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Image of Urban Public Park during Nighttime in Relation to Place Identity

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Abstract

Image is a part of variable in forming place identity. There are three attributes in measuring image domain in urban public park during nighttime which are conditions of physical setting; lighting and colour; and signage/ symbol. The aim of this research paper is to investigate the reliability of urban public park image in relation to nighttime place identity in Shah Alam. The data is collected through pilot questionnaire survey and the data were analysed using reliability scales known as internal consistency and correlation analysis. The results show the significant items used for image in determining the nighttime place identity of urban public park.

Keywords: Image; urban public park; place identity; nighttime leisure activities

1. Introduction

Urban parks and playgrounds fulfill a variety of social and psychological needs of the residents - for example, children's play, social meeting, recreation, and privacy. Urban public park creates more pleasant climate, relatively quiet, and with cleaner air than the rest of the city. The success in fulfilling the social functions by urban public parks may be measured by the frequency of the visitation by the population for whom they were designed. However, the hot climate during the day due to the effect of global warming

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discouraged human activities in an urban park (Ewer, 1991). Moreover, Shaharudin et al. (2010) argued that urban 'heat island' significantly reduced livability and human comfort where it is extremely hot to conduct outdoor activities during daytime. Furthermore the busy lifestyle of urbanites also affects the lack of time for leisure and recreation activities in urban outdoor spaces (Oguz and Cakci, 2010). 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). Cheshmehzangi (2012) argued that, public realm could appear in many ways comprising varied identity of place. In this respect, public realm does not have a certain identity but rather is fulfilled with several changing identities influenced by content (i.e. person or object) and context (i.e. culture or environment) where content is the inherent value (Relph, 1976). At this juncture, the study on the image of urban public park during nighttime 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/ Klang Vally benefits from the green space. This programme also aims to improve cities liveability by creating more comfortable spaces for leisure and recreational activities; and most importantly to create a sustainable environment.

2. Literature review

2.1. The concept of place identity

Place identity could best be understood as that which makes a place unique. It is not just the identity of a place that is important, but also the identity that a person or group has with that place (Relph, 1976). Proshansky et. al (1983), defined place-identity as a "*pot-pourri of memories, conceptions, interpretations, ideas, and related feelings about specific physical settings, as well as types of settings*". Although place attachment is considered a part of place identity, but place identity is more than place attachment. Place identity changes occur throughout a person's lifetime. It is a substructure of self-identity and is comprised of perceptions and comprehensions regarding the environment. These perceptions and conceptions can be organized into two types of clusters; one type consists of memories, thoughts, values and settings, and the second type consists of the relationship among different settings of place (Proshansky & Fabian, 1987). Place identity theory does not provide much detail regarding the structure and process (Twigger-Ross, Bonaiuto & Breakwell, 2003), but refers to "schemata" that Neisser (1976) describe as perceptions and ideas that also concern the physical environment. The cognitive structures tend to be remote from the awareness of the individual, even more than social and personal cognitive structures, because physical settings are "backdrops" against which events occur in a place (Proshansky et al., 1983). Moreover, the perspectives on place have gone from '*physical determinism*' where the environment was seen as having direct effects on behaviour (Franck, 1984), to the view of the people-environment relation as dynamic and interactive. Akin to this, Wicker (1979) also emphasizes that behaviour settings are social constructs developed over time.

2.2. The concept of image in place identity

Understanding a place comes from visibility and creation of place as an image. Image of a place, whether inclusive or collective, emphasises upon the importance of physicality of the place. Places may have become imageable on their own but what makes them associated with others is the awareness of signage and symbolism. It is forms understanding of a place, however, do not become meaningful merely because of their visibility. Moreover, past memories and relations with particular elements can also establish a signage and symbolism system in mind. Signage itself is one of the most generalised ways in

which identity of an environment is recognised. As it is elucidated by Walmsley (1988), social categories or in another words behavioural values '*rest on shared [and collective] meanings and that meanings are systems of signs*'. Within the urban environment, this is a very important factor. Akin to this, Lynch (1960) also emphasised upon the importance of nodes and landmarks as ways of enhancing legibility and identity of a place. As part of this theory, we can clarify that a building for instance can both be material and/or characteristics of an urban environment. Accordingly, Walmsley (1988) asserted that buildings in general are considered as a signage system. In this respect, both buildings and urban environments can appear as symbolic entities or landmarks. Symbolism itself is a trendy approach in urban design in order to make a place identifiable and distinctive. To Cooper (1974), there are four kinds of symbolism that could also be acknowledged in continuous stages of symbolism. The first kind is the '*archetypal symbolism*', which is the collective or global kind of symbolism. The second type is the '*associational symbolism*', whereby a place or element may become symbolic through '*associations based on direct personal experience…[that]…is a very private affair…[and]…is beyond the control of environmental designers*'. The third type is the '*acculturated symbolism*', which is merely attached to the association; but from a cultural origin rather than the personal attachment. The fourth kind is the '*symbolism of the familiar*', based on our everyday visual and experience that to symbolise security and continuity'.

2.3. The relation between place and time

Cheshmehzangi (2012) elucidated that actions taken place within the environment are outcomes of the urban system, which could modify qualities and adjust inner character development and future inputs within the public place. Nighttime activities in public-park are part leisure and part recreation that has become an urban trend (Ngesan and Karim, 2012). Hague and Jenkins (2005) described that the understanding of place requires various techniques and investigations based on three factors namely space, nature and time. Therefore, Relph (1976) explicated that place can have multiple identities to one person as well as to the whole society. Fearon (1999) also confirmed that persons might have multiple identities; therefore the possibility of having different answers and results will depend on different context that are self-associated with different times. Meanwhile, *'content'* (self) and *'context'* (circumstance or environment) are subject to change over time; therefore one can influence, manipulate and even change the other. Time then become an important dimension in the analysis of urban settings (Proshansky and Fabian, 1987). Physical settings have a life cycle; they are planned, develop, change, and indeed may eventually disappear. Although the '*time*' refers to the time decade (Proshansky and Fabian, 1987 and Fearon, 1999), the place can also be change over the daily time. Akin to this, Cheshmehzangi (2012) argued that, every time the place is experienced in a different way, the sociality and spatial inter-relations of it become distinctive. This will include if the place is experienced during nighttime. It definitely offers a different environment and experience of place throughout the whole day (Zaki and Ngesan, 2012). Besides, Gold (1980) highlighted that 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.

2.4. The urban design at nighttime

Artificial light emerged as a powerful instrument to redesign a place, providing visibility and protection. In our modern societies it plays an increasing role in promoting leisure activities, well-being and the most significant is that artificial light gives people the perception of night territory appropriation/domination (Alves, 2009). A multiplicity of places and events are allowed to take place, contributing in a decisive way to create bonds of identity between people and places. 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's 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). Meanwhile, nighttime is the period where people must be resting and sleeping, respecting their biological needs. Zaki and Ngesan (2011) argue that the agglomeration of nighttime activity is able to created different activity to attract people. They also confirm that the creative arrangement of urban components can increase the urbanites movement in urban outdoor spaces. Meanwhile, many nightlife activities are focus on tourists/ visitor such as pubs, bars, concerts and others that disturb the urban community during nighttime (Ngesan and Karim, 2011).

3. Methodology

The purpose of this paper is to investigate the reliability of urban public park image in relation to nighttime place identity through findings from the pilot survey. This study is a part of nighttime place identity research for an on-going master consists of three domains which are: (D1) Nighttime leisure behaviour; (D2) Nighttime image of urban public park; and (D3) Perception of nighttime place identity. Therefore, this paper only would determine the significant items of image attribute (D2) for the purpose of the main survey of place identity. For this particular research, Shah Alam's urban public park located in the city center of Section 14 has been chosen as a case study area due to its subdued urban nature: - a well provided community facilities; and the lack of nighttime commercial and entertainment centres. Shah Alam is the state capital of Selangor and situated around twenty-five kilometers west of the Malaysia's capital city, Kuala Lumpur. Since independence in 1957, Shah Alam can be considered as the first planned city that incorporated the green and community concept for urban development. The urban public park that will consider for this study is a *Padang* (green field of urban park), which are also known as Shah Alam Night Flier (SANF) by the Municipal City Council. It is an open area covered by grass and lighted up at night. 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 with other urban outdoor spaces due to the increasing of the SVF that realize effect of UHI.

3.1. Research procedure

The background study was conducted to gather information and findings from previous researches regarding the image of place identity. Besides, the researcher also had carry out an observation survey in Shah Alam's urban public park. The results served very well in formulating the attributes and items for images domain in the pilot survey of questionnaire as an assessment tool to measure the reliability of images of urban public park during nighttime. The strategy chosen for the research design was based on a pilot survey which required 30 samples of respondents. According to Thomas (2004), the sample size for pilot survey is within 10 to 30 sample of respondent which depend on the complexity of the study. The respondents are required to state their perception item on the image of urban public park during nighttime which influence them to carry out leisure activities. To answer the questionnaire, the respondents are required to state their preference of priority on a rating Likert scale 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. This study used a random sampling technique on target sample of respondent on the site; whereby the probability of sample of the urban park users during nighttime to be selected is the same. The survey has been done on nighttime weekends started from 7.30pm until 12.00 midnight.

3.2. Reliability analysis

There are three attributes in nighttime image of urban public park such as: (1) Physical setting and condition; (2) Lighting and colour; and (3) Signage and symbol (refer Table 1.). This study used indicators of a reliability scales known as internal consistency to measure the significant level of attributes. Internal consistency is the degree to which the items that make up the scale are all measuring the same underlying attribute (Pallant, 2007). Internal consistency can be measured using statistical tools from Cronbach's alpha coefficient available in the Statistical Package for the Social Sciences (SPSS). This tool also provides an indication of the average correlation among all of the items of image attributes that make up the scale. Values range from 0 to 1, with higher values indicating greater reliability for this study.

Table 1. Attributes, item and label for image variables of urban public park during nighttime

Attributes	Items	Item Label
Physical setting and condition	Visibility level of urban public park at night	PC1
	Design spaces of urban public park for nighttime leisure activities	PC2
	Size of urban public park	PC3
	Variety of urban public park facilities	PC4
	Condition of grass	PC5
	Condition of path ways	PC6
	Condition of flowers and trees	PC7
	Condition of benches	PC8
	Entrances	PC9
Lighting and colour	Sufficient of lighting	LC1
	Brightness of lighting	LC2
	Location of lighting	LC3
	Colours of lighting	LC4
	Colours of lighting for buildings in the surrounding park area	LC5
	Colours and design of landscape plants	LC6
	Colours and design of park facilities	LC7
Signage and symbol	Clarity of signage/ symbol in relation to urban public park at night	SS1
	Design of signage and symbol	SS2
	Naming of urban public park	SS3

4. Findings and discussion

This pilot study was developed to testify the reliability item of image of urban public park during nighttime to be used as part of domain in place identity research. Ideally, the Cronbach's alpha coefficient of scale should be above 0.7 (DeVellis, 2003). Sometimes it is difficult to get a decent Cronbach's alpha value when the item is less than 10 (Pallant, 2007). Furthermore Nunnally (1978) asserted that the value of Cronbach's alpha coefficient is 0.5 even if the items are fewer than 10. Meanwhile, according to Briggs and Cheek (1986), the item has to mention the Cronbach's alpha coefficient value together with

the mean of Inter-item correlation. The accepted optimal range for the mean of Inter-item correlation for this case is within range 0.20 to 0.40. Kline (2005) stated three cases for identify reliability value; (1) good if all positive moderate to strong correlations with value of Cronbach's alpha coefficient high which is more than 0 .7; (2) acceptable if some positive correlations; no negative correlations alpha; not awful which is more than 0.4 or 0.5 anyway; and items not noticeably different from each other; (3) problem with some negative correlations which value of Cronbach's alpha coefficient is less than -0.1 and/ or all correlations are near zero.

   Table 2 shows the result of summary for reliability analysis for each attribute studies which is in between 0.867 to 0.93. Therefore the value of Cronbach's alpha coefficient for all attribute is considered reliable and significant because they are more than 0.7. The mean of Inter item correlation which is in between 0.448 to 0.818 are also more than sufficient to support the Cronbach's alpha coefficients which need only 0.2 to 0.4. Therefore, items of image attribute tested in this study can be used in the final studies of place identity.

Table 2. Summary of Reliability value and Mean of Inter Item Correlations

Attributes	Item of Attributes (N)	Deleted Item of Attributes (N)	Cronbach's alpha coefficient (α)	Mean of Inter-Item Correlations
Physical setting and condition	9	-	0.867	0.448
Lighting and colour	7	-	0.926	0.647
Signage and symbol	3	-	0.931	0.818

   Table 3 shows the demographic profile of respondents for this pilot survey consist of 30 respondents from users of urban public park at night. There are 56.67 percent of female whereas male is 43.33 percent. The higher sample for ages of group is from 19 year old until 40 year old with 56.67 percent. Throughout the survey, 60 percent of respondent are married which showed that they are family oriented users. Moreover, 40.00 percent of respondent has stayed more than 10 year in Shah Alam. Auh and Cook (2009) highlighted 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 3. Demographic profile of respondents

Demography profile	Item	N	Frequency	Percentage
Gender	Male	30	13	43.33
	Female		17	56.67
Ages	13 – 18 year old	30	8	26.67
	19 - 40 year old		17	56.67
	41 - 65 year old		5	16.66
Married status	Single	30	12	40.00
	Married		18	60.00
Length of stay in Shah Alam	1 – 4 year	30	7	23.33
	5 - 9 year		11	36.67
	More than 10 year		12	40.00

4.1. Physical setting and condition of urban public park at night

Table 4 illustrated the 9 items for attribute of the physical setting and condition of urban park at night. Throughout the analysis, the higher value of Cronbach's Alpha (α) for this variable is (PC4) the variety of urban public park facilities which is 0.870 and the lowest is (PC8) the condition of benches which is 0.814. There is no deleted item since all the value of Cronbach's coefficient alpha (α) items for this attribute considered as reliable because they are above 0.7. Table 5 indicates the Inter-item correlation matrix for physical setting and condition of urban public park at night. It showed a positive correlation between items and consisting *r* value from 0.034 to 0.845. Meanwhile the items are not noticeably different from each other. Cheshmehzangi (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*'. According to Walmsley (1988), the '*environment as perceived rather than the real world which influences behaviors*'. Therefore certain characteristics and urban formations are important aspects of how environment can control or/and enhance the social behaviors.

Table 4. Reliability value Cronbach's coefficient alpha (α) for physical setting and condition of urban public park at night

Item label	Item	Cronbach's Coefficient Alpha (α) value if item deleted
PC1	Visibility level of urban public park at night	0.863
PC2	Design spaces of urban public park for nighttime leisure activities	0.837
PC3	Size of urban public park	0.850
PC4	Variety of urban public park facilities	0.887
PC5	Condition of grass	0.844
PC6	Condition of path ways	0.846
PC7	Condition of flowers and trees	0.838
PC8	Condition of benches	0.832
PC9	Entrances	0.865

Table 5. Inter-item correlation matrix for physical setting and condition of urban public park at night

Item label	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9
PC1	-	.530	.538	.210	.634	.417	.547	.183	.344
PC2	.530	-	.740	.389	.610	.537	.670	.690	.356
PC3	.538	.740	-	.034	.577	.511	.607	.464	.469
PC4	.210	.389	.034	-	.017	.153	.346	.563	.237
PC5	.634	.610	.577	.017	-	.845	.564	.571	.141
PC6	.417	.537	.511	.153	.845	-	.480	.668	.088
PC7	.547	.670	.607	.346	.564	.480	-	.725	.660
PC8	.183	.690	.464	.563	.571	.668	.725	-	.484
PC9	.344	.356	.469	.237	.141	.088	.660	.484	-

4.2. Lighting and colour of urban public park at night

Table 6 shows the 7 items for attributes of lighting and colour of urban public park at night. Throughout the analysis, the higher value of Cronbach's Alpha (α) for this variable is (LC1) the sufficient of lighting which is 0.920 and the lowest are (LC6) the colours and design of landscape plants which is 0.885. There is no deleted item since all the value of Cronbach's coefficient alpha (α) items for this attribute considered as reliable because it is above 0.7. Table 7. reveal the Inter-item correlation matrix for physical setting and condition of urban public park at night which showed a positive correlation between items and consisting *r* value between 0.447 to 0.929. 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).

Table 6. . Reliability value Cronbach's coefficient alpha (α) for lighting and colour of urban public park at night

Item Label	Item	Cronbach's Coefficient Alpha (α) if value item deleted
LC1	Sufficient of lighting	0.920
LC2	Brightness of lighting	0.917
LC3	Location of lighting	0.916
LC4	Colours of lighting	0.914
LC5	Colours of lighting for buildings in the surrounding park area	0.913
LC6	Colours and design of landscape plants	0.907
LC7	Colours and design of park facilities	0.910

Table 7. Inter-item correlation matrix for lighting and colour of urban public park at night

Item label	LC1	LC2	LC3	LC4	LC5	LC6	LC7
LC1	-	.551	.746	.645	.629	.606	.513
LC2	.551	-	.540	.929	.447	.576	.703
LC3	.746	.540	-	.614	.653	.654	.612
LC4	.645	.929	.614	-	.514	.593	.594
LC5	.629	.447	.653	.514	-	.866	.743
LC6	.606	.576	.654	.593	.866	-	.851
LC7	.513	.703	.612	.594	.743	.851	-

4.3. Signage and symbol of urban public park at night

Table 8 indicates the 3 items for attribute of signage and symbol of urban public park at night. Throughout the analysis, the higher value of Cronbach's Alpha (α) for this variable is (SS3) the naming of urban public park which is 0.925 and the lowest is (SS2) the design of signage and symbol which is 0.832. There is no deleted item since all the value Cronbach's coefficient alpha (α) items for this attribute considered as reliable because it is above 0.7. Table 9 shows the Inter-item correlation matrix for physical setting and condition of urban public park at night which is positive and have a strong correlation between

items and consisting *r* value between 0.732 to 0.872. The symbolism appears in a wide range in urban design. The use of colours in designing environments and buildings is one of the significant ways in achieving symbolism. Another approach is to exploit symbolism as a notifying or informing notion. It can enhance legibility of a place and can configure the importance of individuality in the wholeness. Naming, for instance, is believed to '*connect self and identity'*, not in a visual form but in a symbolic manner (Ferguson, 2009). Therefore by imposing names, this influential approach in symbolism not only becomes a subjective matter but a perceptual form of the urban identity.

Table 8. Reliability value Cronbach's coefficient alpha (α) for signage and symbol of urban public park at night

Item Label	Item	Cronbach's Coefficient Alpha (α) if value item deleted
SS1	Clarity of signage/ symbol in relation to urban public park at night	0.918
SS2	Design of signage and symbol	0.845
SS3	Naming of urban public park	0.931

Table 9. Inter-item correlation matrix for signage and symbol of urban public park at night

Item label	SS1	SS2	SS3
SS1	-	.872	.732
SS2	.872	-	.849
SS3	.732	.849	-

5. Conclusion and recommendations

This paper from a pilot study has been able to identify the reliability items of urban public park image in relation to its place identity during nighttime. Through the conducted survey in the case study of Shah Alam's urban public park, the image of urban public park such as physical setting and condition; lighting and colour; and signage and symbol are influenced place identity at nighttime. These findings may also influences behaviour of human leisure in urban public park during nighttime since the place and social behaviour is an inter-related element in place identity. Such evidences may contribute to new knowledge in the environmental behavior studies and help the urban designers, architectures and landscapers to create a sustainable design of public realm. Moreover, by carry out leisure in outdoor spaces during nighttime, it would rejuvenate the urban community and creating a healthy of urban lifestyle and improve the urban quality of life. As this research is confined to Shah Alam's urban public park with ample number of respondents for pilot survey, it is suggested that in the future of main survey involve adequate samples and considering urban public parks nationwide.

References

Alves, T. (2009). Geografia da noite. *Centro de estudos 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.

Briggs, S. R. & Cheek, J. M. (1986). The role of factor analysis in the development and evaluation of personality scales. *Journal of Personality,* 54, 106-48.

Cheshmehzangi, A. (2012). Identity and public realm. *Procedia Social and Behavioural Sciences*, 50, 307-317.

Cooper, C. (1974). The House as Symbol of the Self, in J. Lang et al. (eds.) Designing for Human Behaviour: Architecture and the Behavioural Sciences (pp. 130-46). Dowden, Hutchinson and Ross, Stroudsburg.

Economic Transformation Programme (2010). *A roadmap for Malaysia. Chapter 5: Greater Kuala Lumpur/ Klang Valley*. Performance Management and Delivery Unit.

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 Resouces*, 4, 365- 377.

Fearon, J. D. (1999). *What is identity – As we now use the word?*, Stanford: Stanford University.

Ferguson, H. (2009). Self Identity and Everyday Life, Oxon: Routledge.

Franck, K. (1984). Exorcising the ghost of physical determinism. *Environment and Behavior*, 16(4), 411-435.

Gold, S. (1980). *Recreation planning and design*. New York, McGraw Hill.

Gwiazdzinski, L. (2005). La Nuit, derniére frontiére de la ville. Editions de l'Aube, ESSAI.

Hague, C. & Jenkins, P. (2005). *Place identity, planning and participation*, London: Routledge.

Hennessy, G. (2010). *Seize the night: The business and culture of new york nightlife*. CreateSpace Independent Publishing Platform.

Kline, P. 1986. *A handbook of test construction*. New York: Methuen.

Lynch, K. (1960). The Image of the City, Cambridge: The MIT Press

Neisser, U. (1976). Cognition and Reality. San Francisco: Freeman.

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. (2012). Human behaviour and activities in relation to Shah Alam urban park during nighttime. *Procedia-Social and Behavioural Sciences*, 68, 427 – 238.

Nunnally, J. O. (1978). *Psychometric theory*. New York:McGraw-Hill.

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

Pallant, J. (2007). SPSS survival manual. Allen & Unwin.

Proshansky, H.M., & Fabian, A.K. (1987). *The quality of urban life*. Walter de Gruyter & Co. New York.

Proshansky, H.M., Fabian, A.K., & Kaminoff, R. (1983). Place-identity: Physical world socialization of the self. *Journal of Environmental Psychology*, 3, 57-83.

Relph, E. (1976). *Place and placelessness*, London: Pion Limited.

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 2010,* Hanoi 23- 26 Nov 2010. Onlice proceeding.

Thomas, S.J. (2004). *Pilot Testing the Questionnaire*. SAGE Research Methods.

Twigger-Ross, C.L., Bonaiuto, M., & Breakwell, G. (2003). *Identity theories and environmental psychology*. Aldershot, England: Ashgate.

Walmsley, D. J. (1988). *Urban living: The individual in the city*, Harlow: Longman Scientific and Technical.

Wicker, A.W. (1979). *An introduction to ecological psychology*. Monterey, CA: Brooks/Cole.

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.