
| 1 hours | 614 | 29 |
| 2 hours | 1054 | 50 |
| >3hours | 455 | 21 |

Table 1 showed a profile of the user park in six urban parks. Most respondents ($n=2139$) are male (53%). The largest group of respondents is the 17 to 25 age group (47%); with second in line that under 26 to 36 years old. The mean and median age are respectively 33 (S.D. =13) years. As far as the gross monthly household income is concerned, 87% of the respondents ($n= 1970$) has earned below RM 3000 per month. Majority of the respondents

(53%) actively participated in recreation activities such as jogging, walking and did other sports activities during their visitation to the urban parks. The respondents spent average of two hours in their visitation to the urban parks.

The value added and trip rewards among the park user

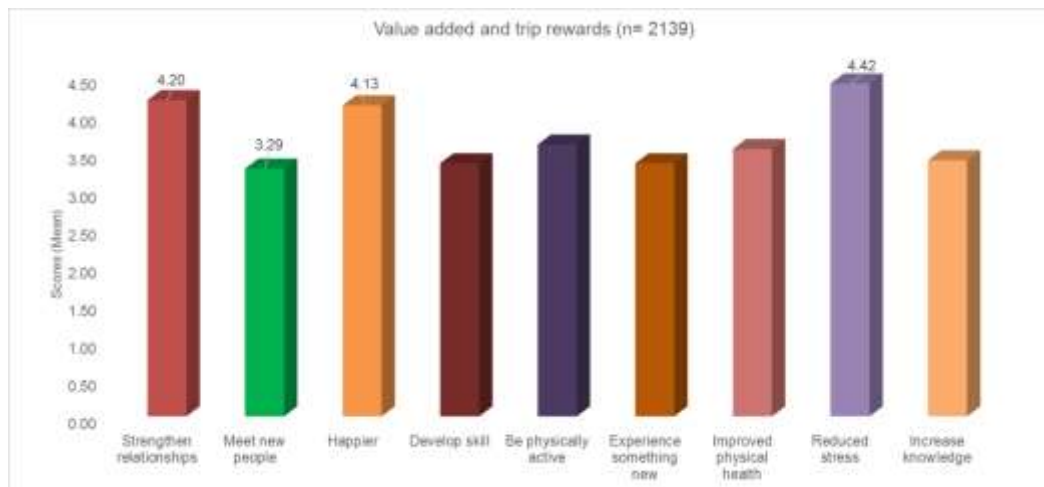


Figure 1: Value added and trip rewards perceived among park user in Malaysia urban parks

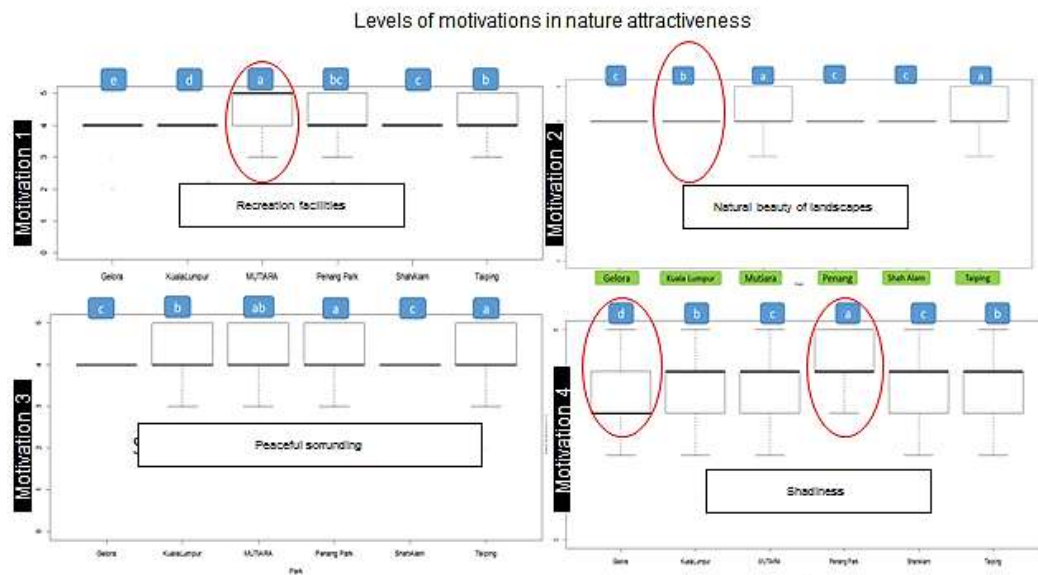
Daily trips to the parks had reduce their stress ($M=4.42$); strengthen relationships with families and friends ($M = 4.20$) and they felt happier ($M= 4.13$). The mean score gathered from the scale of 1 represented their degree of motivation using level of perception-5 point, where "1= not at all important, to 5= very important". The user park felt to meet new people is the lowest value added during their daily trip. Even though majority of the park user was single, they were comfortable to have their own activities rather than socializing with others. The scenario may be linked to general feeling of safety in urban parks and these attribute which evoke the fear of crime determine the defensive behaviour among the park users (Sreetheran & Van den Bosh, 2015).

Effects of nature motivations in difference of park users

There were four main dimensions of operational variables included to determine the effects of motivations between the six urban parks. Recreation facilities (experience on safety, activities chosen and pursued by park user), peaceful surrounding (free from disturbance, tranquil), natural beauty of landscape (natural scenery, all living and non-living elements free to move and change) and the shadiness aspects that perceived among the park user.

Two way analysis of variance (ANOVA) was carried out to measure the difference between difference parks and their motivation on nature attractiveness. Results on the comparing the means of shadiness showed it was one of an important factor as a nature motivation. In the shadiness model, it explains 21% of the variance in total motivations, and this is statistically significant at $\alpha=0.05$. Gelora (Pahang) and Penang Park users felt the significant difference in the shadiness aspects. Penang Park has a number of big trees and encouraged the passive engagement such as relaxing on the benches, picnic, chatting and reading books ($M = 4.10$). Nevertheless, in Gelora Park user felt ($M= 3.37$) as the trees were not too shady and preferred to have their meals in the park food court.

Figure 2: The effects of motivation variables between different urban parks in Malaysia



Relationship on sociodemographic characteristics and motivations of nature attractions

Multiple linear regression exploring the relationship between the socio-demographic characteristics of the respondent and the importance of nature attractions in urban parks

| Explanatory variable (Coefficient value) | Penang MP | Mutiara Rini | Taiping Lake | Perdana Botanical | Gelora Park | Shah Alam Lake |
|---|-----------|--------------|--------------|-------------------|-------------|----------------|
| Gender (Female) ¹ | 0.0030 | -0.0880 | -0.0565 | -0.0302 | -0.0445 | -0.0308 |
| Age | 0.0050 | 0.0040 | 0.0050 | 0.0076 | 0.0074 | 0.0065 |
| Ethnicity ² | 0.3097** | 0.3381** | 0.4472*** | 0.4390*** | 0.4328*** | 0.4087*** |
| Marital status ³ | -0.0042 | -0.1744 | 0.0371 | 0.0095 | 0.0317 | 0.0356 |
| Household Income (RM) | 0.0007* | 0.0004 | 0.0007* | 0.00008* | 0.00007* | 0.00008* |

¹ coded as a dummy; 1=Female, 0=Male
² coded as a dummy; 1=Malay, 0=non-Malay
³ coded as a dummy; Married=1, Single=0
 Sig. codes; ***[0.001], **[0.01], *[0.05]

*** denotes significant at the 1% level ($p < 0.001$)

** denotes significant at the 10% level ($p < 0.01$)

* denotes significant at the 5% level ($p < 0.05$)

Figure 3: The multiple regression exploring the relationship between the sociodemographics and the importance of nature attractions

Our statistical analysis confirmed socio-demographic characteristics significantly influenced the motivation on nature attractions. Figure 3 shows a correlation from the results of multiple linear regressions. Ethnicity is positively associated with the total of nature motivations and this association is statistically significant ($p = 0.001$) for all urban parks except Mutiara Rini Park ($p = 0.01$). Malay preferred visit urban parks for seeking for the nature attractions more than non-Malays. Household income has low significant variable to predict the level of motivations for nature attractions ($p = 0.05$) for all urban parks. However, it determines that park users with higher income look forward to seek a nature attraction while visiting urban parks. In the urban context, the household with high income need to relax in the silent atmosphere of natural environments and step away from the hectic rhythm of the city.

CONCLUDING REMARKS

The results of this study clearly document the importance of the nature attractions in urban parks. Urban residents always and positively seek a “nature” element in urban parks. Each urban park has small differences for its nature attractions. Overall, park users were motivated with the shadiness element offered by the urban parks. Therefore, the common shadiness experienced by urban park users in Malaysia can be regarded as significantly different from Western and developed countries. This importance element considered to be unique landscape among park user in tropical countries such as Malaysia. The differences in socioeconomic backgrounds affected the level of motivations for nature in an urban park. In the future, management plans by city planners and urban foresters should more focuses to the ecological perspective. Indeed, through preserving biodiversity, social as well as ecological advantages will be gained such as improved tree health and higher aesthetic interest. It recommended that well-managed urban environments help foster strong motivations to provide opportunities to recreate generate support for visitation among users’.

Thus, park characteristics have been importance elements in determine the motivation and in future park user satisfaction level. Park managers should focus to the nature attributes management and indirectly could be a significant contribution to the knowledge of park management and policy implications.

AKNOWLEDGMENTS

We would like to thank the municipal parks; Kuala Lumpur City Hall, Shah Alam City Council, Municipal Council of Penang Island, Kuantan City Council, Taiping City Council, and Johor Bahru City Council for their kind collaboration and assistance. Appreciation goes to the trained enumerators for their assistance during fieldwork and numerous anonymous individuals who participated in the survey from 2013 to 2014 period. Financial support received from the Malaysian Government under Tenth Malaysian Plan (RMK10) budget (2010 – 2015 cycle).

REFERENCES

- Abdullah, S. A. and Hezri, A. A. (2008): *From forest landscape to agricultural landscape in the developing tropical country of Malaysia: Pattern, process, and their significance on policy. Environmental Management*,42(5), 907–917.
- Abdul Malek, N. and Mariapan, M. (2009). *Visitors perception on vandalism and safety issues in a Malaysian urban park. Theoretical and Empirical researchers in urban management*, 4(13).
- Ayeni, D. A. (2012). *Enhancing and developing sustainable tourism through landscaping in Nigeria. (Unpublished doctoral dissertation). De Montfort University, Leicester, United Kingdom.*
- Azlin, Y., & Sabri, N. (1997). *Forest recreation environment: Visitors preferences and perceptions. FRIM*, 1(1), 1-12.
- Ballouard, J. M., Brischoux, F., & Bonnet, X. (2011). *Children prioritize virtual exotic biodiversity over local biodiversity. PLoS ONE*, 6(8). <http://doi.org/10.1371/journal.pone.0023152>
- Chiesura, A. (2004). *The role of urban parks for the sustainable city. Landscape and Urban Planning*, 68,129-138.
- Cohen, P., Potchter, O., & Schnell, I. (2014). *A methodological approach to the environmental quantitative assessment of urban parks. Applied Geography*,48, 87-101.
- Cornelis, J., & Hermy, M. (2004). *Biodiversity relationships in urban and suburban parks in Flanders. Landscape and Urban Planning*, 69(4), 385–401. doi:10.1016/j.landurbplan.2003.10.038
- Dwivedi, P., Rathore, C. S., & Dubey, Y. (2009). *Ecological benefits of urban forestry: the case of Kerwa Forest Area (KFA), Bhopal, India. Applied Geography*, 29(2),194-200.
- Fatin, M.R., Siti Sarah, A., L. Aniza, A.A., and Philips, L.E. (2013). *A study on potential application and people awareness on green infrastructure for Boulevard :A case study of Putrajaya Boulevard. Seminar Proceeding, UMRAN 2013, International Islamic University Malaysia. Selangor.*
- Grimm, N.B., Foster, D., Groffman, P., Grove, J.M., Hopkinson, C, S., Nadelhoffer, K, J., Pataki, D, E., & Peters, PC, D. (2008). *The changing landscape: ecosystem responses to urbanization and pollution across climatic and societal gradients. Frontiers in Ecology and the Environment*, 6(5), 264- 272.
- Home R, Hunziker M, Bauer N. (2012). *Psychosocial outcomes as motivations for visiting nearby urban green spaces. Leis Sci*, 34(4),350–365.
- Kaplan, R. (2004). *The social values of forests and trees in urbanized societies. In C.C. Konijnendijk, J. Schipperijn and K. H. Hoyer (Eds.) Forestry serving urbanised societies. Vienna, Austria: IUFRO World Series 14. 167-178.*
- Lo, A. Y. H., & Jim, C. Y. (2012). *Citizen attitude and expectation towards greenspace provision in compact urban milieu. Land Use Policy*, 29(3), 577–586. doi:10.1016/j.landusepol.2011.09.011.
- Matsuoka, R. H., & Kaplan, R. (2008). *People needs in the urban landscape: analysis of landscape and urban planning contributions. Landscape and Urban Planning*, 84(1), 7-19.

- Noralizawati, M., and Noriah, O. (2010). *Push and Pull Factor: Determining the Visitors' Satisfactions at Urban Recreational Area. Journal of Environment-Behaviour Studies*, 78- 84.
- Oguz, D., 2000. *User surveys of Ankara's urban parks. Landscape Urban Plan*, 152, 165–171.
- O'zgu'ner, H., Kendle, A. D. 2006. *Public attitudes towards naturalistic versus designed landscapes in the city of Sheffield (UK), Landscape and Urban Planning* 7, 139–157.
- Salina, M.A and Abdul Hadi, N.(2006). *Factors That Influence Users' Satisfaction on Urban Parks. Built Environment Journal*, 3(2).ISSN 1675-5022.
- Shan, X.-Z. (2014). *The socio-demographic and spatial dynamics of green space use in Guangzhou, China. Applied Geography*, 51, 26–34. doi:10.1016/j.apgeog.2014.03.006.
- Schroeder, H. W. (2011). *Does beauty still matter? Experiential and utilitarian values of urban trees. In: Trees, people and the built environment. Proceedings of the Urban Trees Research Conference; 2011 April 13–14. Edgbaston, Birmingham, UK. Institute of Chartered Foresters: 159–165.*
- Sreetheran, M. and Van den Bosh, C. K. (2015): *Fear of crime in urban parks: What the residents of Kuala Lumpur have to say?: Urban Forestry and Urban Greening*,14, 702–713.
- Vagias, Wade M (2006). *Likert-type scale response anchors. Clemson International Institute for Tourism & Research Development, Department of Parks, Recreation and Tourism Management. Clemson University.*
- Weber, D & Anderson, D.H. (2010). *Contact with nature: Recreation experience preferences in Australian parks. Annals of Leisure Research*, 13 (1), 46-69.
- Yaakob, U. Masron, T. and Masami, F. (2010): *Ninety years of urbanization in Malaysia : A Geographical Investigation of its trends and characteristics. Journal of Ritsumeikan Social Sciences and Humanities* 4(3), 79–101.
- Yamane , T. (1967). *Elementary sampling theory. p 886. Prentice-Hall.*
- Yuen, B. (1996). *Use and experience of neighborhood parks in Singapore. Journal of Leisure Research*, 28(4), 293-311.