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"Public Participation: Shaping a sustainable future"

Community Participation Strategies in Planning for Urban Parks

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Abstract

Parks, open spacesor green areas could improve people's quality of life and enhance the city's environmental quality. This paper reviews current thinking about the benefits of parks, examines the criteria on park values and describes some of the strategies and the applicability of these strategies in park planning. Employing Q-methodology in getting public opinion on issues relevant to the research will increase awareness among the local community groups to preserve the values and amenities of the park and its environmental setting. The outcome of this research offers essential insights on the preferences and community values towards successful urban parks.

Keywords: Parks and recreation; community participation; q-methodology; quality of life

1. Introduction

The functions of parks as a place to provide opportunities for any kinds of recreational activities promote social interaction among community and enhance air quality in the urban environment demonstrate the importance of urban parks in improving peoples' quality of life. This paper briefly discusses the literature review on urban park benefits to emphasize the role of urban parks in enhancing the quality of life, explains the criteria for successful urban park system and finally, discusses the application of Q methodology in assessing perception of the community on the role of current urban park characteristics in people's quality of life. Previous studies indicate that natural places such as urban parks,

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forests, greenbelts and natural features such as trees and water contribute to the quality of life within an urban context (Chiesura 2004). In creating successful urban parks, the voice of the community in decision making process is very important. Saffuan, Ariffin and Amin (2013) stated that parks should be planned effectively to fulfill the needs and demands of the community, whereby people from upper or lower classes could use the recreational facilities together. In planning and developing sustainable cities, involvement from the local communities are required and communities need to analyze their own problems, express their own thoughts on the solutions and support any community strategies (Mohamed Anuar and Saruwono 2013).

In contemporary park planning process, the idea that parks provide benefits to the community, through the use of the Benefits-Based Management (BBM) concept was first introduced to the leisure, park and recreation field in 1991. This approach embraces the community's voice in park planning, assesses community perception on urban park characteristics and the benefits they hope to achieve while visiting urban parks. There are several methods already initiated by local authorities, planners, managers, the private sectors or even the non-governmental bodies to conduct public meetings as a platform to assess community viewpoints to assist in an urban park planning and management process. One method that is gaining wide interest among scholars and researchers in engaging the community perspective on park issues is Q methodology - a systematic study that connects between qualitative and quantitative research concerning perceptions, beliefs, attitudes, opinions or viewpoints about a topic. Brown & Daniel (1987) mentioned several areas that had applied Q methodology. The main purpose of Q methodology is to assess the diversity of opinions among the community, produce new themes for a group of people and subsequently be used in improving the urban park quality.

2. Urban parks and the quality of life

The American National Park and Recreation Association (2010) highlighted the importance of parks in terms of the community's quality of life, health, economic benefits and the general well being. Urban parks provide opportunities for active and passive recreation activities and thus contribute the improvement of health. Previous studies have also supported that the presence of the natural environment generates positive contribution to people's life. For example, Mohamed and Othman (2012) found that the natural elements in a park contributed to attract visitors to come to the park. Nasution and Zahrah (2012) emphasised the importance of public open space as an element of the urban environment which brought positive contribution to people's quality of life. Those authors postulated that the quality of life can be linked to the interaction between people and the surrounding environment. Shukur, Othman and Nawawi (2010) stated that parks offer a variety of opportunities to fulfill individual, social, economic and environmental benefits. Parks also offer enormous benefits towards children's development. Children are affected by a variety of physical activities and social relationships as part oft heir development process (Oloumi et al. 2011). In this technological era, children are more likely to spend more time indoors, playing video games, watching television and engaging in the social media on the Internet. Zhang and Li (2010) found that the numbers of children performing outdoor recreation activities all over the world are decreasing in the past few years. In Malaysia, the Economic Planning Unit (2011) listed health, environment and social participation among the components to measure quality of life. The government realized the importance of parks to improve the liveability of residents, leading to the introduction of Greener Kuala Lumpur initiative as one of the entry point project in the Greater KL/Klang Valley National Key Economic Area (NKEA). The vision of this programme is to provide the amount of green spaces per person half of the World Health Organization (WHO) standard of 8 square metres per person by 2020. By having more green spaces, the liveability of the city could be greatly improved.

2.1. Health benefits

Human health can be divided into two which are physical health and psychological health. Urban parks are able to enhance these two aspects of human health by providing opportunities for recreational activities. Several researches have shown that those engaged in recreational activities are likely to have better health compared to those who did not. For example, a study by Shukur, Othman and Nawawi (2010) found that park users are more likely to be in a healthy condition than those who did not use parks regularly as parks encourage people to engage in physical activities. However, characteristics of parks do influence the pattern usage and activities. Well maintained parks provide venues for recreational and physical activities among the urban community to improve health and maintain fitness. Zhang and Li (2010) stated that accessible parks, playground and recreational facilities help in increasing physical activities and less sedentary activities. Besides the physical health benefits, nature and recreation are also important for social and psychological development (Chiesura 2004; Khotdee et al. 2011). Khotdee et al. (2011) added that the view of nature tends to improve people well being by releasing them from stress, pressure and mental fatigue. As technology advances, urban community are likely to spend most of their time working, and urban parks provide ideal places to seek for refuge, in escaping from the pressures of urban living (McCormack et al. 2010).

2.2. Social benefits

Social relationships among urban community in the city may decline due to the pattern of working and busy schedules. The establishment of urban parks could provide a solution to promote social interaction within the various community groups through organised events such as health campaign, sports, recreation and tree planting programmes. Besides enhancing social interaction, urban parks could also provide suitable venues that contribute towards improving social bondings among family members by engaging in recreational activities together. Moreover, parks could also function as a gathering place for any social event and encourage cohesiveness either among family, friends and neighbours (Mansor and Mohamad 2010). Sherer (2006) reported that previous studies had proven that residents living in neighborhoods with more green and public open spaces foster better social interactions. As such, successful parks could enhance social interaction among community in an urbanising city. The success of public open space could be determined when the place contributes to the social interaction and promote psychological comfort and safety(Nasution and Zahrah2012).

2.3. Environmental benefits

As global warming becomes an environmental issue especially in urban areas, landscape elements in the urban parks play the role of keeping down the city's temperature. Characteristics of urban parks include trees, flowers, vegetation, biodiversity and natural features contribute to the environmental ecosystem in the city. Sherer (2006) highlighted the importance of trees and soil in urban parks, which play the role as natural filters, for curbing water pollution. According to Chiesura (2004), many studies had found that the natural features including urban parks and open spaces contribute greatly to the quality of life. The natural environment also contributes to children's development as stated by Corraliza et al. (2011). They also added that nature can teach children to be resilient so that children who are exposed to nature could cope with adversity better that those who did not. Another study among youths aged 13-17 years old also concluded that the "physical environment is pivotal in order to increase the level of youth involvement...in physical activities" (Abdul Latif et al. 2011). In addition, the American National

Recreation and Park Association (2010) highlighted that tree-dense parks are able to help reduce air temperature, improve the local air quality and help improve the overall environment.

2.4. Park values criteria

The diversity of urban park settingsholds value to the public that cannot be ignored. A study conducted by Manning, Vallere and Minteer (1996) listed eleven use (functions) of parks. This kind of information would be very helpful in interpreting the themes for recreation setting associated with the urban park benefits.
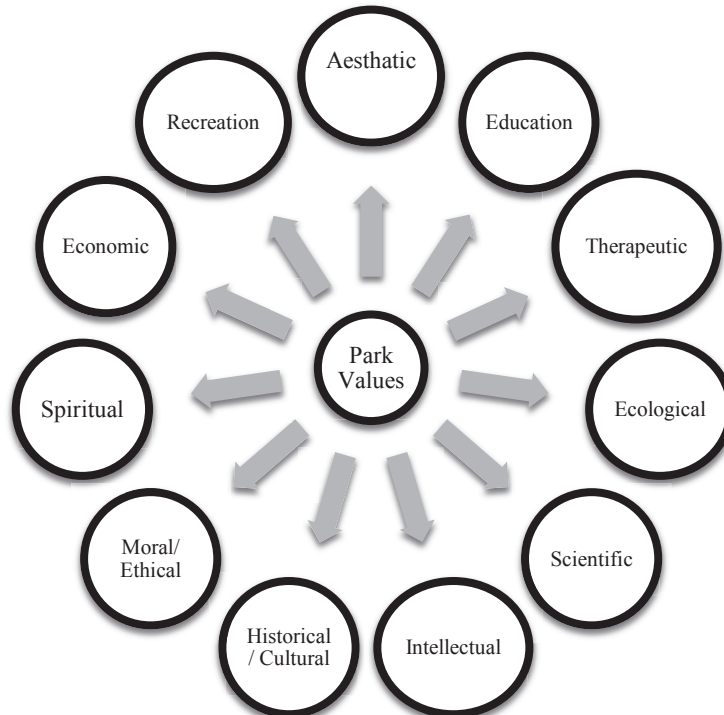

Fig.1.Values of parks

Source: Manning, vellere and minteer, (1996)

3. Benefits-based management (BBM) approach in park planning

Managers and local authorities develop parks to provide opportunities for people to benefit from them (Lee and Driver 1999; Shin, Jaakson and Kim 2001). Recreation scholars and professionals believed that park users attain many benefits from the usage and availability of recreation resources (Smith et al. 2010). Park users need to perceive recreation opportunities by themselves, indulge in recreation activities and gain the benefits. In view of this, public involvement in decision making process is extremely important to provide beneficial recreation settings in the parks. Therefore, the community or urban park users are the main focus in the Benefits-Based Management (BBM) approach. This approach is useful to develop and design management action in the park planning process. Lee and Driver (1999) explained that the origin of BBM approach was from a workshop conducted by Driver and Peterson in May 1989 to assess

the knowledge of recreation benefits. This conference resulted in the publication of a book entitled *Benefits of Leisure* published in 1991 (Lee and Driver, 1999). Following this, preliminary development of the BBM concept in the area of amenity resources began. This study attempts to apply the BBM approach in assessing community perception, opinions and views on the benefits they hope to attain while visiting the urban park and examines the recreation settings in the urban park. The study conducted by Stein and Lee (1995) revealed that benefits that park users hope to attain can be related to particular recreation activities and physical, social and managerial characteristics.

4. Community participation strategies in park planning

The voice of the community in decision making process is an important requirement to establish quality products or services that fulfil their needs and demands. In the field of open space managementin Washington, USA, the Interagency Committee for Outdoor Recreation (2005) stated that involving citizens representing diverse community of interests, in all stages (from goal setting to programme and project design) will produce a system that is more responsive to the community's diverse needs. The voice of the community should be taken more seriously since any decision could affect their lives.Mohamed Anuar and Saruwono (2013) added that the public has the right to know on what is happening in the surrounding environment and the right to get involve in decision making process which particularly affect them in places where they live and work. In order to develop a liveable city and healthy community, planning for parks is an extremely important matter (Saffuan, Ariffin and Amin 2013). Therefore, Shing and Marafa (2006) suggested that practitioners and authorities should initiate more public participation opportunities because park users are the major stakeholders and could ensure the success of urban parks. For example, a dialogue session between managers or planners and representatives from various community groups is important to know what their needs are and to generate new ideas. Another method, the Q methodology, is used in recreation and leisure research for assessing people opinions, beliefs, attitudes and perceptions (Ward 2009). Q methodology received increasing attention among researchers to assess community perception and was widely used in parks and recreation management. The crucial stage of Q Methodology is the collection of concourse as items for respondents to rank order, which could produce a theme for some groups of people, who share similar views or perception.

5. The application of Q methodology

This paper reports on a study that aims to uncover community perceptions on urban park benefits based on a variety of the park and recreational settings. Q methodology is a systematic technique and it acts as a bridge between the qualitative and quantitative methods by presenting items (photos, objects or statements) for respondents to rank order. Brown (1997), an influential leader in Q methodology, explained that William Stephenson has created this technique and published work in a journal called *Nature*. Stephenson held two doctorates, a PhD in physics at the University of Durham in 1926 and PhD in psychology at the University of London three years later (Brown 1997). Brown added that Stephenson later served as the last assistant to Charles Spearman, the inventor of factor analysis. The application of Q methodology is widely used among researchers in the disciplines of communication and political science, recreation, and lately in health science (Brown 1997). Exel and Graf (2005) explained that typically, Q methodology is a study where respondents are shown a set of statements or images about an issue or discourse. This set is called the Q-set. In this method, the participants who are called the P-set are individually asked to rank-order the statements or images from their perspectives or points of view, fashioning along some judgement, preference or opinion about them. Exel and Graf (2005) further

described that the sorting process is mostly done using a quasi-normal distribution. Q methodology consists of five main steps: i) develop the concourse, ii) establish Q sample, iii) select P set, iv) Q sorting process, v) factor analysis and interpretation process.

5.1. Developing the concourse

Concourse is an essential element in Q methodology. Brown (1997) explained that the concourse could be formed either simply through general public opinion, or to the highly-analytical scientific discussions among experts. Exel and Graf (2005) defined concourse as the gathering of all the possible items that the respondents can relate about the issue, and it is supposed to contain all the relevant aspects in all the discourses. It may be in the form of personal statements (should be opinions, not facts), objects or pictures. The concourse in this study will be a collection of photos illustrating recreation settings in an urban park including the managerial, physical and social characteristics as identified in the BBM approach. Photographs are chosen to be the best to represent the real conditions of the current urban park characteristics available for the community. Mohamed, Othman and Ariffin(2012) clarified that visual images play an important role in landscape change since these images are easily readable and legibleby the public. An inventory of the recreation settings for various park characteristics in the study area will be recorded in order to develop a list consisting of managerial, physical and social characteristics. Then, photographs will be captured as many as possible to include all the characteristics, reflecting either positive or negative situations. Therefore, different depictions of the park and recreation settings will be provided as an attempt to diversify the images to represent a range of perceptions and to avoid an unbalanced distribution on the score sheet.

Fig.2. (a), (b) and (c): Examples of Concourse Set (photos on managerial characteristics)

Fig.3. (a), (b) and (c): Examples of Concourse Set (photos on physical characteristics)

Fig.4. (a), (b) and (c): Examples of Concourse Set (photos on social characteristics)

5.2. Establishing Q sample

Q sample is defined as a representative from a set of concourse developed earlier. It is the representatives of the wide range of opinions on a particular interest. Ward (2009) stated that the Q samples could be taken from several sources such as the literature, media, direct interviews or group discussions as long as the selection is representative of the interest being studied. To assess the community's perception on benefits they hope to achieve while visiting urban park, the Q sample chosen should widely represents the real condition in terms of recreation settings in the study area. The process of photos selection will be done based on an inventory list. In the process, careful consideration will be given to representativeness of the photos to ensure the selection covers a wide range of the urban park characteristics.

5.3. Selecting respondents (P set)

Q methodology relies on the fact that perceptions or viewpoints towards an issue will be different from one person to another. Therefore, Stenner (2005) highlighted the aim of this method is not to estimate the population statistics but to access the diversity of viewpoints among respondents. Brown (1980) quoted by Exel and Graf (2005) explained that the P set is a structured sample of respondents who are believed to suit the requirement needed, people who are likely to have a clear view on a topic. These respondents could define a factor in the data collection process. In the context of this study, respondents are to assess the benefits that they perceivewhile they visit an urban park. The perception is about park benefits gained through the interaction between people and the surrounding environment. For this purpose respondents, called the P set, will be chosen among the urban community who play the role of urban park users. Their voices and opinions will be very important to determine the success of available urban park characteristics in improving peoples' quality of life.

5.4. Q sorting process

Q sorting is the process where the respondents need to sort the Q set provided according to a range of choices, which are usually divided into three categories: agree, neutral and disagree. According to Ward (2009), the process is a tool that could gather subjective interpretation. Brown (1997) stated that Q sorting calls for a person to arrange the responses in order of importance according to an explicit rule (condition of instruction), usually from agree (+5) to disagree (-5) through a scale of scores prepared to assist the participants in thinking about the task. As for this study, Q sorting process begins by distributing a questionnaire survey sheet consisting of three sections. The first section will be questions on the demographic profile of respondents including age, race, employment status and their usage of urban park such as frequency visiting urban park. The second section would include a score sheet where

respondents need to rank order photographs that will be presented. Respondents will be asked on a question, "How do you agree that this photo is very important in your urban park experience?" Respondents will begin with rough sorting by distributing photos into those they agree with, they disagree with, and they feel neutral, doubtful and undecided. Next, respondents will be asked to place photos that they agree with, according to the agreement scale provided on a score sheet and the process continues with photos that they disagree with and those that they feel neutral.After completing the process, respondents will be asked to carefully review and look through their distribution and will be allowed to make any changes if necessary. The last section of this survey provides questions for respondents to write their reasons for selecting the photos as depicted in the score sheet. Finally, there will be few open ended questions where respondents are free to give their own opinions, viewpoints and perceptions on how urban park play the role in their quality of life.
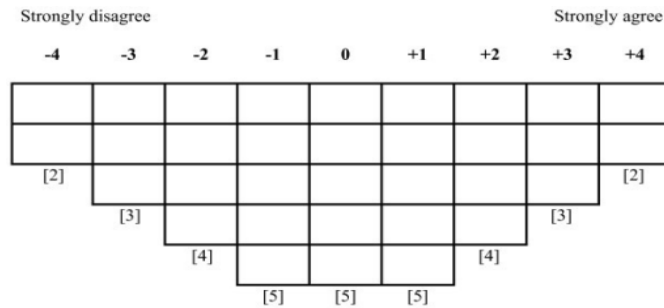
Fig.5. Example of the score sheet

Source: Stenner, (2005)

5.5. Factor analysis and interpretation

Analysis of the data will be performed using Q methodology software known as the Q factor analysis. Data analysis process in this study will find out the level of similarities and dissimilarities among the respondents on the elements they perceived as very important for their urban park experience. Data on the correlation matrix will produce a group of people who are actually sharing the same point of view and the theme for this group will be interpreted using answers given in the last section of the questionnaire. The final step of the process will be the calculation of factor scores and different scores. The Z-score obtained from the data analysis would also be helpful to identify essential elements or urban park recreation set tings that the community perceived as very important in delivering benefits for improving their quality of life.

6. Conclusion

Urban parks offer tremendous benefits towards improving people's quality of life. While many efforts had been initiated to ensure urban park characteristics fulfil the needs and demands of the community, studies on how community perceived urban park benefits from a variety of urban park recreation setting is very important. Community participation in an urban park planning and management process plays a vital role to ensure urban park benefits were delivered effectively. Public meetings, public workshops, interviews, focus group discussions and questionnaire surveys are among the tools used to gather

viewpoints of the community. Other than those tools, Q Methodology should be seen as another effective way to include public participation in park planning and management process.

Q Methodology actually relies on the fact that people's perceptions are different from each other. Therefore, the aim of this method is to assess the diversity of perceptions among the community. This study gives a clear picture on how community perceived benefits of the urban park in improving their quality of life. This kind of information could be very useful for the local authority, planners and managers to determine the success of the park. From a broader perspective, the findings from this study are useful to improve urban park planning and management to meet the needs and demands of the urban community. The study approach could be used by other local authorities, NGOs and governmental agencies as one of the strategies in assessing the perspectives of the community in the park and recreation planning and management.

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