Urban Community Perception on Nighttime Leisure Activities in Improving Public Park Design

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Abstract

The design of urban public park is an important factor which influence urban community leisure. The objective of this study is to investigate the community perceptions on nighttime leisure activities in urban public park. The questionnaire survey is done in \textit{Padang} (green field) located in the urban center of Shah Alam and Putrajaya using random stratifies technique. There are four types of variable studied related to nighttime leisure in an urban public park namely comforts, conveniences, safety and nighttime leisure. The findings from this study are expected to show a positive perception of nighttime leisure in urban public park towards urban community.

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1. Introduction

Urban public parks form areas of separation between neigbourhood adjacent to them. However, the same park may also act as a link between the urban residents of several neigbourhood, offering common service and facilities such as playground, areas for rest, and passageways for different age of the group. As such, the urban public park serves as a meeting place for urban community in the city. The

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sociocultural function of urban public parks can be especially important for lower income groups. While the conditions in such area are less attractive to those of the higher income area, the urban public park can provide the lower income residents opportunities for recreation and entertainment within an area with environmental quality equal to those of other urban residents forming sustainable of urban community. Givoni (1998) stated that, success in fulfilling the social functions by urban public park may be measured by the frequency of visitation by urban community. However, the degree of participation depends also upon the existence of proper condition. It is reasonable to assume that the more interesting and convenience opportunities there are to enjoy in open public space, the higher degree of participation. It was argued by Jacobs (1961) that the most efficient way to prevent crime in public parks is the presence of as many people in the park as possible, during all hours of the day and evening. If this point of view is correct, there will be a need for a directed planning policy concerning urban public parks, which aims to maximize the times and intensity of their use. Such planning should determine the location of facilities and roads in the urban network, as well as planning details of the surrounding urban area, such as land use around the park, institution to attract persons into the area during various hours of the day and others. Cheshmezangi (2012) mentioned that, social behaviorism of a place is either controlled by design or developed with it. Therefore, environmental perception of any place has a mutual relationship with its social behaviorism termed as ‘socio-environmental values’ and ‘spatial inter-relations’. This is also relevant if the place is experienced during nighttime. It definitely offers a different environment and experience of place throughout the whole day. Moreover, nighttime activities in public-park are part leisure and part recreation that has become an urban trend (Ngesan and Karim, 2012). At this juncture, the study of community perception on nighttime leisure in urban public park seemed to be warranted and in line with the Malaysian Economic Transformation Programme (2010), under Entry Point Project 6 (EPP6); to ensure every resident in Greater Kuala Lumpur benefits from the public green space.

2. Literature review

2.1. Concept of leisure activities

Leisure is defined as free time that does not involve work or performing other life sustaining functions. Edginton and Chen (2008) define leisure as a non-work activity. In contrast, Michael and Sara (2012) argue that leisure as the activity engaged in during free time. Neulinger (1981) used the concept of intrinsic versus extrinsic motivation to divide the types of leisure activities. Intrinsic motivation refers to internal motivation (wanting to participate in the activity for its own sake). In contrast, extrinsic motivation refers to external motivation (wanting to do an activity for the external rewards associated with the activity). Some activities are intrinsically motivated, others are extrinsically motivated, and perhaps the largest number of activities is caused by a combination of intrinsic and extrinsic motivation. Muhammad (2001) stated that night does not begin until the last trace of light has disappeared from the sky. The night begins when all the light has disappeared from the sky after sunset and ends when the first trace of light appears in the sky before sunrise. During these two periods, light and darkness mix. It is not totally dark nor is it totally lit. Just before sunset, which is part of the day, the darkness starts to creep in and thus the night is rolled over the end of the day. Furthermore, Kolmos and Davis (2007) argue that the normal cycle of a human being is to rest at night. Scientifically, the phenomenon of the body’s cycle is explained by a term called the circadian rhythm. It means an approximate daily periodicity, a roughly 24-hour cycle in the biochemical, physiological or behavioral processes of human beings.
2.2. Urban community lifestyle

The high temperature during the day due to the effect of global warming discouraged community leisure’s activities in an urban public park (Ewer, 1991). Moreover, Shaharudin et al. (2010) argued that Urban Heat Island impact of urban pollution significantly reduced livability and human comfort where it is extremely hot to conduct outdoor leisure and recreation activities during daytime. Besides, the busy lifestyle of urban community also affects the lack of time for leisure and recreation activities in public outdoor spaces (Oguz and Cakci, 2010). Leisure and works are competitors for time. If one increases, the other decreases. This is the same for individual and for society as a whole (Gold, 1980). These constraints have changed the behavioral patterns of the urban communities where people prefer to carry out their leisure activities in outdoor public-park after the sun has set (Ngesan and Karim, 2012). This offers a cooler temperature with different leisure experience at night. It also encourages the urban community socializing with their family members and friends within their community after working hours. Meanwhile, the current planning designed and guidelines of urban public parks are not accommodative for community nighttime leisure and recreation (Ngesan and Karim 2012). Currently, most of the community’s leisure activities during nighttime only take place indoors; in cinema, restaurants, shopping complexes, etc (Erkip, 2003). The use of indoor rather than open and green outdoor spaces in leisure time activities has led to more passive urban community lifestyle. People in urban areas neglect the fact that physically active lifestyle with outdoor green environment are important in term of physical and mental health to enhance the urban quality of life (Oguz and Cakci, 2010). There are also nightlife activities such as pubs, bars and night clubs, but it gives a negative impact related with alcohol drinking and other monoculture-use of city centres by the younger generations (Ngesan and Karim 2011). Moore et. al. (1992) highlights that parks facilitate social interactions are critical in maintaining community cohesion and pride. Park plays a role in increasing social capital by providing a meeting place where people can develop social ties. Moreover, Smith et. al. (2004) pointed that leisure at the park is able to improve moods, reducing stress and enhancing a sense of wellness.

2.3. Designing urban public park for nighttime usage

According to Project for Public Space (2005), the use of parks have changed from quiet activities during the day to more socializing activities in the evening and extend up until at night. The users also seem to distribute throughout the park during the day, while evenings until night the area become more vibrant with community leisure activities focused on the center of the park. Zaki and Ngesan (2011) postulated that the agglomeration of nighttime activity is able to create different activity to attract people. They also confirm that the creative arrangement of urban components can increase the urbanites movement in urban outdoor spaces (Zaki and Ngesan, 2012). The artificial light emerged as a powerful instrument to enhance the place, providing visibility and protection. It helps to promote nighttime leisure activities supporting urban well-being and gives people the perception of night territory appropriation and domination (Alves, 2009). In the design of urban spaces, managing light is associated with generating quality of life for its citizens. Night becomes a palette of landscapes that have never been seen before, transforming the landscape and image that triggers a living atmosphere of cities at night. Light can give sense to a place, giving new uses and new values (Hennessy, 2010). Social and cultural changes of the recent decades have increased the importance of space-time relations at night. The cities concerned have generated artificial day into the night, in order to continue the sunlight hour activities that are unable to get during the day (Alves, 2007). This dichotomy separates day and night very clearly, in which night was associated with the unknown, provoking fears, mystery, curiosity and contradiction (Gwiazdzinski, 2005).
3. Methodology

3.1. The objective and case study

This paper is part of an on-going master by research entitles “Implication of Nighttime Leisure Activities towards Place Identity of Urban Public Park”; consists of three research domains which are: (D1) Nighttime leisure behaviour; (D2) Image of nighttime urban public park; and (D3) Perception of nighttime leisure activities. Meanwhile, this paper would only consider the (D3) Perception of nighttime leisure activities. The goal of this study is to explore the urban community perception of nighttime leisure activities in urban public park. The aspects that were studied are comfort, convenience and safety which are expected to give ideas for designing vibrant urban public outdoor spaces for community during nighttime.

The survey were carried out in Section 14, Shah Alam and Precinct 3, Putrajaya due to the richness of green urban nature, well provided community facilities; and the lack of nighttime commercial and entertainment centres nearby. The urban public parks in both case studies are green fields known as Padang. According to Emmanuel (2005), significant nighttime cooling in an urban center could be achieved by increasing the Sky View Factor (SVF) and improving the thermal properties. During nighttime, the thermal properties such as green surface in the open area with less trees cover are more cooling due to the increasing of the SVF that realize the effect of Urban Heat Island. Moreover, both case study areas also represent quite similar physical characteristics, located in the respective city center, surrounded by buildings which light up at night, and located next to beautiful mosques.

3.2. Research design and procedure

The background and literature study had been carried out to gather information and findings from previous researches regarding the leisure in urban public parks. The researcher also had conducted an early observation survey in urban public park in Section 14, Shah Alam and Precinct 3, Putrajaya to explore the situation of nighttime leisure. The results from the literature study and observation survey served very well in formulating the variable and attributes for structuring questionnaire to examine the user’s perception on nighttime leisure activities in urban public park. The strategy chosen for the research design was based on a questionnaire survey which required 383 samples of respondents from the total population of Shah Alam and Putrajaya which is 511,583 (Malaysia Statistics Department, 2010). According to Sekaran (2002), the sample size for questionnaire survey is 383 samples if the population in between above 75000 and below 1 million. The samples were distributed using stratified sampling based on the population. Shah Alam’s urban public park indicates 332 samples (86 percent) based on 443,222 populations in Shah Alam while Purrajaya urban public park were allocated 51 samples (13.36 percent) from 68,361 populations in Putrajaya. The survey was carried out at 7.30pm until 12.00 midnight using random sampling by taking a convenience user’s of urban public park. To answer the questionnaire, the respondents were asked to state their preference of priority on a Likert scale rating of 1 to 7; where 1 represent as very poor, 2 represent as poor, 3 represent slightly poor, 4 represent as moderate, 5 represent as slightly good, 6 represent as good, and 7 represent as very good. The data were then analysed using Statistical Package for the Social Sciences software and then evaluated using Measurable Indicator Scoring Technique (MIST) develop by Karim (2008). MIST is used to show the processed data taken from each measurable indicator within the aspects of comfort, convenient and safety and assessed by giving scores based on the mean. The higher score means showed the higher degree of comfort, convenient and safety.
4. Results and discussions

Table 1 described the demographic profile of respondents as the users of urban public park during nighttime. Both areas of case study received higher female respondents than male respondents. Mitchell (1995) argues that the safety of the place can be seen by the existence groups of women. The longer the length of leisure in both areas which is one until two hours represents the conditions of comfort and convenience while carrying out nighttime leisure. This finding also supported the argument by Kolmos and Davis (2007), where nighttime activities should have time limitations to let the human body sleep and rest. The higher sample for income is from less than Myr2000 with 52.1 percent in Shah Alam while Myr2000 to Myr4000 with 35.3 percent in Putrajaya. This influenced the type of site preferences for nighttime leisure in urban public park since it can often be accessible by community at a low or zero cost (Godbay and Mowen, 2003). The finding showed that there are 51.8 percent of married respondents in Shah Alam and 68.6 percent of married respondents in Putrajaya which showed that urban public park at night are oriented to the family users. There are various groups of people engaging in nighttime leisure that also created a cordial form of vibrant urban community. There are about 30 percent respondents who stayed more than 10 years in Shah Alam. Auh and Cook (2009) stated that residents who lived more than 10 years in a community are likely to be emotionally attached to the place and express more community perception and satisfaction than short-term residents.

Table 1. Demographic profile of respondents in Shah Alam and Putrajaya

| Demography profile | Attribute items | Shah Alam (N=332) | Putrajaya (N=51) |
|--------------------|----------------|------------------|-----------------|
|                    | Frequency | Percentage | Frequency | Percentage |
| Gender             | Male | 117 | 35.2 | 17 | 33.3 |
|                    | Female | 215 | 64.8 | 34 | 66.7 |
| Income             | Less than Myr2000 | 173 | 52.1 | 16 | 31.4 |
|                    | Myr2000 – Myr4000 | 115 | 34.6 | 18 | 35.3 |
|                    | More than Myr4000 | 44 | 13.2 | 17 | 33.3 |
| Place of stay      | Inside of study area | 228 | 68.7 | 44 | 86.3 |
|                    | Outside of study area | 104 | 31.3 | 7 | 13.7 |
| Length of stay     | Less than 1 years | 35 | 10.5 | 8 | 15.7 |
|                    | 1 – 4 year | 148 | 44.6 | 26 | 51.0 |
|                    | 5 - 9 year | 49 | 14.8 | 17 | 33.3 |
|                    | More than 10 year | 100 | 30.1 | 0 | 0.0 |
| Married status     | Single | 160 | 48.2 | 16 | 31.4 |
|                    | Married | 172 | 51.8 | 35 | 68.6 |
| Group of leisure   | Alone | 4 | 1.2 | 0 | 0.0 |
|                    | Families | 152 | 45.8 | 42 | 82.4 |
|                    | Friends | 118 | 35.5 | 2 | 3.9 |
|                    | Friends and families | 58 | 17.5 | 7 | 13.7 |
| Length of leisure  | Less than 1 hours | 35 | 10.5 | 13 | 25.4 |
|                    | 1 – 2 hours | 230 | 69.3 | 33 | 64.7 |
|                    | 3 – 4 hours | 61 | 18.4 | 5 | 9.8 |
|                    | More than 5 hours | 6 | 1.8 | 0 | 0.0 |
The analyses of questionnaire surveyed data are shown in the form of mean. As mentioned earlier, MIST is used to show the processed data taken from each measurable indicator within the aspects of comfort, convenient, safety and nighttime leisure perception and assessed by giving scores based on the mean. There are three types of variable that will study regarding perception of urban public parks users while carry out leisure activities during nighttime namely: (1) Comfort; (2) Convenience; and (3) Safety. The study of perception also has been extended to include the reasons for the community in utilizing nighttime leisure activities in urban public park.

Table 2. showed that the variable of comfort and nighttime leisure collected the same score which is 6 (Good) in both of the study areas. While the variables of convenience and safety are more positive in Putrajaya with 6 score (Good) than Shah Alam which is 5 score (Slightly good). The result also demonstrated that the variable of nighttime leisure accumulated the highest mean for both areas where Shah Alam is 5.24 (Good) and Putrajaya is 5.68 (Good) while the variable for comfort gathered the lowest mean value with Shah Alam is 4.62 (Slightly good) and Putrajaya are 5.08 (Good). The summary from the survey of perception on nighttime leisure activities illustrated that Putrajaya received higher mean value with 5.48 (Score 6=Good) and total point score (24) then Shah Alam’s mean value with 4.94 (Score 5=Slightly good) and total point score (22).

Table 2. Summary of perception on nighttime leisure activities in Shah Alam and Putrajaya

| Label Item | Attribute items of perception on leisure activities | Shah Alam | Putrajaya |
|------------|----------------------------------------------------|-----------|-----------|
|            |                                                    | Mean      | *Score    | Mean      | *Score    |
| V1         | Comfort                                            | 5.03      | 6         | 5.62      | 6         |
| V2         | Convenience                                        | 4.62      | 5         | 5.08      | 6         |
| V3         | Safety                                             | 4.88      | 5         | 5.54      | 6         |
| V4         | Nighttime leisure                                  | 5.24      | 6         | 5.68      | 6         |
| Total      |                                                    | 4.94      | 22        | 5.48      | 24        |

*Note: 1= 0.00-1.00 (Very bad); 2= 1.01-2.00 (Bad); 3= 2.01-3.00 (Slightly bad); 4= 3.01-4.00 (Moderate); 5= 4.01-5.00 (Slightly good); 6= 5.01-6.00 (Good); 7= 6.01-7.00 (Very good)

Meanwhile, results from the observation survey showed that Shah Alam’s urban public park (Fig. 1.) is more crowded and high intensity used for nighttime leisure activities and more vital than Putrajaya’s urban public park (Fig. 2.). It indicated that Shah Alam’s urban public park seem more successful in fulfilling the social function of urban community than Putrajaya’s urban public park if it measured by the frequency of visitation. Meanwhile the high intensity of Shah Alam’s urban public park usage has implicated the respondents to give a lower score regarding comfort, convenience and safety on nighttime leisure than Putrajaya’s respondents. According to Montano and Adamopoulos (1984), the effect of crowdedness in environmental psychology can exists in three modes namely (1) situational - such as feeling constrained or having expectations dashed, (2) emotional- usually negative, but positive emotions can occur, and (3) behavioral- such as activity completion or assertiveness. Thus, the crowded usage of urban public park has contributed towards the lack of conduciveness nighttime leisure activities. Besides that, the socio-demography profile of respondents (refer Table. 1) where the place of residence and length of residence also implicated the results of this study which influenced their sense of attachment to the urban public park.
4.1. Perception of comfort on leisure activities

Zacharias et al. (2001) stated that peoples’ perceptions towards the beauty of place are different due to factors of microclimatic condition such as sunlight and wind. These and other microclimatic parameter such as temperature and humidity may also influence our perception towards comfort (Nikolopoulou et al., 2001). The variable of comfort studies for nighttime leisure activities are classified into the aspect of physical (CMP1, CMP2, CMP3), environment (CME4, CME5, CME6, CME7, CME8, CME9, CME10) and social (CMS11, CMS12, CMS13) aspects in urban public park during nighttime (refer Table. 3). The highest mean values item for an aspect of comforts perception while carrying out nighttime leisure activities in Shah Alam is the item of ‘Sermon/ azan from the Mosque’ (CME4) with 5.97 (Score 6=Comfortable) while in Putrajaya is the item ‘To communicate with friends and families’ (CMS11) with 6.10 (Score 7=Very comfortable). The items ranked as the lowest mean value are same in both case study areas with 5 score (Slightly comfortable) in Shah Alam (4.09) and Putrajaya (4.94) which is ‘Noise from vehicle’ (CME5). Overall, Putrajaya received higher mean value of 5.62 (Score 6=Comfortable) and total score of 78 as compared to Shah Alam which has the mean value of 5.03 (Score 6=Comfort) and a total score of 72. Based on observation survey, the majority of nighttime users of urban public park in Shah Alam and Putrajaya are Malays who made up of the Muslim community. Therefore, the users are comfortable with the sermon/ azan from the Masjid and able to socialize with the other users. On the other hand, both of the urban public parks are located beside from the main road and that gives a negative perception on the users’ comfort.
### Table 3. Perception of comfort on leisure activities in Shah Alam and Putrajaya

| Label Item | Attribute items of comfort on leisure activities | Shah Alam Mean | *Score | Putrajaya Mean | *Score |
|------------|-------------------------------------------------|----------------|-------|----------------|-------|
| CMP1       | Cleanliness of urban public park                | 5.39           | 6     | 5.78           | 6     |
| CMP2       | Space to sit on ground                         | 4.78           | 5     | 5.71           | 6     |
| CMP3       | Space to play                                  | 5.61           | 6     | 5.88           | 6     |
| CME4       | Sermon/azan from the Masjid (Mosque)           | 5.97           | 6     | 5.82           | 6     |
| CME5       | Noise from vehicle                             | 4.09           | 5     | 4.94           | 5     |
| CME6       | Smoke/Dust/Gases                               | 4.40           | 5     | 5.41           | 6     |
| CME7       | Air temperature                                | 5.09           | 6     | 5.80           | 6     |
| CME8       | Wind speed/Ventilation                         | 5.30           | 6     | 5.88           | 6     |
| CME9       | Humidity                                       | 5.23           | 6     | 5.86           | 6     |
| CME10      | Pest/Insect/Mosquito threat                    | 4.36           | 5     | 5.25           | 6     |
| CMS11      | To communicate with others friends and families| 5.67           | 6     | 6.10           | 7     |
| CMS12      | To communicate with others visitor (stranger)   | 4.97           | 5     | 5.25           | 6     |
| CMS13      | Present of visitor from outsider               | 4.58           | 5     | 5.35           | 6     |
| Total      |                                                | 5.03           | 72    | 5.62           | 78    |

* Note: 1= 0.00-1.00 (Very uncomfortable); 2= 1.01-2.00 (Uncomfortable); 3= 2.01-3.00 (Slightly uncomfortable); 4= 3.01-4.00 (Moderate); 5= 4.01-5.00 (Slightly comfortable); 6= 5.01-6.00 (Comfortable); 7= 6.01-7.00 (Very comfortable)

### 4.2. Perception of convenience on leisure activities

Knez (2005) had argued that climate is one of the attributes that brings meaning to the place of people. This ecological variable, a physical parameter of a place, plays an important role in everyday life. It has impact on individual, social and economy. The variable of convenience studies for nighttime leisure activities are classified into the physical aspect only (refer Table. 4). The highest mean values for an item in the aspect of convenience’s while carrying out nighttime leisure activities in Shah Alam is the item of ‘Accessibility of pedestrian spaces’ (CVP2) with 5.08 (Score 6=Convenient) while in Putrajaya is the item of ‘Bench’ (CVP6) with 5.49 (Score 6=Convenient). The items of ‘Food and games vendors’ (CVP7) ranked had the lowest mean value with a score of 5 (Slightly convenient) in both of case study areas in Shah Alam (4.16) and Putrajaya (4.18). Overall, Putrajaya received higher mean value with 5.62 (Score 6=Convenient) and a total score of 78 compared to Shah Alam whose mean value is 4.62 (Score 5=Slightly convenient) with a total score of 72.

Based on observation survey, the food and vendor in Shah Alam’s urban public park during nighttime is informal while in urban public parks Putrajaya the food and vendor closed in the early evening. Therefore, the respondents perceived this situation as a slightly convenient. The lack of nighttime users in Putrajaya’s urban public park made it convenient for visitors to use the benches. Although in Shah Alam the urban public park is more crowded, the respondents feel convenient to access the place by walking. This showed that, the nighttime leisure activities are not disturbed by other visitors using the urban public park.
4.3. Perception of safety on leisure activities

According to Marcus and Francis (1998) safety refers to the personal security of park users and covers both as a perceived and an objective measure, where perceived safety refers to people’s perceptions and feelings of safety while objective safety refers to actual incidents of crime. Distinguishing the two concepts is important in order to adequately address the safety concern. Referring to the Table 5, the variable of safety studies for nighttime leisure activities are classified into the aspect of physical (SFP1, SFFP2) and social (SFS3, SFS4, SFS5, SFS6, SFS7, SFS8, SFS9). The items with the highest mean value for an aspect of safety’s perception while carrying out nighttime leisure activities are the same for both Shah Alam (mean=5.41) and Putrajaya (mean=5.82) which is the ‘Presence of families groups (SFS5) with a score of 6 (Safe). The items ranked as the lowest mean value are also same in both of case study areas which is ‘Police patrol’ (SFS5) with Shah Alam 4.13 (Score 5=Slightly safe) and Putrajaya with 5.27 (Score 6=Safe). Overall, Putrajaya received higher mean value of 5.54 (Score 6=Safe) and 54 of total score more than Shah Alam which has the mean value of 4.88 (Score 5=Slightly safe) and total score of 48.

Based on observation survey, there is a lack of police patrol in urban public park for both case study areas during nighttime. This reflected the slightly unsafe perception while carrying out nighttime leisure activities because of the crowded environment. This tends to give a negative feeling to the users. On the other hand, the presence of the group’s families and their children improve the sense of safety. Project for Public Space (2005) argues that, nighttime park users rarely noted safety as a concern. Most people felt the presence of “undesirables” and drug dealers, but the vibrant and heavily used space by small children and their parents around them tend to marginalize this negative activity, or at least make people feel relatively comfortable. Ozcan (2006) states that compared to adults, children are known to be more sensitive in their perception of the physical environment; hence it has a greater effect on the way they conduct themselves.
4.4. Perception of nighttime leisure activities

The variables of nighttime leisure activities’ perception in urban public parks are examined to identify the trends urban community leisure in public outdoor spaces. These variables have been classified into the aspects of physical (NLP1, NLP2, NLP3, NLP4), environment (NLE5, NLE6) and social (NLS7, NLS8, NLS9, NLS10, NLS11, NLS12, NLS13) related to urban public park. Table 6 showed the item ranked highest for mean value in the aspect of nighttime leisure’s perception in urban public park in Shah Alam is ‘Availability of urban public park at nighttime offer an alternative/ opportunity for leisure’ (NLP4) with 5.50 (Score 6=Agree) while in Putrajaya is the item ‘Hot climatic during the day influences leisure at night in urban public park’ (NLE6) with 5.90 (Score 6=Agree). The item ranked lowest mean value is the same in both of case study areas which is ‘Having a good sleep after doing night-time leisure activities in urban public park’ (NLS8) with Shah Alam 4.77 (Score 5=Slightly agree) and Putrajaya with 5.37 (Score 6=Agree). The item ‘Leisure at night in urban public park should have a time limitation’ (NLS13) also received the lowest mean value in Putrajaya with 5.37 (Score 6=Agree). Overall, Putrajaya received higher mean value with 5.68 (Score 6=Agree) and 78 of total score than Shah Alam which is mean value 5.24 (Score 6=Agree) and 75 of total score.

The finding from this study support the argument by Ngesan and Karim (2012) that the accessibility of urban public park during nighttime offer an opportunity for urban community to perform their outdoor leisure activity. The hot climate during the day also has makes the urban public park to become discomfort for leisure which change their time preference to do leisure at night.
Table 6. Perception of nighttime leisure activities in Shah Alam and Putrajaya

| Label Item | Attribute items of nighttime leisure perception | Shah Alam Mean | 'Score | Putrajaya Mean | 'Score |
|------------|-------------------------------------------------|----------------|-------|----------------|-------|
| NLP1       | Physical setting of urban public park influence the type of leisure activities. | 5.14           | 6     | 5.69           | 6     |
| NLP2       | The condition of ground surface influences the site preferences to do leisure at nighttime. | 5.37           | 6     | 5.65           | 6     |
| NLP3       | Leisure at night in outdoor space is more fun than indoor spaces. | 5.48           | 6     | 5.59           | 6     |
| NLP4       | Availability of urban public park at nighttime offer an alternative/opportunity for leisure. | 5.50           | 6     | 5.73           | 6     |
| NLE5       | The urban public park environment at nighttime is positive. | 5.43           | 6     | 5.73           | 6     |
| NLE6       | Hot climatic during the day influences leisure at night in urban public park. | 5.06           | 6     | 5.90           | 6     |
| NLS7       | Busy lifestyle during the day influence leisure at night in urban public park. | 5.34           | 6     | 5.82           | 6     |
| NLS8       | Having a good sleep after doing night-time leisure activities in urban public park. | 4.77           | 5     | 5.37           | 6     |
| NLS9       | Leisure in urban public park at night improved physical and mental health. | 5.00           | 5     | 5.59           | 6     |
| NLS10      | Nighttime leisure in urban public park improved social relationship among families/friends. | 5.45           | 6     | 5.73           | 6     |
| NLS11      | Nighttime offer a unique leisure experience in urban public park. | 5.33           | 6     | 5.80           | 6     |
| NLS12      | Not required a high cost to do nighttime leisure in urban public park. | 5.45           | 6     | 5.90           | 6     |
| NLS13      | Leisure at night in urban public park should have a time limitation | 4.78           | 5     | 5.37           | 6     |
| Total      |                                                 | 5.24           | 75    | 5.68           | 78    |

*Note: 1= 0.00-1.00 (Very disagree); 2= 1.01-2.00 (Disagree); 3= 2.01-3.00 (Slightly disagree); 4= 3.01-4.00 (Moderate); 5= 4.01-5.00 (Slightly agree); 6= 5.01-6.00 (Agree); 7= 6.01-7.00 (Very agree)

5. Conclusions and recommendations

This study reveals the positive perception of the community towards nighttime leisure activities in urban public park in both of case study area of Shah Alam and Putrajaya from the aspect of comfort, convenience and safety. They also accepted the provision of nighttime urban public park as the place for families leisure which help to rejuvenate urban community lifestyle and also act as socializing tools. The results showed that the nighttime leisure in urban public park has a potential to be explored as a future community leisure activities offering cooling outdoor leisure environment with unique experiences of night scenery. Urban public park during nighttime would promote a local nocturnal flora and fauna while optimizing the use of urban green spaces. Such evidence may contribute to novel knowledge in the field of environmental behavior studies, urban planning and urban landscape in creating a sustainable urban public park design for urban communities while promoting vibrant urban public outdoor spaces during nighttime. The findings may also be used to improve the local authority policies and guidelines regarding future urban public park design. This study had identified the items related to nighttime leisure activities in urban public park to ensure the user’s comfort, convenience and safety. The urban public park should provide a buffer zone to overcome the noise from vehicle on nearby roads to improve the comfort of nighttime users. Moreover, the location of urban public park also should be placed closed to mosque if the
population area are among Muslim community. Proper kiosks for food and games vendor should be provided. And pedestrian facilities should also be provided to encourage the urban community to walk. Besides the frequency of police of security patrol, the urban public park should be designed for family’s leisure to enhance the sense of safety during nighttime. Nowadays, urban public park during nighttime are not only enjoyed by the urban community from the catchment area but also people outside who needed a nighttime leisure. Therefore, the future urban public park development should consider these variables and items in this research to ensure that urban public parks are not only used during the day but also accessible during nighttime to satisfied the social need of urban community leisure. Moreover, with the increasing of urban population and the challenging of urban lifestyle in the future; the sizes of urban public park should been enlarged to reduces a negative feelings users while carried out nighttime leisure due to the effect of crowds. As this study is confined to the urban public parks in Shah Alam and Putrajaya, it is suggested that future research should involve more samples of urban parks nationwide. The implication of nighttime activities towards urban community well-being can also be proposed for future studies to identify the relation of nighttime leisure behaviour towards the quality of urban life. Moreover, the differences in the intensity of urban public parks and leisure behaviour within the confinement of the different urban park settings should also be noted. As the analysis of this phenomenon is beyond the scope of this paper, it could be investigated further in future studies.

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References

Alves, T. (2009). Geografia da noite. Centro de estudios geográficos. Universidade de Lisboa.
Alves, T. (2007). A noite, a cidade e a geografia das actividades económicas. Geophilia. O sentir e os sentidos da Geografia. Homenagem a Jorge Gaspar, ed. Centro de Estudos Geográficos. Lisboa. 498 – 500.
Auh, S. & Cook, C. (2009). Quality of community life among rural residents: An integrated model. Springer Science Business Media B.V.
Cheshmehzangi, A. (2012). Identity and public realm. Procedia Social and Behavioural Sciences, 50, 307 – 317.
Economic Transformation Programme (2010). A roadmap for Malaysia. Chapter 3: Greater Kuala Lumpur/ Klang Valley. Performance Management and Delivery Unit.
Edginton, C. R., & Chen, P. (2008). Leisure as transformation. Urbana, IL: Sagamore.
Emmanuel, M.R. (2005). An urban approach to climate sensitive design – Strategies for the tropics. Spon Press Taylor & Francis Group.
Erkip, F. (2003). The shopping mall as an emergent public space in Turkey. Environment and Planning, 35, 1073 – 1093.
Ewert, A.W. (1991). Outdoor recreation and global climate change: Resource management implications for behaviours, planning, and management. Society and Natural Resources, 4, 365 – 377.
Gold, S. (1980). Recreation planning and design. New York, McGraw Hill.
Givoni, B. (1998). Climate consideration in building and urban design. John Wiley & Son. Inc.
Godbey, G.C. & Mowen, A.J. (2003). The role of parks and recreation in promoting physical activity and health. Franklin county Healthier communities through active living summit, Kauffman Station PA.
Gold, S. (1980). Recreation planning and design. New York, McGraw Hill.
Gwiazdzinski, L. (2005). La Nuit, dernière frontière de la ville. Editions de l'Aube, ESSAL.
Hennessy, G. (2010). Seize the night: The business and culture of new york nightlife. CreateSpace Independent Publishing Platform.
Jacobs, J. (1964). *The life and death of great American cities*. New York: Random House.

Karim, H. A. (2008). *The quality of life of residents of urban low cost flats in Klang and Shah Alam*. Unpublished PhD. Thesis UKM, Bangi.

Knez, I. (2005). Attachment and identity as related to a place and its perceived climate. *Journal of environmental psychology*, 25, 207-218.

Kolmos, E. & Davis, S.J. (2007). Circadian rhythms: Rho-related signals in time-specific light perception. *Current Biology*, 17(18), 808 – 810.

Marcus, C.C. & Francis, C. (1998). *People place: Design guidelines for urban open space*. 2nd ed. New york: Van Nostrand Reinhol.

Michael J.L. & Sara F.L. (2012). *Leisure enhancement*. Sagamore Publishing LLC.

Mitchell, D. (1995). The end of public space? People's park, definitions of the public, and democracy. *Annals of the Association of American Geographers*, 85(1), 108 - 133.

Montano, D. & Adamopoulos, J. (1984). The perception of crowding in interpersonal situations: Affective and behavioral responses. *Environment and Behavior*, 16, 643 – 666.

Moore, R., Graete, A., Citelson, R. & Porter, E. (1992). *The impact of rail-trail: A study of users and property owners from three trails*. Washington DC: National Park Service, Rives, Trails, and Conservation Assistance Branch.

Neulinger, J. (1981). *To leisure: An introduction*. Boston: Allyn & Bacon.

Ngesan M.R. & Karim, H.A. (2011). Impact of night commercial activities towards quality of life of urban residents. *Procedia - Social and Behavioral Sciences*, 35, 546 – 555.

Ngesan M.R. & Karim, H.A. (2012). Night time social behavior in urban outdoor spaces of Shah Alam. *Procedia-Social and Behavioural Sciences*, 50, 959 – 968.

Ngesan M.R., Karim, H.A. & Zubir, S.S. (2012). Human behaviour and activities in relation to Shah Alam urban park during nighttime. *Procedia-Social and Behavioral Sciences*, 68, 427 – 238.

Ngesan M.R., Karim, H.A. & Zubir, S.S. (2013). Image of urban public park during nighttime in relation to place identity. Papers Proceeding. *AMER International Conference on Quality of Life 2013 Langkawi*.

Nikolopoulou, M., Baker, N., & Steemers, K. (2001). Thermal comfort in outdoor urban spaces: understanding the human parameter. *Solar energy*, 70, 227 – 235.

Oguz, D. & Cakci, I. (2010). Changes in leisure and recreational preferences: A case study of ankara. *Scientific Research and Essays*, 5(8), 721 – 729.

Ozcan, H. (2006). *Healing design: A holistic approach to social interaction in pediatric intensive care units in the United States and Turkey*. PhD Dissertation, Texas A & M University, USA.

Shaharuddin, A., Noorazuan, M.H., Yaakob, M.J., Kadaruddin, A. & Fahmi, M. (2010). The effect of different land uses on the temperature distribution in urban areas. *SEAGE*, Hanoi 23 – 26 Nov 2010. Online proceeding.

Sekaran, U. (2002). *Research Method for Business*. Wiley, John & Sons, Incorporated.

Zacharias, J., Stathopoulos, T., & Wu, H. (2001). Microclimate and downtown open space activity. *Environment and Behaviour*, 33, 296 – 315.

Zaki, S.A & Ngesan, M.R. (2011). A future town redesigned - How movement pattern is affected with the concept of night city. *Procedia - Social and Behavioral Sciences*, 36, 204 – 210.

Zaki, S.A & Ngesan, M.R. (2012). Concept of night city: A new dimension to a city’s economy. *Asian Journal of Environment-Behaviour Studies*, 3, 26 – 34.