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## Functional needs and residents' motivation towards visiting a neighbourhood park

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**Abstract:** Despite neighbourhood parks meet residents' social needs, provide visual enjoyment, and create passive and active recreational opportunities, most of them are underutilised. To understand this issue, research focused on the social and physical aspects of parks using mainly quantitative methods. Few explored the psychological aspect in terms of motivation and dependence. Hence, this qualitative research aims to provide a more in-depth understanding of resident's functional needs that foster their dependence towards neighbourhood parks. The study involved purposively 29 park users living in the neighbourhood of Precinct 9, Putrajaya, Malaysia. In-depth semi-structured interviews were used then verbatim transcribed. Based on the interpretative phenomenological analysis approach, results revealed that the contextual dimensions and the incentives for park utilisation constitute the major themes, where gathering outdoors, physical activity, emotional, functional, and environmental motivation variables are the sub-themes. The practical and theoretical implications are outlined regarding park users' expectations and experiences for enhanced park utilisation.

**Keywords:** neighbourhood parks; place dependence; phenomenology; behaviour; park utilisation; third place.

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## **1 Introduction**

The explosion of the urban population in the world, especially in the Asia and Pacific regions is unprecedented. Currently, 50% of the global population are living in urban places, and this trend is estimated to increase up to 70% by 2050 (UN, 2015). Moreover, the UN has predicted that by the year 2030, the number of Asian cities with more than five million people will be four times greater than those in Europe and the US combined. In Peninsular Malaysia, most Malaysian populations are expected to achieve urban status by 2020 (JBPD-NUP, 2017). However, this urbanisation trend is expected to affect the quality of the urban environment (Wirth et al., 2016). The increase of urban population means additional concerns on the quality and number of public amenities, housing, and infrastructure. To this end, the UN Habitat III Report on housing and sustainable urban development (Habitat III, 2016) has stated that the actual urban growth and development must be coupled with responsive and inclusive public places, in order to obtain proper and effective urbanisation agenda.

In this regard, although neighbourhoods are designed as areas of identity where people live and meet most of their daily needs, they are now slowly becoming a part of a more impersonal and fragmented urban environment, especially in the Asian cities (Oranratmanee and Sachakul, 2014; Miao, 2001). Hence, it is important to strengthen the functional and symbolic values of public places. The real significance of public open spaces lies in their ability to facilitate the interaction between people and their environment. However, although neighbourhood parks (NPs) are crucial places for socialisation (Kashef, 2016), within the neighbourhoods' social networks and in the context of planned residential areas, they are still not being fully utilised for the users' benefits (Moulay et al., 2017; Riper and Kyle, 2014; Peters et al., 2010). Such conditions deprive the residents of the opportunity to socialise, which is considered as a crucial human need (Ellis and Roberts, 2016; Kazmierczak, 2013).

This issue of underutilised parks persists, despite the existence of extensive literature covering the theoretical and empirical studies that discuss on the methods to improve the physical (Md Sakip et al., 2015; Schultz et al., 2014) and social aspects of parks (Kazmierczak, 2013; Cohen et al., 2012; Miao, 2001). A possible reason is that within the developing Southeast Asian countries, these public open spaces are not sensitive and

relevant towards the local social and cultural contexts. In addition, the designs of parks mostly followed the western models and adopted top-down initiatives for the planning processes (Miao, 2013). These issues become serious obstacles to the Malaysian government's agenda of providing livable neighbourhoods for its citizens (JBPD-NUP, 2017). The Malaysian population is plagued by a sedentary lifestyle and lack of physical activities (NHMS, 2015). According to the fifth report on Malaysian quality of life that is released in December 2013, only approximately 31.4% of Malaysian are engaged in recreational activities for at least once a week [Abu Bakar et al., 2016; MWI, (2013), p.9].

Besides, even though most of the findings benefit the urban designers in making the parks and public spaces more visually and physically functional (Moulay and Ujang, 2016; Schultz et al., 2014; Kazmierczak, 2013; Cohen et al., 2012), but the impacts of these qualities on the users' psychological sense and wellbeing, in terms of functional, cognitive, and emotional attachment, has not been adequately explored (Moulay et al., 2018; Manzo and Devine-Wright, 2014). Hence, the present study attempts to approach the under-utilised issue of parks within an apparent comfortable physical and social environment to emphasise the functional attachment towards the parks, referred to as 'place dependence' (Moore and Scott, 2003). Additionally, the study's findings can reflect the personal connections to places, that are based on fulfilling certain basic needs through specific activities afforded by a setting (McCunn and Gifford, 2014). Moreover, by exploring the place dependence factor, the researchers can regard the NPs as a milieu embedded in the social and cultural senses, rather than merely as a physical form. To this end, the present research examines the residents' functional needs towards their NP, defined as the necessary needs that are practical and useful, rather than optional and attractive (Gehl, 2011). Meanwhile, the primary and the most important activities that are being fulfilled by the users in these public places are reflected. This is done by exploring the residents' intention to perform the behaviour in the park, i.e., to grasp their motivations.

## **2 Review of the literature**

### *2.1 Parks as a major third place in neighbourhoods*

Promoting social interaction is the most fundamental function of public open spaces such as parks. In his book *Life Between Buildings*, Gehl (2011) argued that public spaces could reject or facilitate opportunities for social interaction. The spaces should be convenient for staying, standing, walking, sitting, listening, talking, playing, and exercising. Beyond these functions, the public spaces should also promote the opportunities to participate in meaningful activities that give identity to individuals and groups. At the same time, Carmona et al. (2010) argued that the parks should be responsive in terms of the context. Different design and planning should fit the cultural needs. Accordingly, the design process should consider the visual aesthetic of the setting, the perceived security and safety, followed by the clarity and legibility in the urban structure that are important to create coherence and order.

Several factors influence the utilisation of public places. These include the quality of trails, aesthetic aspect, perceived safety, temperature and weather, park facilities and features, the maintenance, the cultural aspect in terms of awareness of the urban parks'

social, environmental and personal benefits (Wang et al., 2014; Byrne et al., 2009). On the other hand, well-designed NPs within planned residential areas create spaces for social interaction, which helps develop the feeling of acceptance through the residents' participation in their community (Gehl and Svarre, 2013; Peters et al., 2010). The most important value regarding the park utilisation remains in the ability to promote social interaction among the residents, and through the capability to provide areas for gathering, meeting friends, and a meeting point for shared experiences between residents (Carmona, 2015; Gehl, 2011; Peters et al., 2010).

Furthermore, the Oldenburg's (1989) treatise on the significance of third places in neighbourhoods regards the parks as informal gathering spaces in cities. Indeed, the NPs are perfect places for the people to come and socialise outdoors beyond the realms of home and work while providing public social experiences and creating a sense of community. Besides, gatherings at NPs are typical to the core characteristics of third places. The core characteristics often involve regular, voluntary, informal, and the same group of people every time (Oldenburg, 2001). Hence, the occasions for residents to recreate, congregate, relax, and meet others are extremely reduced within the existing fragile social and health contexts (Cabras and Mount, 2017). The parks within neighbourhoods should receive further attentions as major third places that promote quality of life, wellbeing, and health (Finlay et al., 2019). However, little is known about the place-based physical qualities of third places such as NPs that support sociability and place attachment, especially in terms of functional, cognitive, and emotional attachment (Mehta and Bosson, 2010). Furthermore, very few studies are available to understand the types of third places within neighbourhoods that are more ardent in promoting social functioning, health, and wellbeing among all walks of life (Lane et al., 2020; Richard et al., 2008). Therefore, exploring how to increase the functional attachment of parks for further sociability, health, and wellbeing will help to advance the debate on the mentioned gap. Additionally, it is crucial to consider the main aspects of Oldenburg's Third Place's concept for a further in-depth study on how the NPs designs can be distinguished as having third-place characteristics.

Oldenburg (1989) was the first scholar articulating the concept of 'third place' that reflects on the conducive places for community and social interaction, outside the first places (homes) and the second places (workplace). Oldenburg (2001) argued that third places are in the heart of public life that provide the socio-spatial opportunity for passive and active social interaction. Moreover, the third places are crucial for the wellbeing and the development of cohesion and a sense of community. The third places serve as 'ports of entry' to help with integrating and socialising newcomers while serving as eyes on the outdoors that support 'public character' (Oldenburg, 1997). Oldenburg (1999, p.16) defined third places as "public places that host the regular, voluntary, informal, and happily anticipated gatherings of individuals beyond the realms of home and work" [Oldenburg, (1999), p.16]. They work as incubators for broader informal activities and relationships and offer a valuable physical space for the community to mingle and gather (Urry, 2001). These include the locations for residents to talk, walk, socialise, connect, and fulfil a variety of people's needs (Hanks et al., 2020). Also, Oldenburg (1989) in his seminal work 'The Great Good Place', identified eight main characteristics of third places:

- 1 They are established on ‘neutral ground’ where people may gather, come, and go as they please.
- 2 They are ‘leveller’ places that are inclusive.
- 3 Conversation is the major activity that is being carried out in the places. In this regard, it is worthy of mentioning that conversation, whether actively or passively, is the major tool for social interaction.
- 4 They are accessible and afford accommodation for acquaintances.
- 5 They attract further regular people as to new comers.
- 6 They are low profile in terms of being affordable and not expensive.
- 7 They constitute a second home away from home.
- 8 They are playful and generate good mood over anxiety.

Therefore, the NPs as fundamental places within the neighbourhoods’ social networks are crucial for the socialisation and exchange between residents. Additionally, the places provide excellent means to strengthen the bonding among residents by connecting them with their immediate living spaces (Kashef, 2016; Karuppannan and Sivam, 2012). Furthermore, the resident’s quality of life can be positively affected by encouraging physical activities, social interaction, and providing escape areas and enjoyment of nature (Brown et al., 2013). Hence, the NPs play a fundamental role as a major third place in neighbourhoods by fulfilling all the above-mentioned criteria from the Oldenburg’s main characteristics of third places. However, the fundamental role of places depends on the culture of the neighbourhood, and more importantly, the extent of these parks in fitting the people’ needs (Rosenbaum, 2006). To have further insight into the human-place relationship within parks, it is necessary to understand the interrelation between the urban park utilisation with the residents’ needs, through the concept of place dependence, and how it can shape the behavioural tendencies of the park users. Thus, the following sections highlight both the concept of place dependence and human behaviour.

## *2.2 Place dependence*

Place dependence describes the functional bonds that people have with places. It reflects the individual’s perceived association (either positive or negative) between themselves and a particular place (Gross and Brown, 2008). Incidentally, place dependence evolves when the places contain the conditions and features required to meet the people’s needs. If a place can meet a person’s needs and allows it to reach its goals, the place will have better placement for the person than other alternative places. This quality makes the users dependent on that place (Anton and Lawrence, 2016). This underlines the relevance of a place in affording amenities necessary for desired activities (Williams and Roggenbuck, 1989). In that regard, the higher are the valued goals for users, the more positive and higher feelings toward a place are generated. Thus, the degree of user dependency on a place is a function of how well the needs, goals, or motivations are satisfied or how positive are the experiences in that location (Ujang and Zakariya, 2015).

In other words, place dependence is the sum of social and physical resources that meet the visitors’ or users’ specific needs and reflects on the unique qualities of a place

(Hou et al., 2005). Tsaur et al. (2014) suggested four important factors to enhance place dependence: When:

- 1 the natural settings are responsive to the recreationists' needs
- 2 the designed facilities meet the recreationists' expectations
- 3 the recreational facilities provide a feeling of relaxation and satisfaction to the recreationists
- 4 the recreational spaces provide opportunities to allow the recreationists to share their experiences with other participants.

Accordingly, the place users will consider this recreation setting as more valuable than other settings and cannot be substituted by other places. Often, place dependence is formed after an individual evaluated how well a setting might fulfil his needs and goals (Jorgensen and Stedman, 2001). As place dependence is usually expressed behaviourally (Uzzell et al., 2002; Guardia and Pol, 2002), a more in-depth view of the concept of human behaviour needs to be addressed.

### 2.3 Behavioural commitment towards the place

Place dependence has a significant correlation to the personality and behaviour of individuals (Casakin and Kreitler, 2008). It helps generate positive behavioural beliefs and intentions for the engagement with the physical environment and promote sustainable recreation management (Buta et al., 2014). Behaviour (B) is defined as a function of the environment (E) and the person (P):  $[B = f(E, P)]$  [Bonnes et al., (2003), p.64]. Behaviourism should focus on the observable phenomena, rather than the consciousness that is encompassing covert actions such as thinking and overt actions such as doing and speaking. Thus, cognition is crucial as it can elicit behavioural and emotional effects (Bakopoulou and Dockrell, 2016).

Among the plethora of behavioural models including the planned behaviour (Ajzen, 1985, 1991), the health belief model (Rosenstock, 1966, 1974) and the trans-theoretical model (Prochaska and Diclemente, 1983), Montaña and Kasprzyk (2008) proposed an integrated behavioural model (IBM) that includes constructs from the whole previous models. The most important determinant of behaviour in IBM is the intention to perform the behaviour. With no motivation, a person is unlikely to carry out recommended behaviour. Therefore, motivation is the reason behind every intention.

On the other hand, the human behaviour in regards to people-place context can almost totally be explained on the basis of emotions and motivations that the individuals might not be necessarily aware of [Bonnes et al., (2003), p.64]. Tuan (1977) has suggested that emotion links all the human experiences, so that settings acquire meaning through the continued raising of feelings such as love and rage. However, the individual behaviour driven by the pursuit of specific outcomes (i.e., physiological, social, and psychological) can be understood within the context of motivation theory. The motivational theory defined the way people are attracted to natural environments in the pursuit of personal benefit (Kyle et al., 2004). In the same line, Bonaiuto et al. (2011) argued that motivation is a psychological state of mind where the individual aims to satisfy certain needs. It is the result of the interrelation between individuals with their surrounding environment to pursue personal benefits. Moreover, people attracted by different motivations may

develop different social and physiological outcomes towards the settings. The motivation affects behaviour from two main perspectives:

- 1 the energetic perspective in terms of activating behaviours
- 2 the directional perspective in terms of pursuing certain goals.

Furthermore, the individual's needs as the reason behind their motivation can be:

- 1 biological such as breathing
- 2 psychological, such as the experience of stress, which in turn activates behaviours.

Another important element about motivations is that some are necessary for survival, while others may be related to their culture or personal experiences.

The behavioural commitment towards any given urban place influences the users' values, meanings and emotions, which will subsequently shape their behavioural tendencies. Additionally, the intention to perform the behaviour and the motivation behind every intention are crucial in all the behavioural models. Comprehending the concept of behavioural commitment in the urban environment, helps the present study to examine the residents' functional needs towards their NP.

### **3 Research design and methods**

A large number of researches that reported on the under-utilised issue of public spaces focused on the quality of place in terms of meaning, dependence and emotion have used quantitative methods in their analysis (Sivalioğlu and Berköz, 2016; Firouzmakan and Daneshpour, 2015; Tsaour et al., 2014; Ngesan et al., 2013; Inglis et al., 2008). The quantitative methods prevent an in-depth understanding of place-related emotions and attitude while assuming that the positive bonds with places lead to certain behaviours, such as the willingness to stay in the place. Thus, the design of prior literature focuses on the significance of places, rather than on the users' meaning and the needs towards these settings (Lewicka, 2011).

Hence, the present research examines the residents' functional needs in terms of the primary and most important activities they come to fulfil in the park, through a detailed inquiry into the individuals' experiences. Based on the precedents discussion and research, the non-positivist paradigm was the most appropriate approach for the comprehensive exploration of the underutilised parks issue by allowing the comprehension of the park users' emotions and meanings towards the park. Therefore, by drawing from the previous references, this study used qualitative approached and employed the phenomenological case study research design. Specifically, the hermeneutic phenomenological approach that favours the interpretation of informants' experiences, existence, and relation to the studied social phenomenon was employed (Yin, 2011; Chesla, 1995), thus offering straight access to the subjective experiences of the park's users.

In addition, this study also employed the non-probability sampling method by using the purposive sampling to target a population on a specific purpose that fit the research needs and being relevant to the research question (Silverman, 2013). Moreover, this method was done to answer two main questions: where and with whom this research should be conducted. The oldest residential neighbourhoods of Putrajaya, Precinct 9, was

selected as the target neighbourhood. This location has complete public facilities, and an advantageous physical and social environment for living, hence allowing the research to focus on parks' psychological aspect only. Moreover, the city of Putrajaya is a green and livable city that was planned as a model for other future sustainable cities in the country (Musa et al., 2016). Meanwhile, the criteria for informants inclusion in the study were:

- a selecting the informants that are living in the studied neighbourhood (Precinct 9 in Putrajaya)
- b the NP users must be living for at least one year in the studied neighbourhood
- c the informants are female and male adults above 18 years of age and who are not yet retired, because there are different needs for individuals in the retirement age range (Ma et al., 2012)
- d the informants are restricted to the Malay residents because ethnic diversity may weaken place attachment within the neighbourhoods (Stolle et al., 2008; Leigh, 2006).

There is no formula for defining the sample size in a qualitative methodology. However, Yin (2011) argued that a large number of samples are better in providing greater confidence in a study, so a range of 25 to 50 units is suggested. Thus, after conducting 25 in-depth semi-structured face-to-face interviews with the selected informants, four other informants were interviewed to reach data saturation, as defined by Merriam (2009) (see Table 1). During the interview sessions, the principle of bracketing was insured and practised for more objectivity. Prior to the final interviews, a preliminary study was performed on a small-scale version of 'two informants' to prepare for the main research inquiry, by checking the consistency of the probing questions for each research question and ensuring that the language employed was understandable, appropriate and unambiguous. The in-depth, one-to-one semi-structured interviews were employed to describe the informants' park experiences, needs and meaning in a non-directive way, while the conversations were kept focused (Brocki and Wearden, 2006). After that, field peer discussion and transcripts' triangulation were performed to determine the trustworthiness of the research findings (Merriam, 2009; Mason, 2002).

**Table 1** Demographic profile of the informants

| <i>Informants</i> | <i>Gender</i>          | <i>Age</i>                    | <i>Degree</i>                                    | <i>Marital status</i>   | <i>Having children</i> | <i>Length of stay</i>   |
|-------------------|------------------------|-------------------------------|--|-------------------------|------------------------|-------------------------|
| 29 informants     | 11 females<br>18 males | From 23<br>to 59<br>years old | 1 PhD<br>7 master<br>17<br>bachelor<br>4 diploma | 14 married<br>15 single | 12 yes<br>17 no        | Between 1<br>to 8 years |

The interview sessions were started from 15th October 2016 until 28th February 2017. The researcher presented the consent form to obtain the informants' agreement and signature. The form mainly highlighted the procedures for confidentiality and the conditions of anonymity. The interviews were conducted within the NP and inside a relatively quiet covered shelter. Each interview took an average of one to two hours. The interviews were conducted under the guidance of an interview protocol by utilising an

interview guide and an 8 GB Sony recorder to register the sessions. Furthermore, probing questions were utilised to engage the respondents for them to share more of their experiences and to understand the emerging realities.

After each interview, the data were made into verbatim transcription and were then entered into the Atlas.ti software, a valuable research assistance tool (Creswell, 2013; Mason, 2002). Next, each interview was used to inform the next one by adopting the inductive approach, to understand the informants' experiences and developing themes (Gratton and Jones, 2018). A systematic process was undertaken by sorting data through organising, ordering and indexing it. The coding phase was carried out to identify the major themes of this research by gathering codes under categories, followed by the categories under themes (Saldana, 2013). At that juncture, interpretative phenomenological analysis (IPA) was employed. This analysis was used to reflect the process of managing data, with attempt as far as possible to gain an insider's perspective on the studied phenomenon (Smith et al., 2009). The IPA method was done in four steps:

- 1 looking for the initial themes in the first case
- 2 transformation of the initial themes into abstraction
- 3 connecting the themes
- 4 developing a narrative explanation.

## 4 Results and discussion

Based on the study's scope, the informants were asked to share their functional needs towards the studied NP. This section reports on the informants' conception and insights into the needs towards the park. All the informants felt comfortable in revealing their personal needs in a unified way. The analysis revealed two major themes that capture the functional needs of residents towards their NPs. The two themes were classified through data analysis as first, the contextual park utilisation and second, the incentives for park utilisation. Each theme was further elaborated by identifying the corresponding sub-themes, as presented in Table 2.

**Table 2** Functional needs towards NP

| <i>Contextual park utilisation</i> | <i>Number of informants</i> | <i>incentives for park utilisation</i> | <i>Number of informants</i> |
|------------------------------------|-----------------------------|--|-----------------------------|
| Physical activities                | 29                          | Functional motivation                  | 28                          |
| Gathering outdoors                 | 24                          | Emotional motivation                   | 28                          |
| Social interaction                 | 26                          | Environmental motivation               | 26                          |

### 4.1 Contextual park utilisation

Within this theme, the informants expressed their functional needs in using the NP, in addition to highlighting the existing and missing facilities that may fit or contrast with their real expectations. The contextual park utilisation analysis reflected three sub-

themes: physical activities, gathering outdoors, and social interaction. The following sections describe the sub-themes.

#### 4.1.1 Physical activities

To explore the contextual park utilisation further, i.e., the operational park utilisation rather than the conceptual one, the findings from this study indicated that the physical activities are the informants' highest pattern of park utilisation. The description of this main sub-theme was as detailed below:

To respond to the question 'Why do you come to this park?', most informants mentioned that the main reason for them to use the NP is to have an area to perform physical activities. Informant 1 stated that walking and jogging are important to her to remain in good shape and overcome the city's harmful sedentary way of life. She did not underestimate the different benefits that the NP stands for. Nonetheless, for her:

"I do not come here to see the park, to sit or to admire the beautiful landscape; it is the need to exercise who brings me here. I have been living in this neighbourhood for more than five years, and exercising was always the main reason why I used to come here. Furthermore, with all life commitments, job, family, kids, I don't want to waste the few remaining time on doing nothing, I prefer to come to this park and exercise, especially when I bring my kids for tuition centres next to the park."

In support, Informants 3, 6 and 9 also emphasised that performing physical activities is the main reason for them to use the (NP). Informant 6 said:

"It is difficult to find some suitable time to come with my friends here, they have different commitments. Besides, it is quite difficult to ask neighbours here to join you for different activities. So, I used to come here for mainly exercising and turning around".

The main idea retrieved from the responses was that amidst their challenging lifestyles, work, family and other commitments, the physical activities are still necessary to be performed, during the few remaining free time. Informant 9 continued to share on this point, as he clarified "when I have time, and I feel I need to exercise, the most suitable place for that is this park just next to my home, free access, and no time constraints to access the park".

The findings on the contextual park utilisation indicate that physical activities are the informants' most needed activity that shapes the pattern of NP utilisation. The informants claimed that fulfilling these functional needs is the key attraction towards their NP. Most of the informants seemed committed to using the NP as an area for walking, jogging and exercising. These findings support the idea that the physical activities performed within NPs have a crucial role in achieving healthy wellbeing, besides being the core of the third-place characteristics (Oldenburg, 1997). The other characteristics include accessibility, responsiveness, and promoting health and wellbeing. In a study on the effects of NPs on health and wellbeing in Canada, O'Campo et al. (2015) claimed that the residents always directly or indirectly associate the neighbourhood features with a wide variety of health outcomes. The health outcomes were contributed by performing the physical activities such as jogging, walking and cycling within natural places like in the NPs. In that regards, painting all the types of parks with the same brush by claiming that they are mainly used to relax, socialise, and enjoy the natural environment (Ellis and Roberts, 2016; Harun et al., 2014; Kazmierczak, 2013) may not be relevant. Thus, the

outcomes in this study identified the important function of NPs as an active place for health-related activities. Also, The facilities support the physical activities as they should receive greater attention during park designing process.

Although the facilities in NPs are not confined to physical activities, the residents can only focus on parks' most important functional needs due to the limited leisure time available to spend in parks. This trend is commonly shown by married residents. The findings revealed that the modern lifestyle with different social commitments such as work, family, and kids' requirements, leads to little leisure time for the residents to pursuit other lifestyle matters. There are several possible explanations for these findings. First, the health issue of residents was well highlighted by the informants and was always related to the level of physical activities performed, regardless of the social or culture of the populations. However, less connection was established between socialising, relaxing in the park and health issues in their understanding of the neighbourhood park role. Furthermore, awareness about health issues and the role of green spaces for health promotion in Malaysia has been slowly increasing and becoming important (Mansor and Harun, 2014). Another possible explanation is that the adverse impact of a modern sedentary lifestyle such as physical inactivity is the major pattern of life. Second, unhealthy citizens, due to physical inactivity, have been dramatically increased in Malaysia over the past 20 years (Lian et al., 2016), and have embedded in the current culture of Malaysian citizens the strong correlation between physical activities and health issues. Closely related, the informants shared the following functional need aspect towards their neighbourhood park. Hence, being further responsive and inclusive will help to strengthen NPs as a major third place in neighbourhoods.

#### *4.1.2 Gathering outdoors*

Another category under the main theme of contextual park utilisation identified by the informants' responses was 'gathering outdoors'. Under this sub-theme, the Informants expressed their functional need to be outdoors from time to time to change some paces of being in the workplace or being at home. Also, going outdoors includes to meet up with friends or to spend more time with family. For instance, Informant 27 was adamant about the necessity to gather with her friends after work. She said:

“This park is helpful and suitable for gathering with my friends. I have many friends here in this neighbourhood, but we work in different places, so we see each other more in this park. Besides, there are some food stores here in the park, so we can have some good moments around food as well. And sometimes the park is also suitable for meeting new neighbours. Besides, it is more encouraging to exercise with others, better than alone”.

Another moving reflection was given by Informant 5. He focused on the necessity to spend some time with family, by discussing and having some leisure time together. He stated:

“with my different commitments, this park helps me to have some leisure time with my kids. They are still young, one year and three years old, but they need to have some close and funny moments with their father, which is not always easy and suitable at home. They love the grass”.

Furthermore, other Informants such as Informant 1, 16, and 20 appeared to appreciate the park's function of gathering outdoors for different pragmatic reasons. The NP is not only used for functional commitments in the neighbourhood; it is also a place for waiting,

gathering, and meeting friends. Informant 20, for example, related the functional need of gathering outdoors in the NP to other social commitments, such as for looking after his children. He stated:

“Sometimes I bring my children here to see their friends, and to play with them, usually after school. While waiting for them in the park, it happened many times that I meet some old friends or neighbours”.

This section indicates that being outdoors and gathering with friends, family, and others is another central functional need for park utilisation. Thus, suitable designs that fulfil the social function of parks, aiming to promote outdoor gathering and mingling for the residents are essential (Oldenburg, 1997). The informants expressed the importance of NP in helping them to change their daily routine of being in the workplace and home. They can breathe fresh air, meet with friends and neighbours, and spend more time with their families. In this regard, the particularity of NPs as a major third place within the residential areas is the characteristic of being open, free, and within a walkable distance from the residents' homes. The findings are consistent with the work of Carmona (2014) and Gehl (2009) that had established that being outdoors is a prerequisite for the intensity of residents' lives. Hence, the residents who are spending more time outdoors have more chances to meet up with others and can greet, exchange, and interact with the surrounding environment.

#### *4.1.3 Social interaction*

The third sub-theme of the contextual park utilisation is social interaction. Under this category, the informants highlighted the functional need to see people outdoors and have the possibility to interact with the public, such as the neighbours, friends or non-residents. Sometimes, social interaction is related to the other contextual park utilisation, such as physical activities. In that regard, Informant 3 stated, “When I come to this park, I enjoy exercising and seeing other people. It changes me from my work lah”. The passive interaction reflected in the park is considered as the most important and the most needed type of interaction in the NP. For instance, Informant 4 explained that he does not have time for active interaction; instead, passive interaction is sufficient for him. He stated:

“Really, I don't have time to socialise with others. I have lived in this neighbourhood for two years, I don't have many friends. So basically, I come for exercising, and sometimes I just sit, relax and see others. I come here to exercise and to see many people around, it makes me very happy”.

Although passive interaction may occur naturally while exercising or gathering in a park, the active interaction can also be triggered by the same patterns as well. Relation to this, Informant 3 said:

“The physical activities are very important and mean a lot to me, I like jogging, doing cardio exercising. Sometimes, if there are people using this or that equipment, so I change and don't waste time ha ha, or sometimes we share, which is always good. I mean, sometimes it's an occasion to learn from one another, about new exercises, to gossip with them, and why not, making new friends”.

When probed to further explain on whether the physical activities may trigger active interaction with the park users, she said: “Most of my neighbours also come to this park,

for exercising as well, so yeah, it's also an occasion to meet up with them and greet them”.

In this section, the Informants expressed with conviction on how a NP is able to fulfil their functional need for passive interaction, i.e., seeing people around. Social interaction is a less important functional need than physical activities because most informants stressed that seeing people in the park (passive interaction) is not the major reason to use the park. Instead, the informants preferred the consequence of performing physical activities in the park. The passive interaction may evolve to active interaction, but the passive interaction is still the most important one from the informants' point of view. Hence, the NPs' potential for promoting social interaction is similar to the core of Oldenburg's concept of 'third place' aiming to provide conducive places for community and social interaction outside of homes and workplaces. This finding is in the same line with the sociological theories provided by both the micro (Jessop and Sum, 2016; Lofland, 1998; Goffman, 1983) and macro-sociology (Bukodi et al., 2015; Oldenburg, 1989) research. These theories stipulate that passive interaction is the first step of interaction that may lead to more engaged and active interactions. For conclusion, the Informants expressed with convictions and beliefs in the major contextual park utilisation that fits their real needs, especially their needs for physical activities, gathering with others, and social interaction. Physical activities seem to be the major objective of using NPs. However, as an emerging theme, the next section will explain how the functional need is linked to the functional motivation of the park users.

## *4.2 Incentive for park utilisation*

To discover the reasons behind the functional needs towards the NP, the Informants were asked to share their reasons and incentives when they are engaging with the different activities within the park. Afterwards, the Informants gave their insight on the following sub-themes.

### *4.2.1 Functional motivation*

Under this category, the Informants were probed to explain the reason that makes them favourable or not when engaging with their park. Then, the probing was able to identify three main sub-categories. The first and the main reason to engage with the park was identified as to stay healthy. For instance, Informant 5 stated, “For me, the most important benefit of coming to this park is health. I want to reduce weight and have a healthy lifestyle. Doing activities in this park makes me happier”. He added:

“This park helps me to improve my health. It's better than staying at home and watching TV. Here we can exercise, you know, we are walking, running, we can see other people exercising, running on the track, and all these gives you a positive feeling... we feel healthy”.

This functional motivation was shared by the majority of the Informants. They seemed to be well aware of the importance of NP for health issues. However, the Informants related the reason to stay healthy to the physical activities and less with socialising benefits. Similarly, other Informants also emphasised on the relationship between physical activity with the desire of becoming healthier.

The second functional motivation was identified as to be fit, followed by to maintain good shape as the third functional motivation. In this aspect, Informant 11 mentioned that the real reason behind why she keeps frequently coming to the park although being tired after work, is “To keep myself in a good shape, healthy and my body fit, it’s very important for me and helps put me in a good mood”.

Admittedly, the NPs provide the residents with various desired functional, social and emotional outcomes. As a result, the findings indicate that the residents are attracted to perform physical activities in the park in the pursuit of personal benefits, mainly to stay healthy. Majority of the informants clearly indicated that staying healthy is their main motivation to use the park, followed by being fit and maintaining a good shape. The informants expressed the motivation from different ages and gender, from the young to the elderly, male and female. Thus, the motivation to stay healthy has a direct impact on the park design. The concern on health as the functional motivation for park use is consistent with the existing literature on the effects of modern lifestyle, which resulted in poor health conditions. Nowadays, this general poor health issue cannot be addressed by medicine alone. Hence, solutions such as contacting with nature, greeneries and trees, performing physical activities, socialising and interacting with the surrounding environment are crucial in facing these problems (Coleman and Kearns, 2015; Ivory et al., 2015). The following section will explain the second type of motivation expressed by the informants.

#### *4.2.2 Environmental motivation*

Under this sub-theme, the Informants were probed to explain the factors that shaped their comprehension of the park’s meaning as an important aspect of what is needed and expected from the park. Three main sub-categories, namely aesthetic, natural environment, and the lived experience, were identified from this information and responses. First, the emotional meaning was usually linked with the quality of the natural environment and the park’s aesthetic aspect. For instance, Informant 2 stated that “In this park, I used to release stress and tension. As you can see, there are lots of greenery, trees, and a large lake”. He added, “The nature in the park and the beauty present here helps me to feel good and nice, which makes me happier”. In the same line, Informant 5 said: “the park helps me to release stress because the scenario is beautiful, nature around us here in the park, it is really joyful to come here, especially for the park’s natural setting”. Thus, Informant 2 and 5 agreed that the emotional meaning of the park is triggered mostly by the natural environment and the aesthetic of the park.

Another type of motivation that can influence the park’s meanings is the lived experience of the informants. It covers physical activities, gathering with friends, and socialising with others. For instance, Informant 22 stated:

“Being in the nature is refreshing and helps to get rid of all the negative thinking. I believe when I come here and do different activities like walking and jogging, at the same time we release our stress and tension and at the same time I do feel good ha ha. When ... the ... the sweat comes out of the body, and then you feel energise, your mind becomes clearer, so you feel very refreshed after that yeah.... Rather than sitting in front of my TV, I come to this park, I just walk, jogg, exercise, and so I feel good here. Seeing people around here is also very encouraging and relaxing”.

Consequently, these physical activities, socialising and the different lived experiences help familiarise the users to the park and shape a specific park's meaning. Besides that, the dependence to the park is strengthened by fulfilling the users' real needs towards the park.

This part of the study's overall findings indicated that the park's meaning is an essential part of the residents' attachment to the park. Secondly, the park's meaning is influenced by the functional activities performed in the park. These findings are related to the perceptual dimension of urban design (Carmona et al., 2010; Carmona, 2014), i.e., the awareness of place's perception and experience. It covers several steps, starting with the abstracted environmental image, based on people's sensations (i.e., vision, hearing, smelling and touching). Then, the symbolism and meaning are generated by the built environment. In the meantime, people may build their own perception based on the experiential sense of place, which is associated with the place identity. This perceptual dimension starts with the biological process (sensations), and then reaches the cognitive process (perception) that can be socially and culturally learned. The next section explores the third type of motivation to use the park.

#### *4.2.3 Emotional motivation*

Under this category, the Informants were probed to explain the reasons behind the different emotions towards their park. Three main sub-categories, i.e., release stress, release tension, and refresh our minds, were identified after the probing. First, the Informants agreed that the main reason for park utilisation is to release tension. For example, Informant 21 stated:

“I come to this park because it is close to my home, and also it makes me happy and joyful. This place makes me relaxed, it allows me to see what everybody is doing, so it's quite interesting, also you know after a hard day at work it helps me to release tension, and then after that I feel good .... Honestly, I feel happy when I exercise, it helps me to stay healthy, I feel happy because I can release tension from work, I also enjoy nature and have a beneficial leisure time”.

Similarly, Informant 26 said: “the natural environment, the green, trees, I just feel better when I see these natural views, it helps me to release my stress to empty and refresh our minds. It's a very good feeling, joyful and pleasant”.

These findings on the emotional motivation indicated that releasing tension and stress is the reason behind the pleasant emotions in the park. The informants related these emotional motivations to the contextual functional needs, i.e., physical activities. It is mainly, physical activities such as exercising, jogging and walking in the park that help the users to release their stresses and to be able to become happier, which obviously satisfy the residents' emotional motivation. These findings on the interrelation between physical activities with emotional satisfaction, such as releasing stress and being happy are supported by several researches. Brown et al. (2013) and Moore (2005) had established direct correlations between physical activities in urban parks to escape stress while promoting health, quality of life and psychological benefits. Another study in Switzerland found that the individuals that are practising sports (e.g., jogging, biking, playing ball) in urban parks have better mental wellbeing and recovery from stresses (Hansmann et al., 2007).

## **5 Implication of the functional needs on park design**

When the parks are fulfilling the users' functional needs, they are more responsive and inclusive to the neighbourhood environment. Thus, the wellbeing among residents can be promoted. The present findings suggested that the functional attachment depends on the extent of the users' functional needs in being fulfilled by the parks, which in turn depends on the residents' motivation for park utilisation. It is argued that physical activities such as exercising, jogging, and walking in the park, are the main functional need by the majority of the park users, followed by gathering outdoors and interacting with other park users. Also, the main incentives behind fulfilling the users' functional needs are the pursuit of personal benefits, like to stay healthy. These benefits subsequently shape the meaning of the park for the users. Other health-related motivation includes the need to release tension and stress. Therefore, these findings have an impact on park design. For example, the facilities for physical activities should be carefully designed to fit all the walks of life. The designs should provide areas for stretching, which is convenient for elderly and women, and planting trees surrounding these areas, as greeneries are a synonym for health and source of shade. In addition, benches can be provided next to these exercising areas to encourage socialising and interaction between the park users during their resting period. Also, areas in the park for soft exercising or calm places that allow communing with nature which help release tension and stress should be added. The above park design suggestions point out that effective environmental planning and design should focus on the park users' psychological attachment process that fits with their real expectations to strengthen their functional attachment towards parks.

## **6 Conclusions**

The present study employed the hermeneutic phenomenology approach to grasp the contextual experience of park utilisation, in order to solve the persisting issue of underutilised parks that is still wide-spread, despite the presence of apparently well-designed parks. This approach was also carried out to describe and interpret the informants' experiences in the park. The motivation to engage with parks is a key issue to understand how NPs can fit the residents' real expectations. In our study, the findings indicated clearly that the residents agree that the main role of NPs is as an active place for health-related activities. Nowadays, modern society has a lack of time and has different social commitments. Therefore, the key concept that attracts residents to their neighbourhood park was identified as the functional motivation to stay healthy. In turn, the functional motivation is intimately related to the residents' contextual and functional needs, expressed mainly through performing physical activities in the park such as jogging, walking and exercising. These functional needs are vital in terms of enhancing park utilisation and often lead to further activities in the park, such as socialising and relaxing. Thus, this study argues that the facilities for physical activities are the core factor to be considered in order to enhance the NP utilisation. The contextual NP responsiveness could be achieved by providing inclusive and enhanced facilities for physical activities. Also, the designing of resting facilities next to the areas for physical activities can allow more opportunities for passive interaction that may lead to active interaction. However, further studies using both the non-positivist and positivist paradigms are recommended to strengthen the present research findings. Furthermore, the

research findings are based on the city of Putrajaya setting only, which is culturally and demographically distinct from the western context. Thus, it cannot be generalised to other contexts but could still be used as a guide for similar parks in Malaysia.

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