Exploring the Relationship between Community Happiness and Environmental Setting

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Abstract

This study argues that although scenic beauty, preference, and restoration are correlated due to their functional significance over evolution, they still can be distinguished from one another within natural landscapes. It is under category of environmental setting that correlate with quality of life among community. The sense of community and feeling secured living in neighborhood are another indicators as quality of life. A total of 86 respondents were randomly selected involving in this study. This study is quantitative in nature using a questionnaire. The survey involved asking residents to answer a questionnaire that was administered using face to face interviews. The questionnaire contained 6 parts:Part 1- background information, Part 2- the needs of public park, Part 3- perception of safety, Part 4 – fear of crime, Part 5- sense of community, and Part 6 - perception on crime prevention through environmental design (CPTED). Exploratory Factor Analysis (EFA) is used in the early stages to gather information about the interrelationships among variables. The Cronbach's Alpha (α) value was used to determine the level of reliability through the internal consistency for each factor. The result for validity of all construct achieved Alpha (α) value exceeding 0.70. The observation on environmental setting in neighborhood and district of Selama also carried out to identify environmental factors that contribute in quality of life among residents. Hence, the objective of this paper is to determine the factors that influence on Happiest Selama Community. Therefore at the end of this paper, the output will be used to find the relationship between environmental setting andfactors of quality of life among residents in Selama district.

*Keywords:*Community, environmental setting, quality of life, sense of safety

1.0 Introduction

The quality of life is an important needof residents in the neighborhood that involved a sense of community. Social indicators are one of the components in well-being population at the aggregate level (Felce & Perry, 1995). It is given an influence in community well-being and happiness in their life that correlate with psychological effects. Psychological is a subjective feeling about each area of life that may also be reflected in reports of satisfaction and well-being (Felce & Perry, 1995). Same goes to the quality of life that defined the satisfaction of an individual's values, goals, and needs through the actualization of their abilities or lifestyle (Emerson, 1985). To ensure the quality of life, there are some indicators that has been interpreted by the Malaysian government. According to Malaysian well-being report 2013, specifically in a social index there are seven components to measure the Malaysian well-being,namely family relationship (score = 7.80), family income (score = 6.90), family health (score = 7:38), family safety (score = 7.39) families and communities (score = 7.80), family and spirituality (score = 8.28) and family and environment (score = 7.28)(Unit Perancang Ekonomi, 2013). The report explains that the highest score is family and spirituality. However, families and communities is a second highest in social index. It shows that social or community relationship is an important factor in order to create a well-being neighborhood. Same goes with to components of family and environment,even though, this component is located at level 6, but it is a factor that contributes to the measurement of social well being index in Malaysia. It was explained that the environmental setting is an indicator to have an influence towards community happiness. Malaysian well-being is a tool to measure the level of well-being of the people which also includes aspects of inclusiveness and sustainable development(Unit Perancang Ekonomi, 2013). According to Majlis Daerah Selama, the district of Selama is known to be one of district that achieved the happiness index. Therefore, this paper is to seek the factors that influence the happiness of community inthe district of Selama.

1.1 Literature review

Green or natural environmental setting that is reflected as high-quality landscape give psychological effects towards people or community on visual quality that evoke a positive response, while low-quality landscape will induce negative reaction (Han, 2010). Positive responses include happiness, safety, relaxation, exploration, and

approach behavior; negative reactions comprise fear, sadness, stress, anger, and avoidance(Han, 2010). The quality of life includes life experience that embedded within cultural and social context. The society which experienced poverty, crime rates, and pollution contribute predominantly to people's judgments of their lives (Marans, 2003). From the perspective of Pacione (2003) views' the quality of life must include two fundamentals elements; internal psychological and physiological mechanism that produces sense of gratification, and external phenomena that engage the mechanism. Thus, social indicators are appropriate for measuring societaland individual wellbeing. These indicatorsare describing the environments within people live and work. These may deal with issues such as levels of health care provision, crime, education, leisure facilities, and housing.

The second subjective indicatorsintended to describe the ways in which people perceiveand evaluate conditions around them(Pacione, 2003). Referring to Marans (2003), the place or geographic setting (city, neighborhood, or dwelling) would reflect the perceptions and assessments of a number of setting attributes that could be influenced by the occupant feeling and satisfactions. It is reflected by individual experiences of setting that would influenced their perception. Marans (2003) argues that scholars weredemonstrating these domains; communities, neighborhoods, community amenities and ambient environment are important for well-being of individuals and families. Thus, it could be summarized that the quality of life is the need of satisfaction, comfort, safety,happiness among the residents in the neighborhood.

Malaysian government placed high concern and committed on the quality of life (QoL) and well-being of its people in both urban and rural areas of Malaysian people (JPBD, 2011). Under the quality of life (QoL) report Malaysia 2004, there are eleven components to evaluate QoL namely; income and distribution, working life, transport and communication, health, education, housing, environment, family life, social participation, public safety and, culture and leisure (Unit Perancang Ekonomi, 2004) as shown in Figure 1.
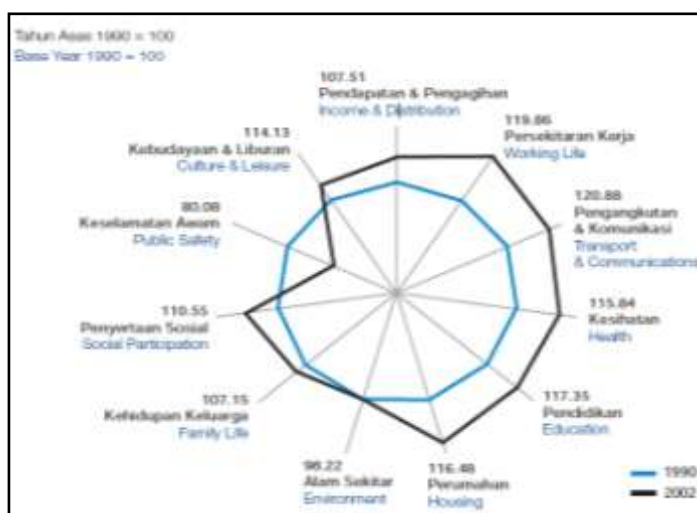

Figure 1: Living Quality of People in Malaysia In The Year 2002. Source : (UPE, 2004)

According to Deputy Finance Minister Datuk Ahmad Maslan said among the components of QoL that influenced the people's happiness index in both urban and rural areas were comfortability and security. He also said 70 per cent of the 29 million people in the Malaysia country were currently residing in urban areas while 22,000 villages were being occupied by eight other million people (Bernama, 2013). To achieve the government policy, The Federal Department of Town and Country Planning being the focal point for developing and coordinating the overall framework on Sustainable Development Indicators for local authoritiesthrough MURNInets (Malaysian Urban-Rural National Indicators Network for Sustainable Development) has now incorporated Happiness Index into the framework. Conceived in late 2010, the Happiness Index was based on international trends which gave special focus on happiness in the context of the Government's effort in improving the well-being of communities towards achieving a Quality and Sustainable Living Environment by 2020(JPBD, 2011). The Happiness Indexfor sustainable community's dimension that include community vitality, cultural diversity and resilience, health, education, ecological diversity, quality of life and efficiency of governance (JPBD, 2011).

The Happiness Index is a way for government to investigate the extent of government policywhether it had provide sufficient welfare to the authorities. It provides guides to local authorities interested in improving the level of well-being of its communities (JPBD, 2011). According to district council of SelamaPerak, theyhad reached the happiness index for their district. They believedthis sense of happiness have a relation with a place or

geographic setting (natural with rural approach). Most people tend to associate happiness with goodfeeling, that is, with a life that offers a variety of pleasure and comfort.

This paper attempted to discuss about community relationship or social interaction, safety and geographic setting (natural environment).The three mentioned components are the contributors towards improving the quality of life and happiness. Community relationship can be described as the simplest first grouping beyond the family that has a social significance in which is conscious of some local unity (Ashok Kumar, 1973). In other words, sense of community is the extent to which any member feel connected and committed to others in the community, which bears on sense of security and belonging(Rogers, G. O., & Sukolratanametee, 2009). Sense of community is the important aspect in a neighborhood to enhance feeling of safety and eliminate the opportunities of crime (Austin, D. M., Furr, L. A., & Spine, 2002). However, in terms of neighborhood design, it will influence the relationship between communities, especially in the physical environment.Talen (1999), argued that community relationship has influenced by environmental factors to stimulate the community on frequency and quality of sense. Uzzell, D., Pol, E., & Badenas (2002)found that the element of the physical and social environment can enhance the relationship between residents using community space in two Guildford neighborhoods, Surrey England. The study found that 70 % of respondent mentioned that the Onslow neighborhood had been in a good physical image compare to Stoughton neighborhood.

Additionally, the senses of happiness in the neighborhood are related with the sense of fear of crime. These elements give more of the sense of happiness, and it is appropriate with 'the satisfaction'. The sense of fear of crime is related with crime happened. And crime will involve the cost. The categorized costs of crime are 'cost in anticipation of crime', 'cost as a consequence of crime' and 'cost in response to crime'(Supt Goh Boon Keng, 2006). In Malaysia, the total cost of crime in 2004 can be divided into two categories, which are criminal justice system costs and crime costs. The total estimated costs of those crimes were RM15,359 million (Supt Goh Boon Keng, 2006). Although the cost in monetary terms is visible, the social cost of crime, such as the fear of becoming a victim of a crime, is less apparent(Hale, 1996). In fact, the fear of crime is purported to be higher than actual crime rates and the effect of fear of crime causes individuals to implement avoidance strategies such as staying in at night or avoiding certain areas (Fowler, F. J., Jr., , & Mangione, 1986).

Fear of crime can be described as a "wide range of emotional and practical responses to crime…individuals and communities may make" (p. 367) (Pain, 2000). It is a manifestation of a feeling that one is in danger. According to Pain (2000), fear of crime is not an inherent characteristic of the individuals but rather something that may come and go, dependent on and influenced by one's experiences, especially as they relate to one's position in society. Some studies have postulated that fear of crime is assumed to be signs or symbols of criminal victimization(Lee, 2001)as the frequency of one becoming a victim of crime will induce a higher feeling of fear of crime(Gray, E., Jackson, J., & Farrall, 2008). Nevertheless, individual understanding of fear of crime differs as it depends on the situation in which one feels fear of crime(Schneider, R. H., & Kitchen, 2007) on design and the environment (Spinks, 2001), as well as their psychological and social life factors (Minnery, J. R., & Lim, 2005).

1.2 Case study

The study area involved Bandar Selama with the size of 7,952.74 hectares which is known to be thedevelopment centre of Selama Local Plan area. The land use encompasses a wide area of 1,068.32 hectares which covers a few primary reserves like institutions and society facilities, housing, business, recreation and also industrials area (Majlis Daerah Selama, 2009). The study area basically consists of an agricultural community that is based on an agrarian Muslim Malay community. Referring to the Selama Local Plan (2009), the city centre development strategy leads to increasing function of Bandar Selama as a *PusatTempatanUtama* (PTU)- main local centre. The Bandar Selamadevelopment strategy will focus to increase the town's accessibility and land used restructuring strategy. The accessibility plays an important role in encouraging investments in the study area and benefits the socio-economic situation (Figure 2).

Bandar Selama is a planned centre for tourists to obtain information on tourism activities carried out in certain places. The existence of waterfalls, such as LataRambung, LataDamak, LataTebingTinggi and LataPanggongare the natural resources that have special potential to attract more visitors (Majlis Daerah Selama, 2009) as shown in Figure 3.
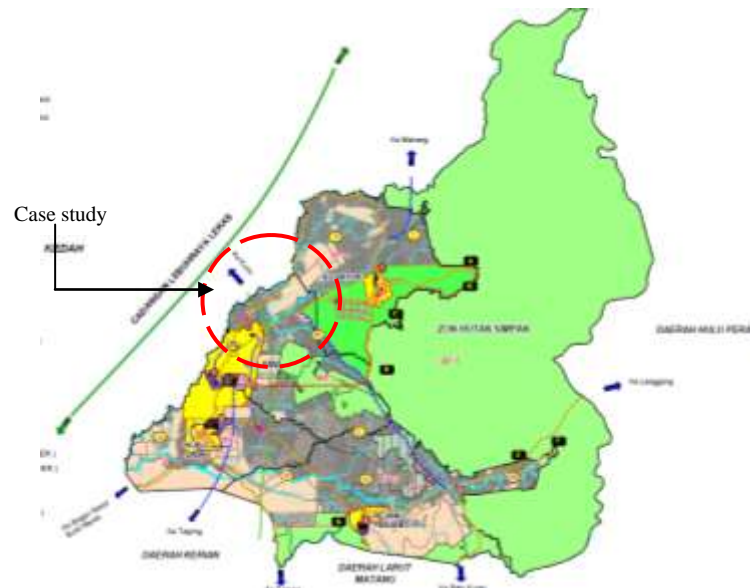
Figure 2: Case study area at Bandar Selama Perak. Source :Majlis Daerah Selama (2009)

a. LataRambung

b.LataTebingTinggi

c. LataPanggungIjok

d. Major road at Selama district
that still preserved by natural
physical setting that could give
positive psychological effects
towards its' people and
community.

e. Afternoon view of one
ofSelama district's major road
that give eye soothing and evoke
social wellbeing.

f. View towards Selamadistrict's of
peace and calm social and business
centre evoke the sense of safety in
their community

Figure 3. Geographic setting and physical environment in Selama. Source :Majlis Daerah Selama (2009)

The total area for housing development in Bandar Selama is around 608.7 hectares with a total estimation for the housing   unit   at   4,789   which consists   of public   and   private   housing   scheme   areas, RancanganPerumahanKampungTersusun(RPKT), traditional   villages, new   villages and staff   quarters. The existing planned housing areas are more focused in the area near the growth centres like Bandar Selama, RantauPanjang and MengkuangUlu. Meanwhilst, traditional villages on the other hand, are mostly scattered and has been expanded organically along the main road covering 12 settlement areas all over Bandar Selama.

2.0 Research methodology

The research method included a structured questionnaire, which was administered in the context of face-to-face structured and formal interviews. Simple random sampling technique was used to obtain the data from the respondent. Residents in area Bandar Selama were involved as respondents, and 86 respondents were participants in this study. Any residents are living in the town and neighborhood area in the Selama district will be selected to

participate in this study. They were considered valid to be the respondents as 83.3 percent were permanent residents of Bandar Selama. 79.1 percent of respondents were living in Selama residential area for more than 5 to 7 years. According to Villarreal & Silva (2006), if the residents are living in the neighbourhood more than 5 years they are known to be as a stability community. Stability is a community in a neighbourhoodthat has the capacity and capability to investigate or good knowledge for any matter that occurred in their neighbourhood(Clampet-Lundquist, 2010). Therefore, these residents have the sense of belonging on their neighbourhood. The observation and image capture also have been used to capture the environmental natural setting around the neighbourhood ofBandarSelama.

3.0 Measuring the constructs

The questionnaire contains four main components, namely (a) background of respondent, (b) perception of safety (POS), (c) fear of crime (FOC) and (d) sense of community SOC). Every item in the questionnaire will be followed by eight choices of answers using the Likert Scale. Choices of response range from (1) Highly Disagree to (8) Highly Agree for the POS, FOC and SOC dimensions. A high score indicates that the respondent has a high degree of POS, FOC and SOC while conversely a mean score indicates a low of POS, FOC and SOC. The validation and confirmation of all constructs were done using Exploratory Factor Analysis (EFA). EFA is used to gather information about the interrelationship among a set of variables(Pallant, 2005).The result for the level of reliability was found by calculating the Cronbach's Alpha. The dimensions of the construct have a good reliability value as the Cronbach's Alpha value exceeds 0.60(Nunnally, J.C. & Bernstein, 1994). The results indicated that the Alpha values for perception of safety (POS)= .88, fear of crime (FOC)=.94, and sense of community (SOC) = .96.These results of Alpha value for all construct and dimensions achieved good Alpha reliability levels(Nunnally & Bernstein, 1994) as shown in Table 1.

Table 1.Cronbach's Alpha value for all construct

Constructs	Items	Description of Items	Corrected Item-Total Correlation	Reliability (Cronbach's Alpha)
Perception of safety (POS)	1	Whenever you are out at night, how far do you feel safe?	.76	
	2	How far do you feel safe if you are walking alone in the neighborhood at night?	.79	.88
	3	How do you feel when you are home alone at night?	.76	
Fear of crime (FOC)	1	I feel worried when I come across vandalism	.67	
	2	I feel worried when walking in areas with dense and unkempt vegetation	.75	
	3	I feel worried when walking along abandoned housing project areas	.79	
	4	I worry when I come across people loitering about near to residential area I feel worried when I come across people who are intoxicated	.82	
	5	I worry when encountering people who are homeless	.78	.94
	6	I feel worried when I hear about news regarding crime through the media	.79	
	7	I feel worried when I hear stories or experiences about being victims of crime from friends and neighbours	.87	
	8	I frequently reflect on images of crime when reading crime related news	.80	
	9		.72	
Sense of community (SOC)	1	I canidentifyallresident in thisstreet	.83	
	2	I can identifymost of theresidentshere	.86	
	3	Most of the community knows me	.85	
	4	I always participate in community activities organized by the community association	.78	
	5	My neighborhood has a face book group to get any information or anything happened in this community	.41	
	6		.79	
	7	I look aftermyneighbours' children/plants/petswhentheygoonvacations I value my neighbour's/community's views or comments		
	8	Whenever there are problems in this residential area, they are solved by the community	.83	.96
	9	I feel that I am one of the community members in this residential area	.74	
	10	I can trust the community here	.86	
	11	I feel this residential area is good to live in	.87	
	12	I am happy living among the community in this residential area	.87	
	13	The community here always share importnat events such as birthday parties, weddings, festivals (Deepavali, Hari Raya and so on)	.82	
	14	The community here care about each other	.78	
	15		.82	

4.0 Results and discussion

Respondent involved in this research is45.3% female and 54.7% male. They were 32.6% aged in 40s followed by the 50s (24.4%), 30s (16.3%), 60s and above (14%) and 20s (12.8%). 57% of respondent havestayed in the residential area for more than 7 years and above, followed by 5 to 6 years (22.1%), 3 to 4 years (14%), 1 to 2 years (4.7%) and less than 1 year (2.3%). Most of the respondents are owners of houses (83.3%), married (69.8%) and had higher education up to university level (45.3%) followed by secondary education (34.9%). Most of respondents are Malay (62.8%) followed by Indian (20.9%) and Chinese (16.3%). Theycame from different background religion which are Islam (59.3%), Hindu (18.6%), Buddha (11.6%) and Christian (10.5%). Most of them working in government sector (32.9%), self employed (farmer/ business/ retailers-27.1%), private sector (22.4%), retirees (14.1%) and unemployed (3.5%).

Fear of crime (FOC) consists of three dimensions (physical environment, social environment, indirect victimization) and the result found that respondents have higher sense fear of crime on physical environment (PHY) with 18.5 percent compared to social environment disorder (SOC= 18.2%) and indirect victimization (VIC=18.3%) as shown in Figure 4. The physical environment element involved physical design that could affect the sense of fear such as abundance building, vandalism, bushes, etc.
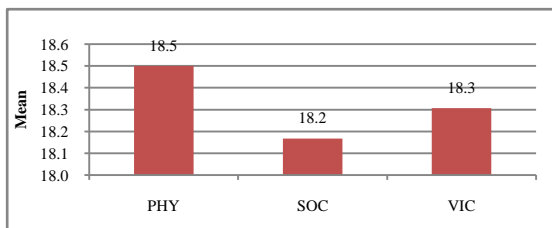

Figure 4.Mean difference value on fear of crime dimensions – physical, social environment and indirect victimization
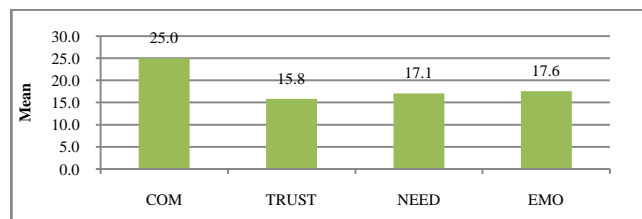Note: PHY: Physical environment, SOC: Social environment, VIC: indirect victimization

Figure 5.Mean difference value on sense of community dimensions – community involvement, trust and influence, needs and sharing emotion
Note: COM: community involvement, TRUST: trust and influence, NEED= Need, EMO: Sharing emotion

For the sense of community in Bandar Selama, this study found that the community involvement (COM) is the main attribute in the community relationship with 25 percent. It is followed by sharing emotion (EMO=17.6%), needs (17.1%) and trust and influence (TRUST= 15.8%) as shown in Figure 5. The result explained that community ties among respondents are higher because of community involvement. The activities involvement such as *gotong-royong* (cooperative activities), knowing their neighbours in their street, participate in community activities and has a face book group community.

Good relationships among the community in the neighbourhood provide the sense of safety among residents. This is referring the result of how often respondents go out at night. How often go out at night it is the one indicator to measure the sense of safety of residents (Cozens, Hillier, D., & Prescott, 2001). This result is shown in Figure 6. Referring to the graph, it is explained that respondents feel safe go out at night for 5 to 6 times in a week with 28.2 percent.
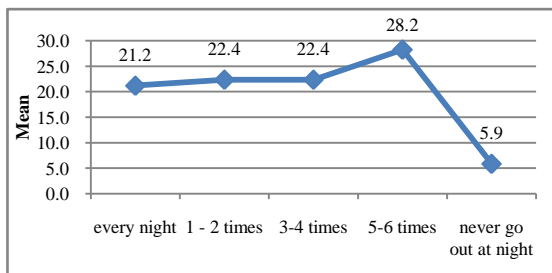

Figure 6. Mean difference frequencies of go out at night

Table 2. Pearson product-moment correlation between fear of crime and sense of community

	Correlations		
		Fear of crime	Sense of community
FOC	Pearson Correlation	1	**.379**[**]
	Sig. (2-tailed)		.00
	N	83	60
SOC	Pearson Correlation	**.379**[**]	1
	Sig. (2-tailed)	.00	
	N	60	62

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

It is followed by 1 to 4 times in a week (22.4%) and every night (21.2%). The number of respondents that never go out at night only 5.9% (21 respondents).The factors that contribute towards not going out at night are age factor (4.7%), incapable-healthy condition (5.8%) fear with darkness (1.2%), worried if burglary happen in their home (5.8%), do not have enough money (1.2%), busy with their job (1.2%) , prefer to rest with family(2.3%) , and no reason to go out at night (2.3%). This finding shows that most of the respondents feel safe to go out at night which it could be related with trust among their community to help each other if there is unwanted incidents occurred.

The correlation betweenfear of crime (FOC) with the sense of community (SOC) was investigated using Pearson product-moment correlation coefficient. The result has shown in Table 2. The output shows that there was a medium, positive correlation between the two variables[r=0.379, n=60, p=0.00). The output explains that SOC helps to explain 14 percent of the variance in respondents' score on the FOC.This finding can be explained that if the feeling of fear of crime among residents is increased, thus the community activities will be increased. It shows thatsense of fear on crime gives an influence on community relationship. This result is consistent with previous scholars that community relationship can reduce the sense of fear on crime (McMillan, D.W., & George (1986); Taylor, Gottfredson, S. D., & Brower, 1984).

5.0 Conclusion and recommendation

The findings confirm that residents of neighbourhoods with abundant green space tend, on average to enjoy better general health. This research shows that the percentage of green space in people's living environment has a positive association with the perceived general health of residents. This finding is support Maas, Verheij, Groenewegen, de Vries, & Spreeuwenberg (2006), in their study according the relationship between green space with general health.Additionally, social interaction is another factor that contributes in the sense of general health. The relationship among communities in neighbourhoods is significantly associated with sense of security to attempt the quality of life. This study was confirmed that there is positive correlation between sense of community with fear of crime. The result suggest that the community activities will increased, when the community feeling unsafe from crime.Due to the community activities such as *gotong-royong*, community gathering (wedding ceremony), birthday party, neighbourhood watch (*rukuntetangga*) that impulse the sense of belonging to the community.

This study yielded interesting a finding of the correlation between green and community happiness. However, this approach entails limitation in terms of characteristics of respondents living environment. The distance of green space in the respondents' living environment should be measured within a similar distance with other neighbourhoods. This is important to reduce the green environment impact biases of respondents. Furthermore, the selection of respondents is randomly selected in town and neighbourhood area. This selection is not reflected to the real community in a particular neighbourhood. Therefore, in the future study could test improvements of the method, for example, by justified the area of green space with their distance of particular neighbourhood.

6.0References

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