

**ASSESSMENT OF URBAN PUBLIC SPACES:
CASES OF KUALA LUMPUR CITY CENTER**

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ABSTRACT

Public open spaces are vital elements of urban fabrics that animate communities in cities. They are appropriate spaces for performing cultural gathering or declaring political freedom. These significant places provide people with different facilities as well as social and health-promoting opportunities. Successful public open spaces meet the needs of people of different social classes, ethnicities, and in general different backgrounds. These substantially beneficial spaces in cities endow urbanites with physical, social, and psychological comfort. Investigating the visions of the City Hall Kuala Lumpur shows that the City Center lacks successful public open spaces that meet users' needs. Therefore, the main question raised in this research is *'what are the components of a successful public open space in the City Center of Kuala Lumpur?'* This research aims to enhance the quality of public life in the City Center of Kuala Lumpur through identifying the characteristics of a sociably successful public open space.

The research employed a quantitative approach. Accordingly, the self-administered questionnaire surveys collected the data. The sampling method used was the mix of systematic and time-interval methods. Followed by that, the structure interviews with Landscape Architects, Academicians, and Town Planners verified the results of the public surveys and assisted the research in reaching the methodological triangulation. The findings showed that the public facilities play a more significant role in attracting people to the public open spaces than social and health-promoting benefits. The research disclosed that old people prefer passive activities such as sitting, talking to their friends, and watching people, while young people do activities and explore the places and mingle with both their peers and others. The findings uncovered that the physical, personal, managerial,

and social factors influence social interactions in the public open spaces of the City Center of Kuala Lumpur. In summary, the physical factors, meanings attached, social activities and events, inclusiveness and social interactions, and design features are the urban factors contributing to the creation of a successful public open space. Overall, the findings of this research are beneficial to designers in choosing the factors to ameliorate the viability of social interactions among different groups of urban dwellers. This assists them in determining the features and characteristics of successful public open spaces that enliven the public life in City Centers.

ABSTRAK

Lapangan awam adalah elemen penting fabrik bandar yang dijiwai masyarakat sesuatu bandar. Kawasan begini adalah ruang yang bersesuaian untuk orang awam mengadakan perhimpunan kebudayaan atau mengisytiharkan sesuatu berkaitan politik. Tempat-tempat penting ini menyediakan berbagai kemudahan serta peluang-peluang bersosial dan aktiviti untuk kesihatan. Lapangan awam yang berjaya dapat memenuhi keperluan golongan masyarakat Bandar yang berbeza, etnik serta latar belakang. Tempat-tempat ini yang sebahagian besarnya memberi bermanfaat telah membiayai orang bandar dengan kemudahan fizikal, sosial, dan keselesaan psikologikal secara percuma. Melihat kepada wawasan Dewan Bandaraya Kuala Lumpur ternyata bahawa Pusat Bandaraya mempunyai kurang tempat lapangan awam yang berjaya iaitu yang dapat memenuhi keperluan pengguna. Lantaran itu, persoalan utama penyelidikan ini adalah '*apakah komponen-komponen bagi sesuatu tempat lapang awam berjaya di Pusat Bandaraya Kuala Lumpur?*' Penyelidikan ini bertujuan untuk menambahkan kualiti kehidupan awam di Pusat Bandaraya Kuala Lumpur dengan mengenal pasti secara sosial sifat suatu kawasan lapangan awam berjaya.

Kajian ini menggunakan pendekatan kuantitatif. Dari itu, soal selidik kawalan sendiri digunakan untuk mengutip data. Kaedah persampelan yang digunakan adalah campuran kaedah-kaedah sistematik dan sela masa. Kemudiannya, temubual berstruktur digunakan dalam temubual bersama-Arkitek Landskap, Ahli-ahli Akademik, dan Perancang Bandar bagi mengesahkan keputusan kajian tinjauan dan membantu mencapai analisis triangulasi. Hasil kajian menunjukkan bahawa kemudahan awam lebih berperanan untuk menarik orang awam kepada kawasan lapangan awam berbanding faedah-faedah sosial dan aktiviti

untuk meningkatkan kesihatan. Hasil kajian juga mendapati bahawa orang-orang tua mengutamakan aktiviti-aktiviti pasif seperti duduk, bercakap dengan rakan, dan memerhatikan manusia; manakala orang muda pula suka membuat aktiviti dan meneroka kawasan dan begaul dengan teman-teman sebaya atau orang lain. Sebagai rumusan, faktor fizikal, peribadi, pengurusan, dan sosial mempengaruhi interaksi sosial di kawasan lapangan awam di Pusat Bandaraya Kuala Lumpur. Sementara faktor fizikal, rasa tertarik, aktiviti dan acara social termasuklah interaksi sosial dan ciri-ciri reka bentuk merupakan faktor-faktor bandar yang menyumbang kepada kewujudan satu tempat lapang awam berjaya. Keseluruhannya, penemuan penyelidikan ini sangat berguna kepada pereka bentuk Bandar dalam memilih faktor-faktor yang boleh memperbaiki kebolehan interaksi sosial antara berlainan kumpulan penduduk bandar. Ini membantu mereka dalam menentukan ciri dan sifat kawasan lapangan awam berjaya untuk mencerikan kehidupan awam di sesuatu Pusat Bandaraya.

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LIST OF ABBREVIATIONS

CABE: Commission for Architecture and the Built Environment

DETR: Department of the Environment, Transport, and the Regions

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CHAPTER 1

INTRODUCTION

1.1 Introduction and Background of the Study

A public open space is diffusely perplexing as it relates to a labyrinth of politics, social relations, and interpersonal contacts. Technically, it concerns human experience and builds on social and physical aspects of the place (Calderon & Chelleri, 2013; Kratochvíl, 2013). Efrogmson et al. (2009) described a public open space as a place where people have freedom in action and access. This comprehensive description covers the most aspects of places designated for the public use of various groups and ethnicities of societies. The definition reveals that:

A public open space is the place where anyone with any background can come in. It is where most socio-cultural events spontaneous happen rather than being pre-planned. The place gives people an opportunity to mix with others, move around, sit alone or together, and watch other groups. This public open space is free for everybody and does not impose any dress codes or scripts. There are a lot of surprises and unexpected pleasures happening in such a place. The happenings in a public open space cover the children playing, the youth strolling, the elderly chatting and resting, and the people escaping the troubles of busy urban life. There are no clear-cut discrepancies between the observers and the happenings observed. In fact, all are on-going and significant parts of the public life.

Collectively, public open spaces reflect special socio-political situations of societies (Sucker, 2010). Over centuries, the spaces have been considered places for fostering of community not the individuals; hence, public rather than private in essence (Giddings et al., 2011). In fact, such spaces in cities comply with people's need for a place to interact with each other or try to convince each other of their perspectives (Mattson, 1999). Throughout the history, cities have been portrayed by the activities occurred in public open spaces. Therefore, such spaces play an important role in articulating the constructs of societies (Giddings et al., 2011). Over years ago, public open spaces existed within the cities played the role of central gatherings and market places, arenas for making the most important decisions, and places for various activities (Truong, 2008). Nevertheless, along with the advancement of urban design and transformation of needs, these spaces have gone through a tremendous evolution (Mossop, 2001). A public open space encompassing a quality arena is an unavoidable component of a city that imposes an impact on its social, economic, and environmental aspects (Truong, 2008). In fact, such spaces make people better experience and understand the city and are the showcases for the dominant cultures (Mossop, 2001). Given this, Ferdowsian (2002) affirmed that public open spaces are deemed to demonstrate people's socio-cultural needs.

The evolution of public open spaces might be traced back in the guise of the '*Agora*', the Greek market place, and flourished along the pedestrian-oriented culture long before the human being was successful in inventing the automobile (Kostof, 1992; Rubenstein, 1992; Bedimo-Rung et al., 2005; Krenichyn, 2005). In Greek and Roman times, central '*Agora*' and the forum were places for conducting public affairs. Since medieval times, squares were arenas for making elections, demonstrations, ceremonies, day-to-day encounters, and conversations as normal constituents of social life. In squares, people felt and experienced

the sense of belonging (Kostof, 1992). Collectively, the various proposed definitions of public open spaces introduce them as places that unlimitedly offer accessibility for users to share communication with others (Truong, 2008). This is in line with what Woolley (2003) pointed as the place for sharing with others even those that we do not know; a place for relaxing, gathering, political events, religious celebrations, etc. In conjunction with people's involvement in the environment, a person would be aware of the point that they are engaged with the fact of encountering people and activities. Doxa (2001) outlined that public open spaces embody features of urban situations like co-existence with strangers as well as random confrontation.

Most of the scholars look at public open spaces as empty spaces between buildings such as streets, plazas, and parks that provide movement pathways and outdoor activities. These places as the scenery of the public life are of a prime significance in multidisciplinary theories in the field of urbanism and city planning along the history (Bada & Farhi 2009; Bada & Guney, 2009). Public open spaces or in other words publicly accessed open places are significant elements of any sustainable and livable urban development and might refer to any sorts of physical settings (Ansell & Thompson-Fawcett, 2008; Hajjari, 2009; Németh, 2009). In a more comprehensive sense, the concept of a public open space raises different functions that introduce it as an outdoor public assembly spot (Yeoh & Huang, 1998; Law, 2002) and neighboring spaces between buildings (AbuGhazze, 1996; Ford, 2000). These spaces would be urban open spaces such as cafes, retail bazaars, theme parks, streets, and pedestrian walkways (Chua & Edwards, 1992; Cybriwsky, 1999; Kayden, 2000; Moir, 2002).

In favor of the significant and vital role of public open spaces, Wu and Plantinga (2003) stated that public consensus stresses public open spaces as the need for urbanizing areas in cities. As an inherent trait, public open spaces are addressed to cover different potential spaces within cities. A comprehensive attribute elucidates that the most important role of public open spaces that range from a single street to an urban park is to strike a balance between cultural and social needs in cities. Since the inner areas in cities are mostly places where people are overwhelmingly involved in the hustle and bustle of activities, the need for enhancing social interaction is most noticeable in the congested urban areas. The need for providing more public open spaces in Peninsular Malaysia, especially in Federal Territories of Kuala Lumpur city, has been pronounced by the Ministry of Housing and Local Government.

Alexander et al. (1977) raised the issue in relation to occupancy of such spaces that people admire neither too exposed nor too enclosed public open space. Similarly, Campos and Golka (2005) stressed that people do not prefer too exposed spaces, but admire spaces that provide good views and instill some sorts of privacy for un-programmed activities. Visibility and visual perception are given a specific attention on how people mingle with each other, while experiencing public open spaces. These are considered two influential factors in designing public open spaces (Bada & Farhi 2009; Bada & Guney, 2009). Briefly, a public open space urges different sorts of interactions among diverse groups of people with various socio-economic backgrounds that this leads to creating a vista in order to accomplish a vast range of socio-cultural and physical needs (Özsoy & Bayram, 2007).

In the context of Malaysia, public open spaces are deemed important parts of the cities' history and glory that some of which date back to the era of colonialism. Of their prime importance, public open spaces in Malaysia create the arenas for multivariate ethnicities to accomplish their ritual activities. These spaces manifest the glorious appreciation of art and aesthetic pleasantness and satisfaction (Federal Department of Town and Country Planning, 2005). 'Padang' Kota lama in Georgetown in Penang, Dataran Merdeka in Kuala Lumpur, Ipoh 'Padang', 'Padang' Merdeka in Kota Bharu, and 'Medan' Bandar in Alor Setar are some of the exemplary public open spaces in Malaysia that reminisce about the colonial dominance reflecting the very essence of communal gatherings and social interaction (Federal Department of Town and Country Planning, 2005).

The use of a public open space as a place for meeting, resting, learning, observing, watching people, and most probably interacting with others is an essential component of the public culture. Activities that occur in public open spaces in cities are divided into three categories (Shu-Chun, 2006; Turel et al., 2007). These activities encompass necessary activities (e.g. shopping, waiting for a bus or a person, going to school or work, etc.), optional activities (walking to get fresh air, standing around, enjoying life, or sitting), and social activities (playing children, greetings and conversations, communal activities of various kinds, and finally, as the most widespread social activity, passive contacts, i.e., simply seeing and hearing other people). All these activities are developed in direct connection with each other (Shu-Chun, 2006; Turel et al., 2007). Similarly, Stauskis and Eckardt (2011, p. 122) explained that types of activities in public open spaces '*could range from quiet (standing, sitting, lying, leaning) to medium (dialogue while walking, speaking, listening) and active (all types of physical exercise, skating, cycling, skateboarding, jumping, singing, and dancing)*'.

In fact, public open spaces are the places that provide the atmosphere for carrying out the spontaneous discussions, deliberation, and unplanned interactions (Young, 2000; Blomley, 2001). Hence, they are the sites where social interactions occur to constitute the personal identities through unmediated human contacts (Lofland, 2000). Social interactions constituted by multilayeral groups are found in the encounters among different groups of people in public open places and originate from the heterogeneous diversity of the society (Weszkalnys, 2008). In a deeper sense, people expect a public open space to create a place that includes their aspirations and demands. With the consideration of actual behavior into the design of such a place, it is able to bring about the social robustness for the society (Weszkalnys, 2008). Gehl (2011) concerning the use of urban open spaces broke down outdoor activities into three sub-categories reliant on different conditions of a physical environment. Necessary activities are less reliant on exterior environment (customary activities); optional activities that are dependent on environment exterior physical conditions and take place with environment pleasant exterior conditions. The last category, social activities discuss the animation of public open spaces through people's presence.

Another controversial discourse that attracts the attention towards public open spaces is the responsiveness of such spaces. A responsive place is enriching, optimizes options for people, and gives them freedom in action (Carmona et al., 2003 cited from Bentley et al., 1985). Public domain is known by public open spaces in cities (Alexander et al., 1987). People's presence shows the extent of democracy in cities (Giddings et al., 2011; Hajmirsadeghi et al., 2012). In fact, a public domain is considered physically accessible urban regions where both strangers and residents might come in with a few restrictions (Madanipour, 1999; Williams & Green, 2001). Taking this into consideration, the existence of public open spaces (the places within the city for public gathering) can enhance social,

cultural, and democratic activities of various ethnic groups and social class strata. Besides this, these places might tone down the stress of daily life with bringing nature to high-density districts or neighborhoods within the city. This research aims to follow the concern stressed by City Hall Kuala Lumpur that there is a lack of public open spaces in the City Center of Kuala Lumpur. Hence, the research builds on bringing social interaction to the congested areas where people are less likely to escape from the hustle and bustle of the environment.

1.2 The Operational Definition of the Terms

In order to understand the structure of the research better, the following statements elucidate the definition of the terms that underpin the basis of this research.

- 1) A public open space refers to a publicly accessible space between buildings that is well connected to the city main network labyrinths such as highways, roads, and streets.
- 2) Social interaction discusses any sorts of contact among people including active and passive involvement.
- 3) A successful (convivial) open space is welcoming for all groups of people; it is designed in a way that best meets its users' needs providing miscellaneous activities for different times and occasions.
- 4) Conviviality or success of a public open space in this research is measured by the period of time people spend in such a space.
- 5) A responsive public open space is an arena that meets the physical, meaning-related, activity-related, and social needs of different groups of people.
- 6) Inclusiveness of a public open space concerns the equal right given to all groups of people in a society to enter and use such a space.

7) Urban design is a field that covers the connections between people and public open spaces. It also concerns the arrangement of public open spaces in cities.

1.3 The Problem Statement

In general, few studies have investigated the integrated issues in relation to the use of public open spaces (Thompson, 2007). Sennett (1977, 1990) in his works, *'The Fall of Public Man'* and *'The Conscience of the Eye: The Design and Social Life of Cities'* emphasized that cities have been divided into places where public life is seldom noticeable. Public open spaces, such as plazas, have been replaced with enclosed shopping mall, i.e. consumption is rather than community at the center of attention (Mattson, 1999). Garreau (2013), the author of the book of *'Edge City: Life on the new frontier'*, even claimed the end of public open spaces (Mitchell, 2003). More crucial, the social importance of a public open space that defines it as a meeting space for people has been aggravated time by time (Sieverts, 2003). Holland et al. (2007) declared that the social nature of public open spaces has been understated. Similarly, numerous social functions that occurred in public open spaces have been declined (Sennett, 1977; Ellin, 1999; Carmona et al., 2003). As the resulting threat, Weszkalnys (2008) noted that extinction of public open places, such as streets and squares, leads to the decline of public life. This shows how public open spaces have been downgraded, distorted, or even disappeared that negatively affects the public realm (Tonkiss, 2006; Amin, 2008; Perovic & Folic, 2012). Quite a number of studies have pinpointed the homogenization in the experience of public open spaces, their physical deterioration, and lastly their exclusion (Worpole & Knox, 2007).

Most public open spaces have been converted to ‘*mono-functional places*’ intertwined with business or tourism purposes (Madanipour, 2004). In fact, all these issues impose a negative impact on the social interactions among people in public open spaces. Supportively, Carmona (2010a) asserted that the contemporary design attests the decline in the quality of public open spaces. The reason might be that due to the rapid development in most cities around the world, public open spaces have undergone changes in their significance that this has resulted in the deterioration of their quality. This rapid development has caused public open spaces to turn into leftover spaces in cities all over the world (Pasaogullari & Doratli, 2004).

The ever-growing simplification of public open spaces and vanishing the basic qualities of such spaces have been of the importance among urban designers and planners during the last three decades (Carr et al., 1992; Rowe, 1997; Severcan & Barlas, 2007). Pasaogullari and Doratli (2004) asserted that public open spaces have started to lose significance, when they are neglected in the urban planning process. ‘*Much design practice today lags behind on the needs of people in public space. As a result, considerable problems and conflicts exist in urban public open spaces*’ (Francis, 2003, p. 2). In fact, disappearance of public open spaces in the urban development weakens the roots of democracy in societies (Giddings et al., 2011). This causes public open space to lose their role in meeting people’s needs that results in dissatisfaction towards the places (Özsoy & Bayram, 2007). Weakening the presence of public open spaces not only ravages the physical environment, but also devastates the public life. As such, people lose their social interfaces, direct relationships, communal memories, public and private formalities, and their mental balance (Goffman, 1963; Rykwert, 1988). With a similar attitude, Severcan and Barlas (2007) stated that disappearance of public open spaces results in de-individualization and a-socialization

of the public life that are the by-products of globalization. Public open spaces are understated and this has caused that they lose their role in providing arenas for crystallizing social interactions and public expressions (Hayter, 2002). Taking a different attribute, most contemporary public open spaces signify the end of the public since they have limited access or visibility (Madden, 2010). This insinuates what Amin (2002) disclosed as most public open spaces have turned into transitional places where the least lasting contact between strangers occurs. Numerous scholars, such as Loukaitou-Sideris (1993); Low (2006); Voyce (2006); Miller (2007), elaborated that contemporary public open spaces, shopping malls, plazas, enclosed atria, gated communities, and other contemporary public spaces portray a public sphere without the essence of accessibility and visibility. With the beginning of the century, a different sort of threat emerged in relation to public open spaces, which is not just of disuse. This threat targets at the patterns of design and management that constrains some people from using public open spaces and detracts from social and cultural diversity (Low et al., 2005). Reviewing the literature, Mehta (2007) demonstrated that there are a few numbers of empirical studies concerning people's social interactions in public open spaces. In light of all the above-mentioned issues concerning the role of public open spaces in the public life, the current research mainly targets at enhancing the quality of public life through identifying the characteristics of a successful public open space.

1.3.1 Issues of Public Open Spaces in Malaysia and Kuala Lumpur

After reviewing the issues in relation to the current situation of public open spaces in the global context, it seems necessary to narrow down the discussion to the current issues of public open spaces in Malaysia and Kuala Lumpur as the capital city of Malaysia from

which the researcher chose the study areas. The literature in the context of Malaysia showed that a few studies have currently discussed the role of public open spaces in meeting people's social and cultural needs.

In this regard, Shuhana and Ahmad Bashri (2002) noted that in the current Kuala Lumpur urban design, the traditional streets as the major public open spaces are vanishing that this results in gradual attenuating the importance of public open spaces as the core elements of social and cultural interactions. Most of the public open spaces in the City Center of Kuala Lumpur due to the emergence of modern shopping centers have lost their function in providing the social and cultural interactions for the residents and visitors (Shuhana & Ahmad Bashri, 2002). Harun and Said (2009) asserted that in most cities in Malaysia, public open spaces have succumbed to new projects, which this results in the loss of their social and cultural functions. In fact, the loss of public open spaces in the City Centers stigmatizes place identity and the characters of city that negatively affects people's life (Harun & Said, 2009). More recently, City Hall Kuala Lumpur (2004a) has stated that there is a lack of urban pocket parks and in general public open spaces in the City Center, district and neighborhood centers of Kuala Lumpur city. This issue has caused the lack of places for informal civic uses and cultural performances that can help to bring life back into the streets and provide opportunities for street artistes to display their skills (City Hall Kuala Lumpur, 2004a). In addition, the City Center of Kuala Lumpur lacks successful public open spaces as the places where people gather (Ujang & Dola, 2007). Collectively, the problem statement highlighted in the current research is that there are a few public open spaces in the City Center of Kuala Lumpur that are unsuccessful in welcoming all groups of people for social interaction, participating in various activities, and benefiting from the opportunities provided in such spaces.

1.4 The Aim of the Research

The aim of the research is to enhance the quality of public life in the City Center of Kuala Lumpur through identifying the characteristics of a sociably successful public open space. In this regard, the research proposes the following research questions and objectives to bridge the research aim and the problem statement.

1.5 The Research Questions

In line with the problem statement and research aim, the following main and sub research questions are proposed:

RQ1) What are the reasons that attract the public to the public open spaces of the City Center of Kuala Lumpur?

SubRQ1-1) What are the public's opinions on the time they spend in the public open spaces of the City Center of Kuala Lumpur?

SubRQ1-2) What are the public's opinions on the reasons that attract them to the public open spaces of the City Center of Kuala Lumpur?

RQ2) What is the role of users' backgrounds, such as gender, ethnicity, and age, on their needs in the public open spaces of the City Center of Kuala Lumpur?

SubRQ2-1) What are the users' needs in the public open spaces of the City Center of Kuala Lumpur?

RQ3) What are the factors that affect people's social interactions in the public open spaces of the City Center of Kuala Lumpur?

RQ4) What are the urban factors that make the public open spaces of the City Center of Kuala Lumpur successful?

1.6 The Research Objectives

The objectives of the research, which correspond to the research questions, are as follows:

Objective 1: To identify the reasons that attract the public to the public open spaces of the City Center of Kuala Lumpur

Sub Objective 1-1: To identify the public's opinions on the time they spend in the public open spaces of the City Center of Kuala Lumpur

Sub Objective 1-2: To identify the public's opinions on the reasons that attract them to the public open spaces of the City Center of Kuala Lumpur

Objective 2: To determine the role of users' backgrounds, such as gender, ethnicity, and age, in their needs in the public open spaces of the City Center of Kuala Lumpur

Sub Objective 2-1: To identify the users' needs in the public open spaces of the City Center of Kuala Lumpur

Objective 3: To identify the factors that affect people's social interactions in the public open spaces of the City Center of Kuala Lumpur

Objective 4: To determine the urban factors that contribute to successful public open spaces in the City Center of Kuala Lumpur

1.7 The Significance of the Research

Successful public open spaces are the important urban elements that improve the quality of life in the congested parts of cities (Shu-Chun, 2006). In general, public open spaces perform a magnificent role in enlivening the social life of cities and societies (Worpole & Knox, 2007). These spaces are more successful in playing their roles as socially shared spaces if the first step is exploring people's interactions other than physical spaces (Mean &

Tims, 2005). In the present literature on urban design, urban designers are more concerned about the social aspects of public open spaces than before (Gehl & Gemzøe, 2004). The need for the study of social interactions in public open spaces is necessary (Sugiyama et al., 2009) that this necessity underpins the objectives of the current study. In support to the significance of social needs in public open spaces, Carmona et al. (2003, p. 114) asserted that urban design concern is in relation to '*social space*', the space that enhances '*social and cultural interaction and public life*'. Amin (2006) accentuated the need for finding out the relationship between public open space and social needs that implicitly supports the significance of the objectives of this research. Social and physical environments are dependent on each other, i.e. that each physical ambience is in relation to people's social interactions (Yen & Syme, 1999; Cattell et al., 2008).

Although a rich number of scholars challenge the importance of public open spaces, the degree of importance is controversial. Specifically, in the City Centers where the land price is high, public open spaces are more the matter of development pressures. In the current trend of development, the need for public open spaces is tangibly pronounced (Harun & Said, 2009). The existence of public open spaces in the City Centers refreshes and enhances the quality of life (Tajima, 2003). The most important public open spaces of the city are located in the City Centers that benefit the city with their far-reaching contribution (Worpole, 2000; Moughtin, 2003; Gehl, 2011). Concisely, Hajmirsadeghi et al. (2012) stating that a public open space is required to meet the socio-cultural needs of people supported the significance of the research. This directly underpins the necessity of conducting the current research to identify the characteristics of successful public open spaces. In fact, City Center public open spaces not only provide places in inner locations of the city for social interactions, but also contribute to the social wellbeing and sustainability

of the whole city. Overall, the results of this study contribute to the design of successful public open spaces in the City Centers that assists urban designers in enlivening the public life.

1.8 The Conceptual Framework of the Research

The conceptual framework of the research shown in Figure 1.1 forms the basis of the research structure. It links the problem statement with the literature review and data collection methods and tools in order to present reliable and valid results. Therefore, it elaborates on various steps from initial preparation to contribution to the field of urban design in the study context. The initial stage aims to establish the problem statement and research aim and objectives. The literature review analytically addresses different issues of public open spaces to spot the urban gaps in the field that forms the theoretical framework, assists in selecting the study areas, and establishes the objectives of the research. The theoretical framework determines the independent and dependent variables as the units of analysis. The Figure shows the methods employed, the tools used in data collection, and the relevant procedures. It illustrates that the first method used in this research is a quantitative approach and the data collection tool is the self-administered questionnaire survey. It elaborates that the structured interviews with the experts validate the results derived from the public surveys. Lastly, it shows that the findings of the research present practical suggestions for the future development of successful public open spaces in the City Center of Kuala Lumpur. It emphasizes that the findings significantly assist urban designers in enhancing the public life among different groups of the society.

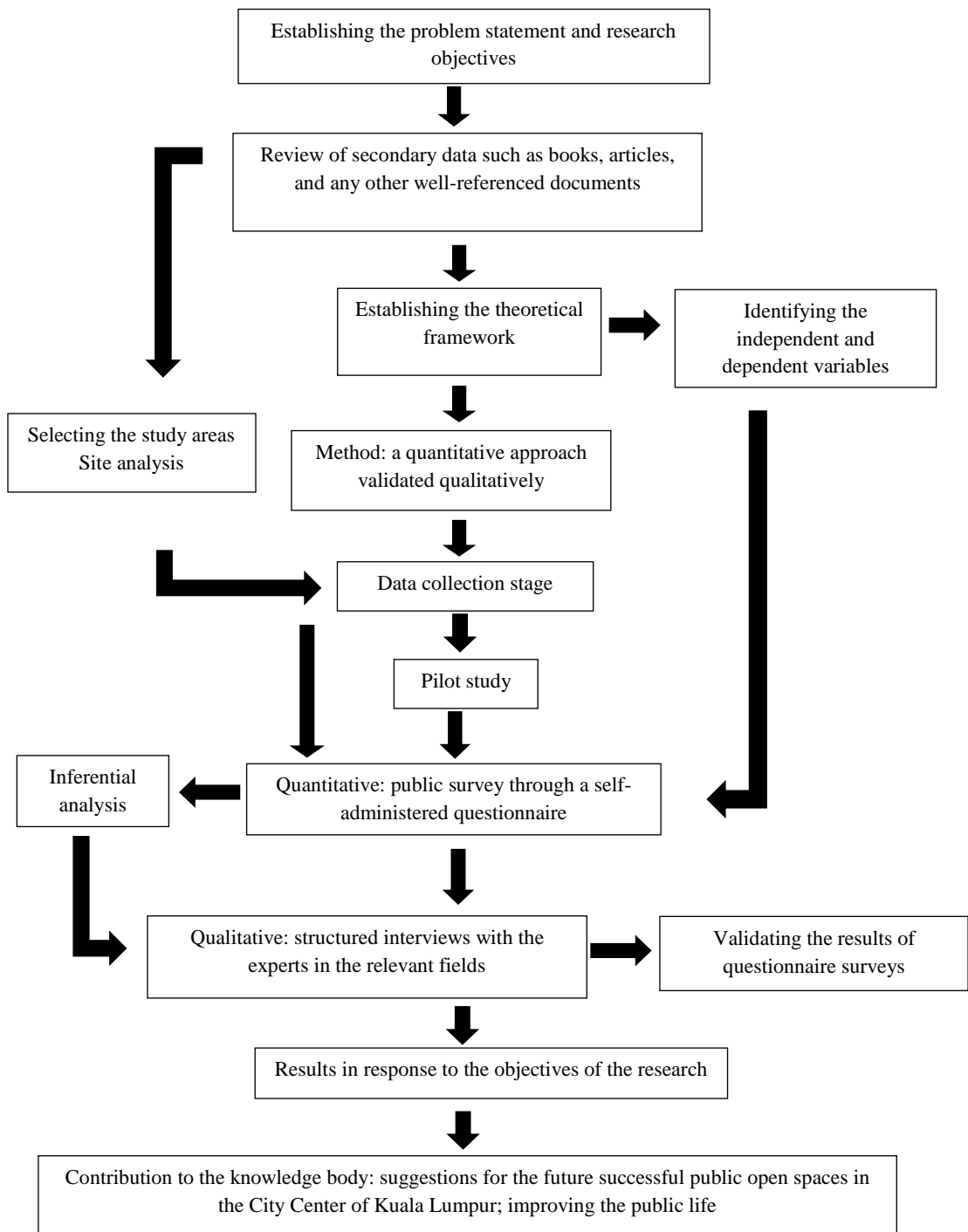


Figure 1.1: The conceptual framework of the research

1.9 The Scope of the Research

In line with the objectives of the research, the characteristics of public open spaces in the City Center of Kuala Lumpur that meet the needs of people according to their age group, gender, and ethnicity are the main subjects. In this research, public open spaces are the places where everybody freely accesses to strengthen their social bond with the rest of the society. The main goal is to identify the features of a successful, responsive, and convivial public open space that make people enjoy and linger. On this basis, the current research conducts an exploratory approach in the field of urban design concerning the quality of people's life in the City Centers. This research is limited to the urban factors of public open spaces such as physical elements, activities, and cultural meanings. This limitation leaves identifying the role of these factors in the spatial configuration of public open spaces for the future relevant studies. In addition, this research due to the need for another comprehensive study did not deeply investigate the impact of physical elements and features of public open spaces on the cultural attachment of ethnic groups in a Malaysian context.

1.10 The Structure of the Research

This research encompasses six chapters representing the introduction, literature review, research methods, analyses and results, findings and discussions, and implication of the results. Introduction chapter that portrays the research agenda elaborates on the issues such as the background of the study, research aim, research objectives, research questions, problem background and statement, research significance, and conceptual framework as the basis of the research construct. The literature review chapter that underpins the theoretical framework and validity of the research aims to bridge the recent issues concerning public

open spaces and the way people are engaged in such spaces considering social, design-based, and personal factors. This chapter targets at covering a comprehensively analytical review of the components of a convivial public open space. The research methods chapter sets out to put forth the research design and the approaches considered for the data collection. Besides that, this chapter elaborates on how different inferential analyses that suit the objectives of the research establish the relationships between the independent and dependent variables. At the end of this chapter, a section addresses the selection of the study areas in response to the relevant urban theories. Followed by that, Chapter 4 delineates the results of study derived from data analyses. The next chapter builds on discussing the findings of the research in line with the theories. Chapter 6 mainly summarizes the major findings, discusses the implication of the results, and elaborates on how these findings contribute to the current design and development trends of public open spaces. This chapter opens the discussion further by proposing some future studies. Overall, the chapter draws a conclusion on the findings by consolidating the research contribution towards the future development of successful public open spaces in the City Center of Kuala Lumpur, a city where Asian cultures are experienced.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter aims to address theories in the field of urban design concerning people's engagement in public open spaces. The first section targets at covering the attitudes toward such places, their significant role in public life and urban design, their typology, and their place in a Malaysian context. The second section discusses the meanings attached to such places, their qualities, privatization, and transformation. Followed by that, the next section aims to identify people's need in public open spaces. The fourth section covers the theories on a responsive and successful public open space. Afterwards, the chapter uncovers the issues relating to social interaction in such spaces as well as the characteristics of a socially successful public open space. The next section elaborates on the role of age, gender, and culture in use of such spaces. Lastly, this chapter bridges the link between the relevant literature and the objectives of the research that results in establishing the theoretical framework.

2.2 Public Open Spaces

In pre-modern societies, a public open space was the place for interaction, sharing information, exchanging gossips, ideas, and the latest political rumors, as well as a place for religious gatherings (Khondker, 2009). Public open spaces are interrelated with livable public domains and largely vary in their functions. They are places where people interact

with individuals out of their personal domains. In other explanation, they are places that house direct determination, the public concerns establishment, information exchanges, commercial interactions, and mingling. In fact, the clashes between these domains often bring about complicated conflicts (Ehrenfeucht & Loukaitou-Sideris, 2007).

From a holistic view, demarcating the exact meaning of public open spaces is complicated and sprinkled with ambiguity (Gaffikin et al., 2010). The essence of public open spaces might be discussable through two categories: (1) the physical and (2) the procedural (Iveson, 2007). Iveson (2007) stressed that looking at public open spaces from the physical attitude perspective introduces such spaces as the territories of sociability where people's actions and activities are exposed to others. From second category, the procedural attitude demarcates such spaces as the arenas where people might participate in group discussions on communal conversations and issues. However, these two categories are not separable from each other (Gaffikin et al., 2010). In fact, this definition of public open spaces bridges the physical domains in which people mingle in different ways and participation in numerous communal issues on different occasions take places. In general, public open spaces are tricky places as different disciplines impart different meanings to them. These places generally bear three different interpretations (Houssay-Holzschuch & Teppo, 2009). First, a public open space has been politically understood as the base for public domain that makes a society's political life more vital and lively. A vibrant public open space is a place that paves the path for strengthening the democracy (Dijkstra, 2000; Child, 2004; Houssay-Holzschuch & Teppo, 2009) that is mostly pronounced via participatory citizenship in a civil society (Low, 2000; Melucci & Avritzer, 2000; Warren, 2002; Goodsell, 2003; Houssay-Holzschuch & Teppo, 2009).

The second view looks at public open spaces from a juridical view that contemplates a public land – the land owned by public authorities – as a public space. Based on this definition, streets, squares, parks, and gardens are public open spaces (Houssay-Holzschuch & Teppo, 2009). On this basis, urban planners make a differentiation between private and public land regarding its ownership. Despite the need for contextualizing this definition historically, since Roman times, western legislators have revered a considerable distinctiveness between public and private domains (Houssay-Holzschuch & Teppo, 2009).

The third view identifies a public open space from a social perspective deeming its uses by diverse people who frequently use it (Goodsell, 2003; Houssay-Holzschuch & Teppo, 2009). This attitude forms the basis of people's involvement in public open spaces in this research. Given this, Goodsell (2003) elucidated that the strongest dissension falls between those who contemplate a public open space as the social domain of public concern and those who perceive it as a physical, public place such as a town square or an urban plaza. The latter viewpoint refers to a consecrated place where a vast spectrum of people from all groups, races or ethnicities meet up and interact with each other (Houssay-Holzschuch & Teppo, 2009). Accordingly, public open spaces are perceived as the places where groups of people possessing diverse cultures and interests come for social interactions and interrelations (Walzer, 1986; Ortiz et al., 2004).

This perspective towards public open spaces has been strongly supported by the French sociologist Isaac Joseph (Houssay-Holzschuch & Teppo, 2009). Critically, this French sociologist accentuated the necessity for open access to spaces that are public in the social sense. Consequently and based on this attitude, social public open spaces should be enabled to welcome a plural amalgamation of uses or viewpoints (Houssay-Holzschuch & Teppo,

2009). Through this multidimensional and theatrical quality, people are concurrently active and engaged in the public domain as the ascribed social public open spaces. This exquisite quality of social public open spaces is called '*publicness*' (Houssay-Holzschuch & Teppo, 2009). All in all, there are three definitions that are germane to the exact meaning of publicness of a public open space: public domain, public territory, and public life (Varna & Tiesdell, 2010). Low and Smith (2006) explicated that a public sphere is an arena for doing political performances in which a public open space is a real physical entity, introducing public realm as a domain where the two entities converge. Deliberating on different dimensions of a public open space, Varna and Tiesdell (2010) asserted that a public open space might be political, social, and symbolic. A political public open space is the place for performing political actions; a social public open space is the ground where social interaction, interconnection, information interchange, personal improvement, and social learning occur (Varna & Tiesdell, 2010). A symbolic public open space represents a collective confluence of diverse sociability.

A new viewpoint towards public open spaces touches urban planning perspective and architectural view. The discourse of public open space is an important subject in the fields of urban design, city planning, and city image. The fostering development of a public open space delineates new dimensions ahead of urban theorists in investigating and enhancing. Attributing to the impact of such spaces on the special efficaciousness of the society, the value of high quality public open spaces is given a specific place (Truong, 2008). The urban planning attitude is tied up with creating open physical places within cities that commensurately play the role of sites for public use as well as citizens' interactions. Public open spaces are vital for their values such as allowing people to escape from the hustle and bustle of the urban life, improving the sense of connectedness among groups, and assisting

them in creating the sense of community identity (Goodsell, 2003; Holland et al., 2007). Marcus and Francis (1998) in a study on American urban plazas stated that recommendations from urban designers demonstrate that these places should be human scale, consistent arenas for concerts and art shows, and seemingly safe and secure. In addition, from the architectural perspective, public open spaces are places with free access for anybody in contrast to the private spaces that are mostly with high control and restriction. Deliberating on all the aforementioned theories, Table 2.1 illustrates a brief discussion on the prevailing theorists' perspectives towards the various prospects of current public open spaces.

It is noteworthy to say that all the aforementioned theories touch and cover general issues on the use of public open spaces within cities considering the efficaciousness of design elements across people's needs. Overall, the theories on public open spaces delineate the point that public open spaces are the vital entities of the core nucleolus of cities (more specifically City Centers), where all groups should be given the same right to enter and use; therefore, the needs of all groups should be thoroughly taken into account. Yet, in order to create spaces safe and secure, the management of such spaces should consider an intense monitoring of criminals and the groups who are most of the time a nuisance.

Table 2.1: Key Public Open Space Theorists

Theorists	Source	Description
Gehl	Life Between Buildings (2011), New City Spaces, & Public Spaces (2003), Public Spaces, Public Life – Sydney (2008)	A Danish architect with multiple renowned books that study and delicately analyze the positive and negative aspects of public open space with a clear promotion towards pedestrian life. His study on Sydney Cities Public Open Space aims to transform the city into a similar framework to that of the European café seated culture with inspirations deriving from that of Copenhagen.
Lindner	Urban space and cityscapes: Perspectives from modern and contemporary culture (2006)	Christoph provides a social oriented theoretical perspective on urbanisms influence on open space. He examines the key notions of image, text and form providing an obscure yet fresh insight into the mechanics of open space. This reflects highly on how spaces are interpreted through subtext, history and imagery.
Corbett	Transforming cities: Revival in the square (2004)	Corbett examines the philosophical entity of open spaces with a guided process on the development of key open spaces. An exploration of the complexities of public space development due to the large number of stakeholders involved with spaces is undertaken. A set of principles deriving from expanded conventional notions of space from Kevin Lynch is provided in evaluating open spaces largely looking at the urban design of spaces and how effective management of key spaces create spaces of urban livability.
Woolley	Urban open spaces (2003)	Woolley sees open space as a crucial asset in the development of sustainable cities. The many benefits derived from effective open space are explored to great detail including social, health, environmental and economic benefits. The influence of different types of space on the city produces inherent challenges in designing effective open spaces.
Wise	Sydney’s Great Streets (2004)	Tim Wise provides a local and fresh insight into the possibilities of appropriate design criteria on the urban space of streets. A local examination of how well-designed streets can play a vital role in the future expansion of spaces. His formulation of a set of [decisive] design criteria, focused on urban design elements, in improving streets and achieving quality spaces creates a similar perspective for that of public open spaces.
Loukaitousideris and Banerjee	Urban design downtown: Poetics and politics of form (1998)	The American architects explore failing open spaces in downtown (CBD) Los Angeles through a detailed analysis of the poor design merits of open spaces as they create social divisions among different classes of people in the community and fail to attract users to spaces outside of conventional office hours. The overall lack of evolution and sustainability of spaces, to meet the growing needs of users, is attributed as the detriment of open spaces. Solutions to such spaces proposed revolve around the need to redesign physical aspects of the built form of spaces to reinvigorate life into spaces and remove social class divisions.
Gallacher	Everyday Spaces: The potential of neighborhood spaces (2005)	A UK landscape architect that examines neighborhood open spaces and their connection to renewal of public life in public space. She places a high emphasis on effective management and design of spaces as crucial elements needed to refigure the culture of failing open spaces in the UK.
Mossop	Public Space: Civilizing The City (2001)	A local perspective of how the public realm is developed in Australian cities with a strong emphasis on design and urban livability as a focus.

Source: Truong (2008)

2.2.1 Dimensions of Publicness

Quite a number of critics have declared their perceptions of diverse dimensions of publicness with a high degree of commonality. Kohn's (2004, p. 11) definition reveals three dimensions of 'ownership', 'accessibility', and 'intersubjectivity', which intersubjectivity refers to the diversity of social interactions that might happen in a public open place. Similarly, Madanipour (2003) highlighted three dimensions of publicness. The first dimension namely access includes the easy access to the place as well as the social activities happening there. The second dimension introduced by him is agency, which refers to the control and decision-making. Lastly, he introduced interest as a dimension of publicness that refers to the targeted beneficiaries or the influence of decisions on the place. Complementary, Staeheli and Mitchell (2007a) contended that publicness is in relation to the property (a thing or a set of rules) and people who use and inhabit the property. More importantly, the quality of access to a public open space that concerns the relationships of the property is of a considerable significance (Staeheli & Mitchell, 2007a). Publicness of a public open space might be dependent on different features of such a space. '*Rights of access, use and control /ownership*' are the factors that play a substantial role in specifying the extent of publicness of a public open space (De Magalhães, 2010, p. 563). Németh and Schmidt (2011) found the three criteria of possession, controlling, and uses determining in demarcating the publicness of a public open space. Even in a broader sense, publicness is defined through the factors of possession, controlling, approachability, and inclusiveness (Langstraat & Van Melik, 2013).

With a holistic view, an urban anthropologist, Low (2002) stated that the publicness of spaces is discussable through five kinds of spatial rights. These spatial rights are access (the opportunity to enter and stay in a public space), freedom in doing actions (the chance to do activities in a public space), claim (the power to alter the environment), change (the power and authority to alter the environment), and ownership (the final format of control). Similarly, Ehrenfeucht and Loukaitou-Sideris (2007) unfolded that publicness of a space is discussable when people are invited without the need for permission so that they are enabled to make a decision arbitrarily about their needs how to be conducted. Carmona (2010b) stressed the dimensions of function and perception. From a different perspective, publicness of a place is in relation to five dimensions of '*ownership, control, civility, physical configuration, and animation*' (Varna & Tiesdell, 2010, p. 580). Ownership refers to the range in which a public open space varies from public to private (Marcuse, 2005; Varna & Tiesdell, 2010). The two dimensions of control and civility discuss how the place is monitored, managed, and maintained, namely the managerial aspects of publicness. Furthermore, the fourth and fifth dimensions physical configuration and animation are design-oriented (Varna & Tiesdell, 2010).

2.2.2 Attitudes Towards Public Open Spaces

Different studies have focused on various constituents of public open spaces such as physical form, human activities, meaning, and image (Relph, 1976; Canter, 1977; Punter, 1991; Montgomery, 1998). '*Public spaces are the lifeblood of cities. More than simple physical entities, truly public spaces are sites of interaction in which individuals are sometimes forced to interact with those whom they usually criticize or dislike*' (Németh & Hollander, 2010, p. 21). Sociologically, a public open space is the place where different

social groups perform a variety of special social activities (Stauskis & Eckardt, 2011); therefore, it should be an ideal place for the occurrence of ‘*social interactions and public activities*’ (Mitchell, 2003, p. 131). This qualification of a public open space clears the way for conducting social life (Marcuse, 2006). Hence, it is inferred that public open spaces are the arteries of the body of cities in which through providing arenas for doing numerous social activities, people of different classes are given a chance for social interactions.

In their traditional definitions, public open spaces are the arenas where people gather for political (Mitchell, 1996; Madanipour, 1999; Banerjee, 2001; Carmona et al., 2003; Amin, 2008) and cultural expressions (Whyte, 2001; Thompson, 2002; Amin, 2008). More considerably, such spaces as main functional and visual elements play an important role in augmenting urban quality in the way that show cultural issues throughout time and reflect urbanites’ well-being (Ahmadi et al., 2009). Public open spaces in cities are the source of visual aesthetics and functional environments, the places for holding events and resting. Besides that, these spaces bring about confrontation with indoor atmosphere where new experiences take place (Perovic & Folic, 2012). Banerjee (2001) argued that public open spaces are the places for relaxing, social interaction, amusement, time-out, and simply having a pleasant time. These places maintain people's social entity within the society, where people face different groups of people and events to share experiences (CABE, 2004b; Mean & Tims, 2005; Holland et al., 2007) that this exchange helps them learn how to trust each other (CABE, 2004b). Similarly, Hajjari (2009) asserted that a public open space is an important catalyst for creating changes in social interaction to the extent that these changes make different people gather.

Many designers and architects consider public open spaces the places that are empty spaces between buildings and publicly owned (Worpole & Greenhalgh, 1996). Some theorists opened a controversy that public open spaces are magnificent since they provide places for social interactions and political activities (Arendt, 1958; Chua & Edwards, 1992; Dijkstra, 2000; Madanipour, 2004; Shaftoe, 2008). Walzer (1986) stated that public open spaces are the places to share with strangers; therefore, such places might be appropriate for trading, sport, politics, religion, peaceful coexisting, and even impersonal encounters. The serendipity in encountering others is traceable in Gaffikin et al.'s (2010) argument that public open spaces create a potential base for incidental interactions with other groups, which leads to the exchange of ideas. In fact, this happenstance in public open spaces that clears the way for exploration, fosters what a lively urban environment is planned to provide (Gaffikin et al., 2010). Massey (2005) introduced this as the cutting edge of the complication and uncertainty of current life. Public open spaces might be places for peaceful coexisting and communicating and pledging miscellaneous activities (Abdulkarim, 2004; Charkhchian & Daneshpour, 2009) as being the cores of cities in attracting people (Abdulkarim, 2004). As the prevalent role, public open spaces are arenas for '*the arts and culture, typically for performances, festivals, concerts, parades, and outdoor film shows*' (Melik et al., 2007, p. 28). Such places also might be considerable urban elements, places for learning and solidarity (Shaftoe, 2008). One of the badges of a public open space that binds all of its embossed characteristics is its capacity to help people be educated about others as well as the real urbanity (Lofland, 2000).

Staeheli and Mitchell (2007a) through a precise analysis of the literature review on public open spaces and publicness delineated that public open spaces are describable through two clusters; the first cluster introduces a public open space as a meeting place, but the one personalized by danger, in contact with strangers, and lack of individual control. The importance of a public open space, in this classification draws the attention to a place for social interaction, identity formation, and affirmation, achievable with activities such as walking, recreation, and casual interactions. The second cluster introduces a public open space as a focal place that discussion and encounter, observation, showcase of ideas, public possession and accompanying legitimate principles, and high degrees of approachability characterize it. The importance of a public open space in this cluster describes it as a place for democracy, politics, and social movements (Staeheli & Mitchell, 2007b).

From a different angle, Shaftoe (2008, p. 75) stated that: '*A broad definition of public space would cover anywhere that is universally accessible to citizens and could therefore include everything from national parks to town hall foyers*'. More specifically, this scholar classified public open spaces as open squares, enclosed and/or covered spaces, pocket parks, linear parks, reclaimed streets, and linked spaces. Open squares are the classical places for people's gathering and epitomize most kinds of public open spaces including a large spectrum of sizes, shapes, and functions (Krier, 1979). Public open spaces might be in parallel with traffic routes or be pedestrianized (Jacobs, 1993). Most importantly, they should give priority to pedestrians and provide opportunity for lingering. Among all types of public open spaces, the most successful ones are those with numerous squares connected by short pedestrian routes that enable loitering for the users (Shaftoe, 2008).

Collectively, the definition of the public open space in this research is the amalgamation of the above-mentioned theories covering people's social needs. More specifically, this definition is in parallel with Valentine's (1996), Malone's (2002), and Holland et al.'s (2007) definitions as a public place where people from different social classes, ages, groups, and ethnicities are given the equal right to access at the same time. Nevertheless, the open accessibility of these places might bring about contestation, opposition, confrontation, resistance, and even subversion (Mitchell, 1995, 2003). Therefore, this heterogeneous definition of a public open space requires devising a series of strict management regulations and measures, such as installing CCTVs all over the place and employing efficient security guards, which guarantee a safe stay for all groups, while excluding and sifting out the offensive ones. A plethora of studies have elaborated on different aspects of the efficiency of public open spaces that discussing them analytically is out of the scope of the objectives of this research.

2.3 The Significant Role of Public Open Spaces

Public open spaces in cities are of significant consideration in all societies' public landscape (Truong, 2008). In fact, a public open space plays *'an important part in urban heritage, it makes a valuable contribution to environmental quality, health and social cohesion and receives public endorsement as major contribute to quality of life'* (Gallacher, 2005, p. 41). Similarly, Pasaogullari and Doratli (2004) declared that a public open space plays a vital role in shaping people's confidence, which helps to promote societal cohesion. These spaces continuously are considered important in societies; meaning that, well-equipped public open spaces are significant grounds creating potentials for miscellaneous physical activities and social interactions (Giles-Corti et al., 2005).

Social basis of the communities of cities is enhanced through the formation of vibrant public open spaces (Chua & Edwards, 1992). Public open spaces are physical heart of the cities that show people's social world and provide basis for activity and communication (Whyte, 2001). Distinctive characters are impartible components inherited by these spaces that inspire the meaning of belonging to people, unlike the meaning generated by home and workplace. Hence, such spaces are the places for face-to-face interactions with strangers (Dijkstra, 2000). Supported by Arendt (1958), a public open space is a physical place for cultural and political matters. Being inclined to this prospect, demonstrations, protests, celebrations, and festivals both in large and small scale take place in public open spaces (Dijkstra, 2000). These are only sporadic happenings in public open spaces; in fact, everyday activities ranging from merely passing through to lingering take place in such spaces as well, which these daily activities make a place public. Bringing togetherness, public open spaces give a unique experience though providing strong bonds among different groups (Dijkstra, 2000).

Urban designers started to figure out the magnificence of public open spaces at the end of twentieth century. In fact, urban theorists contended that these places play a basic role for the self-governing structure and urban existence (Ehrenfeucht & Loukaitou-Sideris, 2007). Public open spaces offer the opportunity for a vast spectrum of people to learn about each other and, specifically, oblige people to be more patient in their communications (Lieshout & Aarts, 2008). In fact, in a multicultural society, such as Malaysia, creating lively public open spaces that welcome the confluence of different ethnic groups could strengthen the political patience among groups and sectarians, which this ultimately makes the societal conflicts abate. More holistically, the significant role of public open spaces is not only highlighted due to that they are the arenas for representing a multicultural society, but also

because they test the relationships among the inhabitants of that society (Wood & Gilbert, 2005). Furthermore, public open spaces are important environmental features that provide physical activity among children and adults (Giles-Corti & Donovan, 2002; Bedimo-Rung et al., 2005; Davison & Lawson, 2006). From another viewpoint, Worpole (2007) accentuated the importance and necessity of public open spaces in that they are places to form and test the public life and citizenship. Therefore, they are created to shape more mutual sorts of social lives that are vital elements of future sustainability (Worpole, 2007).

More than being places for recreational activities; public open spaces integrate greenery into urban spaces, offering notable environmental benefits (Pasaogullari & Doratli, 2004; Kotchen & Powers 2006; Wang et al., 2012). In addition to the environmental benefits, these places offer socio-psychological benefits that provide significant values for the vividness of the cities as well as urbanites' health (Chiesura, 2004). Public open spaces play their role in providing people with the physical, environmental, and socio-psychological benefits in the City Centers more than anywhere else. Hence, the question is that why public open spaces are of importance in the City Centers. The following section targets at finding an appropriate answer to this question.

2.3.1 The Importance of Public Open Spaces in the City Centers

City Centers possess invaluable lineaments in cities (Gruen, 1964; Whyte, 1989; Gratz & Mintz, 2000; Rypkema, 2003). The existence of public open spaces in City Centers with high density is more pronounced (Carmona et al., 2003). These places are sprinkled with historic districts and constitute the appropriate arenas for communication as well as forums for civic life. Being the main component of an urban fabric and identity, public open spaces

are civic places holding diverse socio-cultural activities, sports, and events that animate City Centers (Harun & Said, 2009). Considerably, City Centers are places with multiple functions that are affluent with squares and public open spaces and denote the symbol of local and national cultures (Balsas, 2007). People through walking in public open spaces of the City Centers give vividness to urban life and consequently to the whole city. In fact, a successful City Center is viable through a blend of activities coexisting with daily interactions and uses (Balsas, 2007). Based on the above-mentioned statements, the research delves into finding the characteristics of a sociably successful public open space in the City Center of Kuala Lumpur, which contributes to the dynamics of urban life.

2.3.2 The Role of Public Open Spaces in Public Life

Public open spaces create the basis of public life and prepare people's needs for their socio-cultural activities, rituals, social interactions, and joy (Slessor, 2001). This wide domain introduces such spaces as places for declaring democratic expressions as well as spaces between buildings, which animate people's interactions (Varna, 2009). Largely, factors, such as diversity and heterogeneity, identity, and democracy as the elements of a vivid public life, form the qualities of urban life (Jacobs, 1961; Lefebvre, 1996). Public open spaces are significant elements that play an important role in improving people's quality of life (Chua & Edwards, 1992). Urban designers and planners consider a tremendous value for public open spaces for their substantial contribution towards social interactions and quality of life in urban areas (Karuppanan & Sivam, 2012). Francis (1989) introduced public open spaces as essential elements of urban life that have the capacity to crystallize people's cultures, thoughts, beliefs, and values. Possessing the social value, public open spaces admire the reciprocal communications between people's behaviors and their

culturally enriched built environment. Quite a number of urban design and planning literature highlighted the essential role of and need for meaningful public open spaces in enhancing the daily experiences of public life and social interactions (Vernez-Moudon, 1992; Madanipour, 1996; Burke & Ewan, 1999; Tibbalds, 2001; Burton & Mitchell, 2006; Holland et al., 2007; Mehta, 2007; Orum et al., 2009).

Similarly but slightly with a different viewpoint, it is widely believed that plazas, squares, and any other sorts of urban public open spaces possess such a capacity to support and augment public life (Lynch, 1984; Vernez-Moudon, 1991; Carr et al., 1992; Sorkin, 1992; Zukin, 1996; Cooper-Marcus & Francis, 1998; Tibbalds, 2001; Gehl, 2011). There is an increasingly supported request for investment and revitalization of any traditional types of public open spaces in cities (Lennard & Lennard, 1995; Gehl & Gemzoe, 1996; Dane, 1997; Gehl et al., 2008). Overall, the impact of public open spaces on the social cohesion and vividness of a city highlights the premise that such spaces providing people's social needs contribute to the social conviviality of cities. In fact, public open spaces of high quality are essential for the vitality of cities (David, 2008). There must be a renewed interest in a thorough understanding of the relationships between cities and public open spaces within them. Since public open spaces are focal points of neighborhood activities, special consideration should be given to making these spaces not only functionally appropriate, but also consistent with the features and the density of the surrounding areas (Pasaogullari & Doratli, 2004). After exploring the importance of public open spaces in public life, the following section elaborates on how the existence of lively public open spaces contributes to improving the quality of life.

2.3.3 The Role of Public Open Spaces in Quality of Life

Quality of life concerns people's satisfactions of their life and the places. This definition covers their needs, fancies, preferences, aspirations, and in general a vast range of touchable and untouchable factors that specify their overall wellness (Cutter, 1985). Overall, the word of quality relates to the extent on which the goodness of any objects or entities is specified, while it might be different among people (Nasution & Zahrah, 2012). Various development programs in public open spaces are targeted at improving people's quality of life (QOL). In this line, some studies have been conducted in order to assure the effective achievement of this goal (Beck, 2009). The enhancement of people's quality of life in public open spaces is deemed to be the concomitant of people's involvement with such spaces (Das, 2008). Widely supported, public open spaces are vital components of urban entities (Shirvani, 1985) that strikingly boost up people's quality of life (Madanipour, 1999).

Dimensions of QOL in urban areas relate to the physical and social aspects of environment (Das, 2008). This makes public open spaces relate to physical and psychological health (Chiesura, 2004; Harlan et al., 2006; Hansmann et al., 2007; Song et al., 2007), social interactions, and cohesion (Ravenscroft & Markwell, 2000; Sugihara & Evans, 2000; Tinsley et al., 2002; Cohen et al., 2008). Public open spaces in a broad range are found influential in individual wellbeing, community life, and health (Cattel, 2008). Supporting the above statements concerning the important role of public open spaces in the quality of life, Fermino et al. (2013) stressed that public open spaces contribute to enhancing the condition of a salubrious urban living for people through providing facilities for leisure and physical activities. In a broader sense, such invaluable spaces in cities augment the physic-

psychological health of the society by facilitating the social cohesiveness of the urbanites (Bedimo-Rung et al., 2005; Leslie et al., 2010; Lee & Maheswaran, 2011). Public open spaces are the places that teem with private and common requirements to satisfy public life in cities; meanwhile, public life alters with the passing of time due to the socio-economic changes as well as culture of the public (Turel et al., 2007). These places creating an image for the city in which they are located become a meeting place as well as a center for various activities to improve physical and social environments (Rubenstein, 1992; Bedimo-Rung et al., 2005; Krenichyn, 2005; Kaczynski & Henderson, 2008; Koohsari, 2011). Similarly, Davison and Lawson (2006) stated that physical activities such as access to public open spaces impose impact on several aspects of the built and social environments within the city. Since in any communal lives there is a dynamic balance and interplay between private and public activities, different cultures instigate different stress on the public open space within the city (Carr et al., 1992; Turel et al., 2007).

Public open spaces equipped with various functions enhance users' quality of life in cities. Therefore, urban life will be more attractive and meaningful by creating more vivid and livable environments. In fact, designing well laid-out public open spaces helps to have the ease of walking and cycling within the city and provide the opportunity to make safer environments in line with the diminution of vehicle use (Turel et al., 2007). Overall, the rich meaning attributed to public open spaces has made them idiosyncratic components within cities (Tang & Wong, 2008). Generally, public open spaces cater for various physical activities across all age groups, which this character impressively contributes to the promotion of their quality of life. The following section aims to highlight the place of public open spaces in urban design and planning.

2.3.4 Public Open Spaces and Urban Design and Planning

Urban design concerns the visual forms of environments and effectiveness of their function of developments within the surroundings and broader contexts. The concept of the public domain, obtaining a sense of place, and the public importance of new developments are the vital components of the urban design objectives. The issues, such as society safety, accessibility, sustainability, quality of life, and keeping the heritage, are the focus of the public domain as well as important elements of the urban design agenda (Abidin et al., 2010). The definition highlights the role of public open spaces in improving the public life.

Creating public open spaces is the focal point of urban design process for their instrumental role in gathering people as well as lodging socio-cultural daily activities within cities (Al-Shams et al., 2013). Stressed by a plethora of urban design scholars, public open spaces are the essential urban elements that demarcate the cities' points of attraction and planning as well as the social interactions within communities (Pasaogullari & Doratli, 2004; Kotchen & Powers 2006; Wang et al., 2012). Holistically, Frick (2007) highlighted the importance of public open spaces in urban structure to the degree that these spaces are considered the components of the cities' the physical and spatial structure, which shape the correspondence between elements and places, and make the cities more pragmatically functional. Although a public open space is all about an urban place, the exact concentration of such a space is directed to an open sociological category. Most of the definitions attributed to this term have been in relation to cities (Madanipour, 1999; Carmona et al., 2003). Public open spaces are the most influential elements of cities' structures, where people gather to hold various events, such as protest, contest, and celebration that these make cities livable entities (Hajjari, 2009). Considering the most

important effect of urban design on the formation of public open spaces, it is noteworthy noting that if urban design carefully considers socio-cultural and physical quality of public domain in order to make enjoyable arenas for people; undoubtedly, its main responsibility is to make successful public open spaces in cities (Carmona et al., 2003).

In the field of urban design, urban public open spaces greatly affect the overall image of the cities, which this introduces them significant for the urban culture as well as civic life (Velibeyoglu & Gencel, 2006). Urban public open spaces have been of a prime importance in the urban development in Malaysia ever since the colonial era (Melasutra, 2004; Ayob, 2010). Undoubtedly, an outstanding element of British Colonial towns in Malaysia was '*Padang*' or square that historically proven has been influencing the images of cities (Ayob, 2010). This signifies the important place of public open spaces in urban design and planning to the extent that such spaces might strikingly be influential on the structure of cities. Calhoun (1986, p. 341) asserted that one of the most socially magnificent features of a city is the creation of public open spaces where various groups of people socialize, '*interact and observe each other, debate and learn politically, and grow psychologically from diverse contacts*' (as cited in Aurigi & Graham, 1997). Hence, the very meaning of dynamic public open spaces includes vital components for residents to enjoy their miscellaneous activities and mingle with others. In fact, fabric and characteristics of a city are partially formed by its public open spaces. More importantly, these spaces provide breathing spaces in cities that control human exchange flow. Irrefutably, such spaces are adorable whereas their physical and social functions give pleasure and safety to the urbanites (Lynch, 1960; Carmona et al., 2003; Harun & Said, 2009). The next section discusses different typologies of public open spaces to strengthen the type and definition of public open spaces in this research.

2.4 Typology of Public Open Spaces

Carr et al. (1992, p. 79) pointed out eleven kinds of public open spaces as: *'(1) Public parks, (2) Square and plazas, (3) Memorials, (4) Markets, (5) Streets, (6) Playgrounds, (7) Community open spaces, (8) Greenways and parkways, (9) Atrium/indoor marketplaces, (10) Found spaces/ everyday spaces, and (11) Waterfronts'*. With a different viewpoint, Gehl et al. (2008, p. 87) sorted out public open spaces into five categories of *'main city square; recreational square; promenade; traffic square; and monumental square'*. From a sociological perspective, public open spaces are dividable based on the users and their perceptions of these places (Carmona, 2010b). Adhering to this ideology, Dines et al. (2006) using the way people socially engage themselves with the public open spaces or perceive these places, proposed the five following types:

- a) Everyday places within the range of neighborhood communal spaces, which cover much of the public realm and daily places of interaction.
- b) Places of meaning that vary from person to person and concern specific relations and connotations associated to particularly positive and negative places.
- c) Social environments that actively cause social relations among the users. Their design and uses bring about the relations that might be brief or meaningful.
- d) Places of retreat that clear the way for some people to be alone or to communicate within their small groups of friends.
- e) Negative spaces where some groups face different facets of disorderly manners, such as racism and troublesome behavior that are often threatening.

The definition of public open spaces in this research is imbedded in the characteristics of social environments and places of retreat in which different types of social interaction might occur. Furthermore, public open spaces might be the places for the community, where people interact socially or politically or the places for competition and segregation that are formed upon '*spatial identities*' (Gulick, 1998; Fainstein, 2001, p. 1). Similarly, Kilian (1998) argued that public open spaces are the arenas for contact or representation. He furthered the discussion that all spaces are both public and private encompassing explicit or implicit constraints, in terms of access and activity. In fact, this definition shows that public open spaces are composed of hierarchically spatial constructs that clear the way for conducting numerous social activities. Supporting this, Kohn (2004) drew a conclusion that a public open space is a complicated concept in which multifarious and contradictory definitions are traceable.

Totally, six types of urban open spaces are categorized in three overlapping categories based on the abovementioned typologies of public open spaces (Carmona, 2010b). In this line, Table 2.2 illustrates that these six types of urban open spaces are 1) civic space, 2) public open space, 3) left over space, 4) undefined space, 5) conspicuous space, and 6) interface space. A public open space in this research is ascribed to a place with public accessibility that is intentionally designed to meet people's social needs according to their age group, gender, and ethnicity. Analytical review of these types of urban open spaces shows that the features of a civic type of public open space seem to correspond to the exact definition of public open spaces in this research.

Table 2.2: Different Types of Urban Spaces

Space Type	Distinguishing characteristics	Examples
	“Positive” spaces	
1. Civic space	The traditional forms of urban space, open and available to all and catering for a wide variety of functions	Streets, squares, promenades
2. Public open space	Managed open space, typically green and available and open to all, even if temporally controlled	Parks, gardens, commons, urban forests, cemeteries
	“Negative”spaces	
3. Left over space	Space left over after development, often designed without function	‘SLOAP’ (space left over after planning), Modernist open space
4. Undefined space	Undeveloped space, either abandoned or awaiting redevelopment	Redevelopment space, abandoned space, transient space
	”Ambiguous” spaces	
5. Conspicuous space	Public spaces designed to make strangers feel conspicuous and, potentially, unwelcome	Cul-de-sacs, dummy gated enclaves
6. Interface space	Physically demarked but publicly accessible that interfaces between public and private space	Street cafes, private pavement space

Source: Carmona (2010b)

Civic public open spaces are the arenas open and available for all that provide miscellaneous facilities for a vast range of social functions suitable for both permanent and occasional activities advocated by different groups and cultures. Table 2.3 depicts a list of the major public open spaces in the City Center of Kuala Lumpur such as parks, green open spaces, and civic public open space. Totally, public open spaces in Kuala Lumpur have notably risen by 169.6 percent from 586 hectares in 1984 to 1,580 hectares in 2000. Despite being this increase, there is a steady decline in public open spaces in the City Center mainly due to changes in land uses. The public open spaces of Taman Tasik Perdana, Bukit Nanas, and the Kuala Lumpur City Center Park (KLCC) totaling 301 hectares mainly include open spaces in the City Center (City Hall Kuala Lumpur, 2004b).

Table 2.3: Major Public Open Spaces in the City Center of Kuala Lumpur

Public Open Spaces	Category	Remark
Taman Tasik Perdana	Green open space	Considered a green space; therefore, out of the scope of the study
Bukit Nanas	Green open space	Considered a green space; therefore, out of the scope of the study
Kuala Lumpur City Centre Park (KLCC)	Park	Considered a green space; therefore, out of the scope of the study
Lake Garden	Park	Considered a green space; therefore, out of the scope of the study
Dataran Merdeka	City Center civic open space	A civic public open space
Along Hang Kasturi Street	Walkable open space	A civic public open space
In front of Masjid India	Walkable open space	A civic public open space

Source: City Hall Kuala Lumpur (2004b); Gullick (1994) cited in Harun and Said (2008a)

Besides that, the City Center houses civic open spaces as well as walkable ones such as Dataran Merdeka, the open space along Hang Kasturi Street, and the one in front of Masjid India. The function and definition of these places tally with the definition of a public open space in this research; hence, they are chosen as the study areas. Since the focus of this research is on the public open spaces of the City Center of Kuala Lumpur, the next section discusses the transition of function and configuration of such spaces in Malaysia in different periods.

2.5 Public Open Spaces in Malaysia

In fact, public open spaces provide places for residents to play, meet, and enjoy. In Malaysia, ‘*Padang*’ or a public open space resembles the square or the plaza in Europe with the same values and functions. These places fulfill recreational, social, and cultural desires dreamed by each ethnic group, which are visually, socially, psychologically, and physically accessible (Harun & Said, 2009). Overall, in the context of Malaysia, public open spaces are deemed the important parts of the cities’ history and glory that some of which date back to the era of colonialism. Of their prime importance, public open spaces in Malaysia create the arenas for multivariate ethnicities to accomplish their ritual activities. These spaces

manifest the glorious appreciation of art and aesthetic pleasantness and satisfaction (Federal Department of Town and Country Planning, 2005). ‘*Padang*’ Kota Lama, in Georgetown in Penang, Dataran Merdeka, in Kuala Lumpur, Ipoh ‘*Padang*’, ‘*Padang*’ Merdeka in Kota Bharu, and ‘*Medan*’ Bandar in Alor Setar are some of the exemplary public open places where reminisce about the colonial dominance reflecting the very essence of communal gatherings and social interaction (Federal Department of Town and Country Planning, 2005). Concerning upgrading projects, a new concept was inspired by European plaza and top roof garden in which pavilion and concrete stage are used for public open spaces. Hence, most public open spaces, such as Dataran Merdeka in Kuala Lumpur and Dataran Pahlawan in Melaka, have lost their originally social functions (Harun & Said, 2009). Imposition of a concrete stage, a gigantic digital monitor, and hoisting of the world’s tallest flag pole have mainly changed the characteristics of Dataran Merdeka, such an important historical site for Malaysian society (Chandran, 2004).

2.5.1 The Essence of Traditional Public Open Spaces in Malaysia

The concept of traditional public open spaces in villages, towns, and cities in Malaysia was considered the place for sultans of local societies. At that time, most of public open spaces were a vast area lain in front of palaces, market places, and religious edifices (Kostof, 1992). The royal court in front of sultan’s palace was Maidan, or locally called ‘*Medan*’ as the main convergence of Malaysian society (Harun & Said, 2009). At the royal courts, all public events were imprinted by scribes who were at the service of kings (Kostof, 1992). In fact, royal palaces being the focal points were the most influential elements of settlements in this period (Harun & Said, 2009). The most typically common royal court was wide, turfed, and surrounded by huge shady trees. Local urbanites described these spaces as focal

points for gatherings, indigenously reputed as '*Padang*' (Home, 1997). In this period, symbolism imposed the highest impact on public open spaces. Cultural, environmental, and religious needs were depicted through the form of the Malay palace grounds as public open spaces (Abu Bakar, 2002). The exemplary public open spaces possessing these characteristics are '*Padang*' Maziah in Kuala Trengganu, '*Padang*' Kalumpang in Kota Bharu, and '*Padang*' Pekan in Pahang (Harun & Said, 2009).

In the era of sultanate dominance, the pavilion in a turfed square was located between a mosque and palace (Harun & Said, 2009). The front side of the mosque was a large gated courtyard. The activities held in the mosque included official measures, class teaching, judging cases, and reading proclamations by criers. Mosques took the place of the forum and considered a public open space. In this era, '*Medan*' was not the place with political functions; in fact, a small '*Medan*' was just a connecting vestibule to monumental and significant edifices and market places (Kostof, 1992; Home, 1997).

Public commercial and recreational activities took place in the vicinity of the port and the areas with commercial centers such as '*Medan*' and the '*Padang*'. The most suitable time for carrying out the trading and recreational activities was in the morning and in the evening respectively (Harun & Said, 2009). The other activities held at the '*Padang*' were watching buffalo fights, playing sepak raga (a traditional Malay game), and being entangled in other intentionally organized formal and informal activities such as sultan's birthday celebration and crowning (Fazamimah, 2007; Wan Abdullah, 2008). Taking these activities, the '*Padang*' was the main civic center of public gatherings (Kostof, 1992). In addition, the crowds of Friday prayer in the main mosque shaped the biggest gathering in the courtyard or '*Medan*' (Harun & Said, 2009). Kuala Trengganu and Kota Bharu are the

two traditional Islamic cities that lodged well-defined public open spaces in Malaysia. In Kuala Trengganu, the sultanate administrative power was concentrated on the palace, mosque, market, and other communal buildings (Harun & Said, 2009). There was a well-connected pathway from the palace to the mosque, market, and residential areas. The public open space near the palace was the place for royal formalities such as weddings and Sultan's installation, public assemblies, celebrations, and other occasions (Fazamimah, 2007). Similarly, in Kota Bharu, the sultanate community for the expense of society-based, religious, and royal activities governed the public open spaces.

Totally, bull fighting, 'Wau' (kite flying), and 'Gasing' (top spinning) were the most popular activities done by Malaysian local residents in public open spaces (Fazamimah, 2007). In fact, these spaces together with public activities gave a distinctive identity to the early traditional Islamic cities in Malaysia. Taking the same function, in other cities, such as Alor Setar and Pekan, public open spaces consisted of the traditional administrative centers, the market place, and the mosque. In the era of colonization, public open spaces underwent tangible changes to the extent that traditional design criteria were left obsolete and neglected by the societies of designers (Harun & Said, 2009). British thoughts were different from the essence of traditional public open spaces that are mostly adapted to indigenous social activities in different cities in Malaysia. Hence, the next section aims to elaborate on the changes made to the concept of public open spaces in Malaysia in the era of Colonization.

2.5.2 Public Open Spaces in the Era of Colonization

In this era lasting over two centuries, due to the dominance of British thoughts, new models were proposed for town planning in Malaysia. Totally, the main colonial administrative area was shaped by a green space usually flanked by streets and institutional buildings. This was the reminiscent of traditional type of a public open space, namely the '*Padang*' (Harun & Said, 2009). Sometimes, the '*Padang*' was ravaged for the purpose of construction. Kuala Lumpur, Penang, and Ipoh are the cities that experienced this. In this period, public squares were put forth for public purposes as the new components of the British model of colonial town planning. However, the emergence of public squares contributed to the inhabitants' health and endowed the city with a beautiful appearance (Home, 1997). These urban spaces were considered the important settings of public life, contributing to the economy of cities. The square could be a parade place to impress residents. With the onset of nineteenth century organized sports, it could be the place for equestrian activities and cricket (Home, 1997). Later, the '*Padang*' played a more important role in attracting people to herald their freedom and democracy. After independence, the '*Padang*' was used to meet recreational needs (Abu Bakar, 2002).

2.5.3 Contemporary Public Open Spaces

In the late 1960s, most cities in Malaysia went under a socio-economic boom that strikingly influenced town planning and structure. This urbanization resulted in the loss of public open spaces for the purpose of healthy and recreational grounds (Harun & Said, 2009). Gradually, the '*Padang*' and '*Medan*' disappeared in order to construct commercial building or to widen the streets. In this condition, the public open spaces started to lose

their physical and social functions (Harun & Said, 2009). The exemplary succumbed historical public open spaces to new developments are ‘*Padang*’ Maziah in Kuala Trengganu, ‘*Padang*’ Kalumpang in Kota Bharu, and Dataran Pahlawan in Melaka. In the contemporary era, one of the most ambitious programs done by the government was the establishment of National Landscape Department to upgrade the traditional and colonial public open spaces. Taking this notion, the exemplarily newly constructed public open spaces are Boulevard of Putrajaya, Dataran Putra, and Pavilion, although it is not fair to compare them with traditional public open spaces that were physically and culturally different and more successful. Overall, in the contemporary period with the emphasis on the tourist attraction, social interaction has been pulled into the atrium, theme parks, and shopping malls (Goh et al., 1990; Ahmad, 1998). Overall, public open spaces are given specific values embossed with the meanings attached to them. These meanings might create a strong sense and social ties between people and the spaces.

2.6 The Meanings Attached to Public Open Spaces

Social interaction is not just because of physical setting, while it is in relation to the subjective meanings attached to public open spaces (Cattell et al., 2008). Gesler (1991) and Carter et al. (1993) stated that the significance of a place is the direct implication of the meanings attached to it. In this regard, one of the most basic people’s needs is place attachment (Eyles & Litva, 1998). The success of a public open space in providing social needs is in direct relationship with promoting place identity, a sense of pride, or supporting ethnic groups (Cattell et al., 2008).

The condition, aesthetics and physical architecture, historical status and reputation, and visual culture of a public open space determine its social life and meanings of urban public culture (Amin, 2007). The multiple meanings attached to urban open spaces change based on every single individual's view and vary over the time course. Various factors constitute and influence these meanings (Sorensen, 2009). A public open place is the focal point for collective memory shared by the community that might express group identity from a broad view. It also expresses the aggregation of reminiscences from below, through the physical and united tracks that are created by the intertwined configurations of ordinary life (Hebbert, 2005). The process of giving meaning to a shared place, such as a public open space, is so complicated and related to the stories a society tells itself about its history and esteemed possessions, common knowledge about the spaces, features, collective beliefs, limitations, associates, and affiliations (Sorensen, 2009). Concisely, nobody is wary of the fact that the physical form of a public open space and daily common communication of people shape the giving process of meaning to such a place. Scholar such as Jacobs (1961) and Sorensen (2009) have supported this viewpoint.

2.6.1 Public Open Spaces and Sense of Place

A public open space is a place for experiencing and celebrating the shared sense of a society (Hayter, 2002). This is why a vast spectrum of users for various categories of activities utilize such spaces. Therefore, they are places that contribute to the community identity (Franck & Paxson, 1989). Public open spaces in the form of community centers also serve as the symbols of civic pride and sense of place, which promote the notion of community. Sense of place is created simply by paying attention to the sense of space through proper design and placement of public open spaces (Duany & Platter-Zyberck,

1991). According to many urban theorists, there is a concern to create sense of community and urban wholesomeness that public open spaces are given a central role in their production (Goodsell, 2003; Pasaogullari & Doratli, 2004; Mean & Tims, 2005; Holland et al., 2007). As the emanating result, keeping in touch with people within places and events contributes to strengthening of the sense of familiarity and belonging to the community (Oldenburg, 1981; Hester, 1984). In fact, public open spaces assist people in figuring out the community attitudes and consequently, help the community's identity become considerable and achieve a social value and meaning (Lofland, 1998). In other words, public open spaces play a magnificent role in forming urban identities in cities. Whenever people of a greater spectrum use such spaces for a vaster range of activities, they help to foster the societies' communal identity (Franck & Paxon, 1989). Overall, it is inferred that the sense of place in a community and social solidarity of a society that represent its collective identities and heritage are pronounced through shaping successful public open spaces.

2.6.2 Social Ties Interwoven with Public Open Spaces

The strategic efficacy of public open spaces in enhancing social inclusion and societal integration has been declared (Office of the Deputy Prime Minister, 2003; Mean & Tims, 2005; Dines et al., 2006). Public open spaces are important settings or places for shaping social communications, place communities and sense of place, and making strong ties (Agnew, 1987; Eyles & Litva, 1998; Cattell et al., 2008). They also might be places for providing benefits such as relief from daily routines (Cattell et al., 2008). The social interaction often in mundane public open spaces is more highlighted and results in a symbolic importance. This implies that public open spaces are more than just places for

human activity; in fact, they are endowed with subjective meanings accumulated over time. More importantly, public open spaces with vivid social interaction assist societies in enhancing place identity, sense of place, security, and ethnic interactions (Cattell et al., 2008). Successful public open spaces providing socially inclusive interactions foster social and community ties (Mean & Tims, 2005). The social value of a public open space is far-reaching and contributes to the place attachment as well as providing opportunities for inclusive social interactions (Dines et al., 2006). In a broader sense, Brown and Perkins (1992) stressed how social interactions shape the place attachment in public open spaces:

‘Place attachment involves positively experienced bonds, sometimes occurring without awareness, that are developed over time from the behavioral, affective and cognitive ties between individuals and or groups and the socio-physical environment. These bonds provide a framework for both individual and communal aspects of identity’ (p. 284).

Vigorous social bonds, gained through providing support, esteem, a sense of belonging, and identity and social integration are in response to health, well-being, and quality of life (Blaxter, 1990; Wellman & Wortley, 1990). Public open spaces stick the society together, create places for meeting, and foster social ties that may have waned in most urban areas (Giddings et al., 2011). As a result, strong social ties emerge in public open spaces that are the main access to social capital, including social networks, mutual help, trust to each other, and participation and safety (Kawachi et al., 1997; Hawe & Shiell, 2000). In this regard, researchers generally emphasize the significance of public open spaces in generating the social capital (Blaxter & Poland, 2002; Subramanian et al., 2003; Carpiano, 2007). Social capital is the result of strong bonds among the members of an ethnic group, while weak

bonds connect people to heterogeneous groups including different ethnicities (Granovetter, 1973; Putnam, 2000). Creating the public open spaces that establish firm social ties among ethnic groups in Malaysia makes people comfortably mingle with others, strengthen their social support, and enliven the communities as well as the public life.

2.6.3 Place Attachment in Public Open Spaces

Creating distinguished public open spaces mostly relates to the promotion of the physical elements and diverse activities, while less attention has been given to the magnificent role of meaning and attachment in enhancing the sense of place (Ujang & Dola, 2007). Overall, a plethora of studies have denoted place attachment as a concomitant of a place features and activities (Gross & Brown, 2008), while some others have introduced it as a predictor of people's staunchness to a place (Hwang et al., 2005; Yuksel et al., 2010). It seems vital to create social bonds between people and the place (Kyle et al., 2004; Gu & Ryan, 2008). Meaning attached to a place is discussable through the perceptive and psychological facets of environmental experience that within this domain, the affinity between people and the place creates a strong place attachment (Montgomery, 1998). Hence, it is derived that place attachment is largely construed as the result of people's social interactions with a place and the meanings attached to that place (Ujang & Dola, 2007). Unarguably, the lack of place meaning and importance ruin the emotional attachment to a place (Arefi, 1999). Whereas place identity is formed through meaning and attachment, the lack of these two imposes negative influence on people's psychological wellness as well as their rapprochement with places where identity, memory, and history are collected (Gieryn, 2000). In fact, the affective prospects of environmental meaning strongly relate to the concept of place attachment (Altman & Low, 1992; Lobo, 2004). Place attachment is linked to the affective

affinity between people and the places (Moore & Graefe, 1994; Hidalgo & Hernandez, 2001; Smaldone et al., 2005). The attachment to a place is demarcated via the interactions between sensations, knowledge and belief, and behaviors and actions (Altman & Low, 1992). These elements are hidden in the functional (Stokols et al., 1981) and emotional attachment that outline the way people feel their identity and are defined with the traits of the place (Ujang & Dola, 2007). Place dependence and identity are the key dimensions attributed to the place attachment. Place dependence is reflected through the functional aspects of place attachment (Ujang & Dola, 2007). It thrives when a place is perceived important by its users, while it is capable of fulfilling people's functional needs and behavioral objectives (Williams et al., 1995). This causes a resurgence of interest towards public open spaces in creating a strong bond with attachment that directly arouses a sensible emotion towards such places (Hidalgo & Hernandez, 2001). On the other hand, place identity is perceived through the emotional effect of place attachment that arises from people's entanglement with places through doing diverse activities. Therefore, places are essential in fostering people's self and group identity (Proshansky et al., 1983; Davenport & Anderson, 2005). This implicates that place identity is associated with a labyrinth of place traits and features (Relph, 1976). Alternatively, it is related to different physical forms and activities of a place as well as the perceived features of that specific place. Overall, in outlining place identity, studies carried out mainly strived to ponder upon the visual appearance of elements and done activities, while are unsuccessful in exploring the interplay between these elements and place meaning and attachment. Hence, the interrelationship among these components unfolds the sense of place (Ujang & Dola, 2007). One of the most controversial issues in relation to public open spaces is the quality of such spaces in the contemporary context. In this favor, the next section will succinctly discuss the qualities of current public open spaces.

2.7 Current Qualities of Public Open Spaces

The issue that entails the quality of public open spaces is discussed in many parts of the underdeveloped world (Zetter & Butina-Watson, 2006). Since the beginning of 20th century, the role of public open spaces has been influenced by the dictums of modernism due to its stress on utilizing new technologies and materials in producing commercially functional spaces (Pouliot, 2011). A well-documented literature review supports that most of the public open spaces all over the world have undergone the deterioration in their physical appearances (Tibbalds, 2001; Carmona & De Magalhães, 2006; Carmona, 2010a). Another issue raised up in public open spaces is called lost space, an unused and dilapidated space that is the ultimate upshot of poor management (Trancik, 1986; Loukaitou-Sideris, 1996). Some other authors such as Sennett (1990); Zukin (1991) have coined the issue of liminality in public open spaces that introduces them as the places for aggregating diverse activities and dwellers, which creates a strong rapport between them. These lost public open spaces are sometimes termed the slack spaces where include some sorts of anti-social behaviors (Worpole & Knox, 2007). Hajer and Reijndorp (2001) elaborated that different types of neglected public open spaces are ubiquitous all over the world that need more attention. Overall, the use of public open spaces is discussable through numerous quality-based factors (Whyte, 1989; Gehl, 2011). In fact, if a public open space is poorly managed or deteriorates in terms of physical quality or opportunities and activities it offers, it deems to undergo decline and subsequently less to be used (Carmona et al., 2003; Carmona, 2010b). Privatizing the public open spaces is a controversial urban issue, which relates to the control and management aspects, is of attention in the contemporary urban practices. The next section aims to address the dimensions of influence of this issue on the quality and social inclusiveness of the public open spaces.

2.8 Privatization of Public Open Spaces

Loukaitou-Sideris (1993) in her study on American cities asserted that although urban open spaces on paper are considered open for all cross-sections of cities populations, they are not accessible for all spectrums of people in function. This is, in fact, the upshot of the introduction of privatization of such spaces that happened through private capital, which excludes some groups of people from some privately-managed public open spaces. This desire to incorporate the control into public open spaces results in their decline (Ellin, 1999). Considering this, Low and Smith (2006) stressed the privatization of public open spaces by the means of redesigning, closing, and policing such spaces. One of the threats that jeopardize public open spaces entity is their decrease in both quality and quantity. Probably, one of the reasons that downgrade the quality of public open spaces would be the privatization of such spaces (Nasution & Zahrah, 2012). Mandanipour (2003) dissected the issue more and elaborated on the further impact of privatization on the urban development processes. As one of the advantages of privatization, the privatized public open spaces are more managed and controlled, which this creates restriction in both access and activities, but an increasing concern for the cleanliness, upkeep, and security of such spaces (Minton, 2006). Another issue raised in recent conflict between public and private spaces is a trend in commodification of public open spaces that allows local government to rent out these spaces for the sake of commercial purposes (Kohn, 2004). Unarguably, commodification of public open spaces might increase the accessibility level for offensive groups, which exacerbates the physical and spatial qualities inasmuch as there will be less restriction and control over such spaces. Overall, some studies declare that privatization imposes destructive impacts such as accessibility restriction, consumption increase, social gap, limitation in expressive freedom, and lastly restricted social interactions (Kohn, 2004).

Nonetheless, some others stress its positive benefits, such as the improvement of quality and management (Slangen, 2005; Melik et al., 2009) that unarguably promote the quality of life (Beck, 2009). As an important vantage point, the changes happened to contemporary public open spaces both in their spatial and physical nature, have coined another issue namely, transformation of such spaces that is discussed in the following section. Overall, whether the ever-increasing tendency for privatizing public open spaces results in the demise of those spaces is still one the most controversial issues in the contemporary urban design trends (Langstraat & Van Melik, 2013).

2.9 Transformation of Public Open Spaces

Over the recent years, most public open spaces have been transformed in a way that they seem to be more complicated, surveilled, rigorously managed, commercial, and commodified (Madden, 2010). Although some scholars have identified the end of the public (Sorkin, 1992), it seems to be a need for speculation on the consequences of new public open spaces (Madden, 2010). Similarly, some scholars, such as Mitchell (2003); Kohn (2004); Low and Smith (2006); Watson (2006), deliberated on an inquiring approach to argue that the concept of the end of public open spaces has undergone a sort of reformulation. More clearly, these studies have illustrated the contention and negotiation about the new version of public open spaces. This leads to the point that there has been a transformation in public open spaces in terms of both an urban policy and practice. The main issue at the end of public open spaces is the exclusion of diverse groups of people (Madden, 2010). To avoid the exclusion and make a public open space qualified, the two concepts of visibility and accessibility should be taken into account (Carr et al., 1992; Sorkin, 1992; Dijkstra, 2000; Henaff & Strong, 2001; Kohn, 2004).

Nevertheless, the issue of exclusion or inclusion should not be overstated as the focus in the analysis of public open spaces. Parallel to this, some scholars have necessitated the specific exclusion for creating the inclusion in some public open spaces (Madden, 2010). On some occasions, exclusion of some people is necessary for the inclusion of other groups (Warner, 2002; Iveson, 2003; Watson, 2004). In fact, offensive and criminal groups should be excluded in order to have more inclusive public open spaces. In some cases, it is difficult to exclude some groups for the wake of including some others whereas the existence of these opposing groups not even does not violate the rules, but also is vital for the survival of public open spaces. For instance, although the existence of teenagers might inhibit older people from taking the full advantage of public open spaces, the exclusion of the former group is impossible and necessary for the animation and success of such spaces. The next section will elaborate on the needs of people in public open spaces, which plays a significant role in establishing the theoretical framework of the research.

2.10 Needs in Public Open Spaces

Collectively, people's needs in public open spaces are specified by society, users (Lang, 2005; Madanipour, 2007), and environmental issues (Carmona et al., 2003; Lang, 2005; Madanipour, 2007; Erfanian Salim et al., 2012). Different people possess different needs; and more specifically, different people fill up public open spaces depending on the time of day. In this line, less structured spaces are more likely to be adapted to the users' needs at any time (Efroymson et al., 2009). Therefore, a successful public open space should target at addressing people's needs, striking a balance between their lives, and giving them opportunities to escape from the hustle and bustle of the tiring urban contexts. These places offer platforms to develop personalities via learning from each other and gaining new

experience. In this condition, people have a close contact with the environment and feel a sense of belonging and attachment (Ryan, 2006). Carr et al. (1992) argued that people seek five primary needs in public open spaces. These needs encompass '*comfort, relaxation, passive engagement with the environment, active engagement with the environment, and discovery*' (Carmona et al., 2003, p. 165). Comfort is vital for creating a convivial public open space and is measured by the length of the time people spend in public open spaces. Its sense is amendable via the physical design of the spaces and the strategies with which the spaces are managed. Furthermore, the sense of comfort is dependent on the environmental factors (e.g. protection from wind, sun, etc), physical comfort (e.g. comfortable and enough seating facilities, etc), and social and psychological comfort, which the latter is gained through the characters of a public open space (Carmona et al., 2003). With a similar viewpoint, Mean and Tims (2005) stated that protection from wind and other environmental obstacles help to animate public open spaces. Carr et al. (1992, p. 97) discussed that social and psychological comfort is '*a deep and pervasive need that extends to people's experiences in public places. It is a sense of security, a feeling that one's person and possessions are not vulnerable.*' Overall, the physical comfort of sitting opportunities (Groat & Wang, 2002; Bada & Guney, 2009; Bada & Farhi, 2009) as well as the existence of shading facilities, such as shelter and awing significantly contribute to the use of public open spaces (Bada & Guney, 2009).

While one of relaxation prerequisites is psychological comfort, relaxation is more discussed based on '*body and mind at ease*' (Carr et al., 1992, p. 98). In a public open space, the existence of natural elements, such as trees, greenery, water features, and being away from the traffic make it easier for people to be relaxed (Carmona et al., 2003). Passive engagement with the environment is an encounter with the settings without being involved

actively and creates the sense of relaxation (Carr et al., 1992), which the most preliminary kind of passive engagement is *'people-watching'* (Whyte, 2001, p. 13). The elements, such as fountains, views, public art, performances, etc. predispose people to passive engagement. In contrast, active engagement comprises direct experience of place and people (Carmona et al., 2003). To compare the priority between active and passive engagement in public open spaces, Carr et al. (1992) and Holland et al. (2007) stated that some people are more satisfied with people-watching, while others are desirous for the direct experience with friends, family, and even strangers. This implies that active and passive involvement with public open spaces nearly equally influence the success of such spaces, in which people are predisposed to relaxation and easy of mind and body.

Gehl (2011, p. 19) noting the influence of different types of acquaintances on the interactions among people in public open spaces, pointed to various *'forms between being alone and being together'* and put forth *'intensity of contact'* fluctuating from *'close friendship'* to *'friends'*, *'acquaintances'*, *'chance contacts'*, and *'passive contacts'*. Supporting this premise, a successful public open space should provide various kinds of engagement and disengagement from contact (Carmona et al., 2003). Briefly, inclusiveness of a public open space hinges on the affluence of diverse sorts of contacts among people ranging from a close friendship to an instant social interaction between two strangers who may have seen each other for the first time. This complicated labyrinth of social interactions in a public open space enhances the dynamics of contacts among different groups of people. From another vantage point, people are desirous for coherence and a sense of safety in public open spaces to the extent that they dislike insipidity and vapidness (Kaplan & Kaplan, 1989; Marsh, 1990). In fact, if people's innate curiosity is aroused, public open spaces are psychologically attractive (Shaftoe, 2008). Providing bandstand, as a

territorial place for eating, drinking, smoking, and social interaction, brings the sense of security and privacy for young people (Altman, 1975; Holland et al., 2007). In addition, designing a secluded place for skateboarding is a prerequisite vitality for young people's social interaction and involvement in public open spaces (Holland et al., 2007; Travlou, 2007; Shaftoe, 2008).

For older people, allocating sufficient seating opportunities, lighting, toilet facilities, and shelter are vital needs to linger in public open spaces (Peace et al., 2006; Holland et al., 2007). In general, public open spaces should create opportunities for eating, drinking, and sitting to enhance social interactions (Dijkstra, 2000; Holland et al., 2007; Shaftoe, 2008). Succinctly, it is inferred that providing sufficient facilities, such as places for sitting, eating, smoking, washrooms, skating, and efficient lighting mostly covers the needs of young and old people, increases the security and coherence for both groups, and enhances social interactions in public open spaces. The next section discusses what the lineaments of responsive public open spaces are, which significantly contributes to the development of the theoretical construct of this research.

2.11 Responsive Public Open Spaces

Carr et al. (1992) discussed that a public open space should be meaningful as well as helping people create strong bonds among the places, their lives, and in a larger scale the entire world. A responsive public open space should welcome democratic thoughts, protect the rights of groups, and be available to diverse groups of people by giving freedom in action and proclamation (Carr et al., 1992). Carmona et al. (2003) cited from Bentley et al. (1985) that a responsive place is a democratic and enriching space that provides choices

available for people. In other words, responsive public open spaces make people understand where they should go and where they should not go and understand the opportunities the place provides. This increases the spectrum of available uses and makes a responsive public open space more flexible for multiple purposes (Carmona et al., 2003). Overall, a responsive place should be clean (Bentley, 1990), permeable, possessing varieties, legible, robust, visually appropriate, rich, and personalized (Carmona et al., 2003).

Charkhchian and Daneshpour (2009) in their literature review demarcated that a responsive public open space is discussable through four aspects of physical, activity, social, and meaning responsibility. In light of these four prospects, Carr et al. (1992); Nasar (1994); Abbey and Butten (1997); Banerjee (2001); Faber Taylor et al. (2001); Rishbeth (2001); Austin (2003); Mori (2005); Gehl (2011) have carried out studies on the physical dimension of public open spaces. In terms of activity dimension, scholars, such as Carr et al. (1992); Lennard et al. (1993); Spitzer and Baum (1995); Beyard and O'Mara (2001); Whyte (2001); Woolley (2003); Gehl (2011), have carried out studies on the role of activities in making responsive public open spaces. More importantly, social dimension, which is the focus of this research, has been investigated by Carr et al. (1992); Loukaitou-Sideris (1995); Rishbeth (2001); Whyte (2001); Chako (2002); Gehl (2011). Complementarily, Altman (1993); Korpela and Hartig (1996); Green (1999); Oswald and Wahl (2001); Gifford (2002) stressed the role of meanings attached in making public open spaces responsive. Overall, a public open space will acquire its meaning over a long period as diverse groups of people from different cultures and ethnicities utilize it. This issue is sensible in the multicultural countries like Malaysia.

2.11.1 Physical Responsiveness

Physical responsiveness of a public open space relates to its comfort and security, accessibility, and natural elements. The following sections aim to elaborate on these features.

2.11.1.1 Comfort and Security

The two most important human social needs are comfort and security that have close and tight impact on the people's satisfaction of public open spaces (Baba & Austin, 1989; Carr et al., 1992). Comfort concerns supporting the user's activities in public open spaces and security discusses how to protect users against crime, vehicles, and undesirable weather conditions (Gehl, 2011). Creating safe and comfortable public open spaces is inextricably dependent on both physical and activity responsiveness. Physical responsiveness is the way to provide efficacious lighting system at nighttime, planning effective gathering spaces, and cutting traffic burden (Austin, 2003).

2.11.1.2 Accessibility

Accessibility is decomposable to physical, visual, and social types. Physical accessibility is delineated through contextual factors such as public transportation contiguity, locality, adjacent activities, and ease of access for pedestrians (Vanraaij, 1983). Arendt (1958) outlined three characteristics of a public open space. She elaborated that a public open space should be accessible for all, used by all, and should outlast one generation. In light of accessibility, Dijkstra (2000) put forth two questions of a) what parts of the population

make a public sense?, b) what level of accessibility makes a public space? In fact, the lack of social segregation is an acceptable emblem of a public open space. Creating visually accessible public open spaces makes people easily exposed to others (Newman, 1976; Franck & Paxson 1989).

Social access discusses who might access a place and how (Carr, 1982; Banerjee, 2001). In social accessibility, the significant role of mental elements, such as cultural and symbolic elements, is of a central attention (Rishbeth, 2001). In addition, places with multiple functions helping different groups feel the sense of belonging to the place are socially accessible (Lennard et al., 1987; Dahl & Molnar, 2003). Accessibility of a place is in relationship with the physical and visual connection to the surrounding areas. Hence, a successful public open space should be easy to get to, pass through, and be visible from both a far and a close distance (Charkhchian & Daneshpour, 2009). Overall, public open spaces should be accessible for all groups of people across different age groups, gender, cultural, and ethnic backgrounds. In fact, these spaces should not be separated for the sake of any specific groups of people. If a group of people are secluded from public open spaces, it will imply that they are excluded from the urban social life (Windén, 2001). This seclusion from the urban social life is considered a threat for the eternity of social life and brings about social disintegrations in societies. People regardless of their backgrounds and races should be given an equal right to make full use of responsive public open spaces so that the social sustainability of communities in cities is not jeopardized.

2.11.1.3 Natural Elements

The use of green spaces both affects people's health and place satisfaction in public open spaces and persuades them to participate in physical and social activities (Mori, 2005). In this regard, use of local plants, color diversity based on verified reasons, and gathering points create more attractive (Moore, 1982; Ulrich, 1984; Parsons, 1991; Faber Taylor et al., 2001) and securer (Kweon et al., 1998) public open spaces. The criteria, such as diversity and providing social facilities, are important for designing green spaces in public open spaces (Ulrich, 1986). Exposure to water elements or even hearing the sound of water is also important to make public open spaces more attractive and enhances people's social interactions in cities (Charkhchian & Daneshpour, 2009).

2.11.2 Activity Responsiveness

Besides physical responsiveness, public open spaces need activity responsiveness as well as being socially successful (Charkhchian & Daneshpour, 2009). Activity responsiveness provides the strategies in order to integrate different social events and diverse daily and seasonal activities, such as active and passive involvement suitable for a vast spectrum of people, which make public open spaces vivid, responsive, and convivial at all the time (Abbey & Butten, 1997; Mean & Tims, 2005; Charkhchian & Daneshpour, 2009). In general, social activities in public open spaces might increase or decrease based on the characteristics of such spaces (Gehl, 2011). Physical features and facilities provided in public open spaces clear the way for doing numerous social activities. Providing miscellaneous active and passive activities makes public open spaces more comfortable and livable (Gehl, 2011). Facilities for shopping, sitting, eating, watching, playing sport (Carr et

al., 1992), active and passive activities, and recreational facilities make public open spaces more successful in terms of social responsiveness (Woolley, 2003). There is a positive relationship between the existence of optional activities and solidification of social interaction, i.e. a place offering optional activities favors social interaction as well (Porta, 1999). Totally, providing different objects and activities that arouse people to use public open spaces might ameliorate the social quality of such spaces (David, 2008). Law (2000) called this trait the robustness of a successful public open space or in other words a user-friendly one. The sort of activity is impendent on the way people experience a place (Whyte, 2001). Active activities ensure the vibrancy of public open spaces, make them conducive to providing new place experiences, increase people's presence, and strengthen social interactions in such spaces (Lofland, 1998). These activities encompass jogging, recreation, gathering, sports, competitions, and other physical involvements (Carr et al., 1992). In contrast, passive activities, such as hearing, resting, looking, meeting, and other activities in this sort (Carr et al., 1992), create peace of mind without direct engagement with public open spaces (Charkhchian & Daneshpour, 2009). More importantly, passive activities underlie the sense of belonging to the place, social interactions, and exchanging between-groups information (Lennard et al., 1993). Lastly, these activities increase people's satisfaction of public open spaces (Whyte, 2001).

2.11.3 Social Responsiveness

Social responsiveness is the most significant trait of a successful public open space. A socially responsive public open space is the one where people's observation, meeting friends, and interactions among different groups of people take place (Charkhchian & Daneshpour, 2009). Social activities impose an impact on people's place satisfaction and

assist in creating a responsive public open space (Gehl, 2011). Social activities involve designing different focal and gathering places, seating spaces, and special hobbies such as street shows, public arts (Whyte, 2001; Rad & Ngah, 2013), and sport competitions (Carr et al., 1992). In addition, providing urban facilities, such as seating edges, eating places and facilities, and multifunctional kiosks, are also important to enhance the social responsiveness of public open spaces (Lokaitou-Sideris & Banerjee, 1998). Significantly, there is a relationship between social interaction and privacy (Charkhchian & Daneshpour, 2009); meaning that, considering private spaces based on cultural features makes social interactions flourish in public open spaces (Altman, 1975; Walmsley, 1988). One type of privacy that plays a significant role in social interactions in public open spaces is physical privacy. If physical privacy is well defined and established in an environment, such as a public open space, a broader spectrum of individual choices of interactions will take place. Avoiding contacting other groups and controlling spatial territory are the ways to establish privacy in public open spaces (Ramezani & Hamidi, 2010).

2.11.4 Meaning Responsiveness

Meaning responsiveness is also a significant aspect of a responsive public open space, which is impendent on its physical (Marcus & Sarkissian, 1986; Brower, 1988; Green, 1999), social, and activity responsiveness (Fried, 1963; Cohen & Shinar, 1985). Existence of signs, the value of a place, and gathering spaces are some mediators that foster the meaning of a public open space (Charkhchian & Daneshpour, 2009). The history of a public open space and how such a space has evolved influence the way people use it, which imparts a meaning to it over time (Laws, 1997; Holland et al., 2007; Charkhchian & Daneshpour, 2009). The length of time that people stay in public open spaces, their

experiences, and memories of public open spaces impart meanings to such places (Kaplan & Kaplan, 1982; Prentice & Miller, 1992; Riley, 1992; Korpela & Hartig, 1996; Gifford, 2002). In fact, the extent to which people's experience of a place seems important for them specifies the meaning of that place. This signifies that the more valuable the experience of a place, the more meaningful the place is (Milligan, 1998).

People will be inspired to be involved in activities by seeing other people who are engaged as well (Mehta, 2007). Besides that, people's cultural, social, and individual traits have a direct influence on making a responsive public open space, which possesses a distinctive meaning (Altman & Low, 1992; Low, 1992; Oswald & Wahl, 2001). Given this, if in the design process, these characteristics are considered and different groups of users are involved, users' needs and expectations are met and public open spaces are more responsive in terms of meaning-related issues (Rivilin, 1987; Altman, 1993). In addition, Charkhchian and Daneshpour (2009) in their study in Iran elaborated that place status, which is concerning users' social status, the quality of architectural and urban design, and place maintenance and management, is important in giving meaning to a public open space. Maslow's model (1943) stated that human needs include physiological, security and safety, affiliation and love, recognition and esteem, and self-actualization. These needs in public open spaces range from basic ones, such as comfort, security, accessibility, natural elements, and amenities and facilities, to superior needs such as social interaction and place meaning (Charkhchian & Daneshpour, 2009).

2.12 Successful (Convivial) Public Open Spaces

Conviviality is a word intertwined with social inclusion and cultural recognition that discusses the togetherness of people with different backgrounds. This causes a successful public open space to be appropriate for social interactions (Whyte, 2001). To gain a social inclusion as one of its most salient characteristics, a successful public open space should be indiscriminate (Carr et al., 1992), accessible for all groups of people, including diverse age groups, social classes, the disabled, and even informal organizations (CABE & DETR, 2001; Gehl, 2002). In fact, *'the qualities of multiplicity, conviviality, solidarity and maintenance can be expected to crowd out malfeasance, reinforcing a sense of shared space'* in public open spaces (Amin, 2008, p. 22). Tibbalds (2001, p. 87) stated that a successful public open space consists of *'a rich, vibrant, mixed-use environment, that does not die at night or at weekends and is visually stimulating and attractive to residents and visitors alike'*. Taking a different point of view, Billingham and Cole (2002) gauged the success of a public open space with the following questions: Is the place pleasant—is it harmless, responding to human scale, with many uses? Does it harm the environment—is it bright, devoid of wind and pollution? Is it outstanding and recognizable—unique? Is it suitable—does it respond to its context? Is it accessible to everybody? Nasar (1998, p. 62-73) elaborated on five key attributes of a liked environment (here a public open space) as *'naturalness, upkeep, openness, historical significance, and order including organization, coherence, congruity, legibility, and clarity'*. In fact, these attributes make a public open space more attractive; therefore, enhance social interactions. From a holistic view, public open spaces obtain their attractiveness to the extent that these spaces provide a variety of services, users' interests, and social infrastructures acting like the catalysts for fostering social activities (Stauskis, 2010; Stauskis & Eckardt, 2011).

Attractiveness of a public open space is dependent on '*existence of enough spaces for sitting and special events in the space like street theatres, public arts and such activities that connect the people*' (Rad & Ngah, 2013, p. 186). Successful public open spaces should not only have the traits of appropriate urban forms, but also carry dynamism of activities, daily interaction, and users' communal experiences (Sherman, 1988). While such spaces might be informal (Project for Public Space, 2001; Whyte, 2001), offer various activities (Rivlin, 1994; CABE & DETR, 2001; Project for Public Space, 2001; Whyte, 2001) for individuals or groups (Rossi, 1982; Gehl, 2002). A high-quality public open space, so called a successful one, is used by numerous people at different times of day and night. Such a space is flexible to accommodate a vast range of activities including planned and spur-of-the-moment ones and has the capacity of transformability to welcome more uses while reviving its context (Ryan, 2006). The most notable trait of a successful public open space is its capacity to welcome the most diverse spectrum of social activities that tally with the needs of different groups of a society. These social activities should be embedded in cultural beliefs and thoughts of different ethnic groups especially in a multicultural country like Malaysia. In fact, the successfulness of public open spaces is directly influenced by culturally symbolic elements that attract a vast group of users to celebrate their social integration in response to the rest of the society. Therefore, the existence of discriminatory activities that only belong to a privileged group of people will jeopardize the social attractiveness of public open spaces, which undoubtedly results in forming ruinous social decomposition for the society. In this case, public open spaces, on the surface, are publicly accessible, while are transformed into places tailored to the needs of specific ethnic groups, which this irrefutably brings about conflicts among different groups.

As an undeniable fact, success of a public open space must transcend beyond its mere appearance nurturing what Whyte (2001) and Gehl (2011) pinpointed as routine encounters and shared experiences. Hence, providing multifarious opportunities for carrying out informal meetings, variety of settings for selling foods, comfortable settings for sitting, waiting, and watching the passing scenes, and more important, making '*a sense of belonging, hospitality, vitality and historical and cultural continuity*' are among the most important lineaments of successful public open spaces (Montgomery, 1998, p. 95). Moreover, a successful public open space must include high-quality physical spaces, the sensory experience, and activity (Montgomery, 1998). The physical space relates to cityscape, physical forms, penetrability, scenery, and urban furniture; meanwhile, the sensory experience encompasses '*legibility, cultural associations, perceived functions and attractions, and qualitative assessments*'. The activity entails '*land use, pedestrian flow behavior, patterns, noise and smell and vehicle flow*' (Balsas, 2007, p. 235). In this favor, others asserted that a successful public open space should consist of access, comfort and image, uses and activities, and sociability (Project for Public Space, 2001). Nasution and Zahrah (2012) concurred that a successful public open space should augment the psychological comfort and safety of people. Safety is one the most influential factors in attracting people to public open spaces (Rahely Namin et al., 2013).

Physically, a public open space should be clear, easy to access, and with the movement system (Carr et al., 1992; Rivlin, 1994; CABE & DETR, 2001; Project for Public Space, 2001; Gehl, 2002). Designing legible pathways that easily connect to each other is also one of the factors that enhance the success of a public open space (CABE & DETR, 2001; Project for Public Space, 2001; Gehl, 2002). Unavoidably, a convivial space should possess high-quality architecture (Carr et al., 1992), be surrounded by inviting building facades

(CABE & DETR, 2001; Gehl, 2002), and picturesque scenes and details (Gehl, 2002). Similarly but in a broader sense, Stauskis and Eckardt (2011) asserted that social functions of a successful public open space are germane to the architectural and planning practice. The incorporation of natural settings and elements offers comfort, relaxation, and soothing experiences that improve inappropriate climate by planting trees near paths and sitting places (Kaplan & Kaplan, 1982; Carr et al., 1992; Gehl, 2002). Collectively, a public open space is successful if it is used by a broad range of diverse people on various occasions (Parvicini, 2002). In terms of a communicative role, a successful public open space is the one that enhances *‘dynamic interaction, environmental education, information exchange in form of presentation and skills instruction, environmental experiences, [and] possibility of self-expression of creativity for people and groups’* (Rad & Ngah, 2013, p. 186).

Successful public open spaces are most of the time called livable places, although *‘livability’* is definable through a difficult terminology. A livable place is an identical one when one sees and experiences it. In this regard, livability grows out of two main characters of *‘vitality and viability’* (Ravenscroft, 2000). To have a more comprehensive viewpoint, Table 2.4 portrays a digest of the characteristics of a successful public open space.

Table 2.4: Indicators of Successful Urban Places

Number	Description
1	Planning will be invisible and the results will look natural, as though they happened of their own accord
2	There will be interesting and stimulating shapes
3	The 'familiarity' of streets and street life will be celebrated
4	There will be secret places which once discovered grow on you, making you look deeper to find more
5	There will be surprises, to keep citizens awake, provide topics of conversation, prevent Ennui
6	Experiment will be encouraged, and there will be exciting things to do
7	There will be areas and opportunities for informal, casual meetings to take place, including warm and friendly bars and pubs
8	Food and drink will be a treat, and people will be able to purchase and consume it at varying prices and degrees of leisure
9	There will be a variety of comfortable places to sit and wait—a city worth living in has to be a city worth sitting in
10	There will be a good balance between the needs to prevent loneliness and to preserve anonymity and privacy
11	Changing seasons will not draw attention away from the sterner pursuits of daily life but rather will be an integral part of a continually changing city, and celebrated as such
12	The senses will be heightened: affection/friendliness/hospitality; a sense of belonging; historical and cultural continuity; a sense of fun/humor; opportunities for gossip; open-mindedness; vitality; fantasy; flamboyance; color; beauty/aesthetic stimulus

Source: Sherman (1988)

Putting together all the characteristics of a successful urban open space, it is concluded from the table above that such a space should have welcoming shapes and images for people. It should include some cozy places so that people can easily explore them. Furthermore, a successful urban open space should provide exiting activities that instigate the sense of experimentation in people. In this regard, it should be sprinkled with opportunities for informal and friendly interactions. As a response to the basic needs of people, it should possess opportunities for sitting and eating at varying prices for people of any social classes. More importantly, a successful urban open space should give opportunity to either mingle with others or fall private and anonymous. This highlights the role of design in creating different places with different degrees of visibility. Finally yet importantly, it should arouse the sense of belonging, historical, and cultural continuity by borrowing socio-cultural elements from the most pervasive cultures of the society. As such, public open spaces are embellished with colorful and fantastically flamboyant stimuli.

2.13 Social Interactions in Public Open Spaces

Social interaction is one of the topics that are discussed in relation to achieving the social sustainability of environments such as public open spaces. Cultural differences are considerable to the extent that social sustainability is not the same in two societies (Kunz, 2006). The exact meaning of the word ‘*Social*’ refers to a group living of human beings in structured organizations (Tang & Khan, 2012). This causes reciprocal reactions that offer beneficial welfare to people. Along that, the term ‘*Interaction*’ entails diverse implications across all disciplines. In social sciences, it discusses kinetically dynamic actions among individuals (Latour, 1996). The way people interact with each other varies; for instance, it might involve two people in performing mutual actions (Latour, 1996). The sort of interaction might change from verbal to nonverbal communication, while it happens either in a physically actual space or even in a virtual one (Bailenson et al., 2004). Largely, human beings need to be with others benefiting from numerous psychological needs (Shaftoe, 2008). In fact, human beings are sociable and while socializing with others around, feel at home (Whyte, 1989). Lennard and Lennard (1995) agreed that contacting with others is one of the most vital needs for human beings to the extent that being with others brings a sense of reassuring for them.

Social behavior is one of human beings’ instincts (Bowen, 1950). As an instinct, it propels people to attach to gatherings and concourses to find themselves (Goffman, 1963). Achieving this process, people are conducted to know themselves via a comparison between self and others (Jung, 1958; Sennett, 1990). As such, people drop their masks and become aware of their selves (Progoff, 1953; Jung, 1958; Sennett, 1990). Being aware of selves eventually requires that people synchronously use public open spaces (Severcan &

Barlas, 2007). Mitchell and Staeheli (2005); Lieshout and Aarts (2008) stated that public open spaces play an important role in providing a space for community and sociability. A large number of scholars challenged that to augment the sociability or in other words, to make people welcome, spaces with highly planned regulations must be produced (Lees, 1998; Goss, 1999). In fact, public open spaces provide neutral arenas for people to interact with the whole society. This interaction covers ‘*family groups*’, cultural gatherings, ‘*local social connections (for example, chance or planned meetings with friends, neighbors, and work colleagues)*’, and same-targeted gatherings, e.g. walking groups (Holland et al., 2007, p. ix). Quite a number of studies have pinpointed the role of public open spaces in the social life of societies (Charkhchian & Daneshpour, 2009). This has caused public open spaces to be recognized as ordinary places as well as being socially constructed upon people’s responding to the opportunities and constraints imposed by such places (Groth & Bressi, 1997; Jiven & Larkham, 2003). Physical and social functions in public open spaces provide pleasure, safety, and care about people using such spaces (Lynch, 1960; Carmona et al., 2003). Therefore, successful and dynamic public open spaces are the core elements of urbanity that settle recreational activities and social interactions (Harun & Said, 2009).

Social interaction in public open spaces might be watching others, a quick conversation, and exchanging information that these contacts cause a vast spectrum of interpersonal relationships (Porta, 1999). It might be the by-product of both interpersonal and intergroup interactions (Low, 2006). Amin (2008) stated that social interaction in public open spaces is a complex process since it comes to the point of collective inclusion of people possessing different social expectations. In fact, some people mingle to make solidarity, while others do not, subjecting to background, character, expectations from a public open space, and reaction to the norms (Amin, 2008). Similarly, it is believed that public open spaces are

considered the places for social interactions as well as the places for both division and cohesion, which this might impose a negative or positive effect (Bridge & Watson, 2002; Brewer, 2005; Keith, 2005). In fact, these places are valuable for social interactions due to the shared and social elements, although they create a place for people to be secluded from others. This causes them to be the focal points for diverse wants, demands, and aspirations (Cattell et al., 2008). This focal point to provide social needs requires a variety of spaces to meet a range of everyday needs; to linger as well as transition; to bring people together or to make them escape (Cattell et al., 2008). In the past, public open spaces acted like places where people sought their roots (Sennett, 1990). They were the places that attracted various spectrums of people with different races, gender, and ages (Sennett, 1990; Mitchell, 2000).

Public open spaces play the role of cultural landscapes that manifest vigorous bonds of people and place (Mitchell, 2000). In this favor, a public open space rooted in sociability is a place for publicness and representation (Staeheli & Mitchell, 2007a). Socializing in public open spaces is important in promoting the interplay among all classes of urban citizens whereas it reduces conflicts, avoidance behavior, ignorance, and segregation (Nesdale & Todd, 2000; Mingione & Oberti, 2003; Johnston & Shimada, 2004). The overall goal of inclusion is that no one's culture is imposed on anyone (Ehret, 2002). There is more potential for social inclusion to occur in public (green) spaces than anywhere else (Herzele & Wiedemann, 2003; Parr, 2007). In fact, these places are widely recognized as conducive to multicultural encounters (Glover et al., 2005). Totally, social activities in urban public open spaces reveal the degree of towns' liveliness and vibrancy that delineate people's satisfaction of their physical surroundings (Mehta, 2007).

From Arendt's perspective, public open spaces get people together to the extent that they feel a sense of solidarity perpetuated, which they possess communally (Rowe, 1997). Hence, such spaces are the stages for disclosing the drama of communal life (Carr et al., 1992). The features of such spaces embed the circumstances of communal life, civilized culture, and daily conflicts among people (Woolley, 2003). In this regard, public open spaces draw all people of the society into the public realm and create spaces tailored to the needs of public and private lives (Goffman, 1963; Rykwert, 1988). More holistically, the public realm, as a setting of public life and conveying notions of public open spaces, functions as a place for political expression, social interactions, learning, communication, personal development, and information exchange (Loukaitou-Sideris & Banerjee, 1998). Indeed, through this publicness, people are enabled to individuate and socialize (Severcan & Barlas, 2007). Lynch (1960) talked about another important reason, discovery that draws people into public open spaces and presents the desire for motivation. For young people, extension of their knowledge and familiarity with places that they can use via providing activities assist them in enhancing their sense of attachment to the place and provoking their discovery (Mean & Tims, 2005). This underpins the premise that younger people due to their innate curiosity are more willing to explore public open spaces and to be engaged in social activities than older people do.

As a complementary issue, Low et al. (2005) stated that social and cultural diversity are embedded in public open spaces if 1) people are represented in such places, i.e. their histories are well-kept, 2) the social communication among diverse groups is mended through producing secure and spatially abundant spaces for everyone, 3) the dichotomies between the ways social spectrum of people and ethnic groups utilize and value public open spaces is deemed significant, and 4) the decision-makers keep in mind that the symbolic

ways with which people communicate with cultural meanings are essential components of place attachment that might improve cultural diversity. Of the most significant influence, understanding discrepancies between the way different ethnic groups perceive and use public open spaces is considered so essential for strengthening social integrations in public open spaces.

2.13.1 The Factors Affecting People's Social Interactions in Public Open Spaces

Individual usage and social interactions in public open spaces are influenced by many factors, including how the spaces connect to each other, designed, as well as the maintenance and management of natural and built environment (Mean & Tims, 2005; Holland et al., 2007). The way public open spaces are understood and used might be dependent on individual and group characteristics (Mitchell, 1995; Laws, 1997; McDowell, 1999; Low, 2000; Matthews et al., 2000). Many urban theorists highlighted the factors affecting the use of public open spaces according to different classifications (Pasaogullari & Doratli, 2004). In more details, people's use and experience of public open spaces are diverse since their gender, social classes, age groups, and ethnicities differ (Terlinden, 2003; García-Ramon et al., 2004).

Clitheroe et al. (1998) asserted that physical factors, personal factors, and social factors either formal or informal influence social interactions in public open spaces. Personal factors encompass personal characteristics that are mainly shaped by people's backgrounds such as social class, education, religion, and culture. Formal social factors comprise policies and decision-making processes. McDowell (1999); Garcia-Ramon et al. (2004) put forth that age, gender, social class, and ethnicity affect the way people use and perceive

public open spaces and in general public life. Informal social factors include the association between an individual and other individuals or groups (Clitheroe et al., 1998; Williams, 2005). In order to have a clearer image, the relationship between these factors and social interaction has been illustrated in Figure 2.1. Mean and Tims (2005) stated that people do social interaction in public open spaces considering the time of the day. For instance, older people are mostly observable in public open spaces early in the day. Holland et al. (2007) added that age, ethnicity, social class, gender, accessibility, and the time of the day affect the way people use and socialize in public open spaces.

As important factors, physical quality, appearance, and attractiveness increase the likelihood of social interactions in public open spaces (Sugiyama et al., 2009; Rad & Ngah, 2013). This signifies that the design of such spaces should be imbued with attractive shapes and elements. One of the potentials of a high-quality public open space is the provision of a suitable venue for carrying out social events. In this line, well-organized social events impart positive values to the urban areas, by gathering society together and offering socio-environmental benefits (Pugalis, 2009). Creating such social opportunities increases people's participation in activities that upgrades the sense of belonging to public open spaces (Rad & Ngah, 2013). Unusual events and occurrences make strong bonds among people and cause strangers to talk to others. Law (2000) in his thesis elaborated that diversity of physical forms and sufficient pedestrian flows affect the quality of social interactions in public open spaces. In addition, the arrangement of elements might more or less make public open spaces conducive to interactions (Whyte, 2001). Physical obstacles also might ameliorate or exacerbate the possibility of social interaction in public open spaces (Porta, 1999). This is why creating flexible human flows as well as the existence of numerous cozy places where different groups of people are engaged in social activities are

of primary consideration in the design of public open spaces. The Project for Public Space (2001) added that public art enhances interactions among people who do not know each other. Discovery is term that shows the tendency for enjoyable experiences and unpredictability. It grows out of management and animation of public open spaces. Collectively, lunchtime concerts, art exhibitions, street theater, festivals, parades, markets, society events, and even annual events are the elements or activities that underlie the discovery in public open spaces (Carmona et al., 2003).

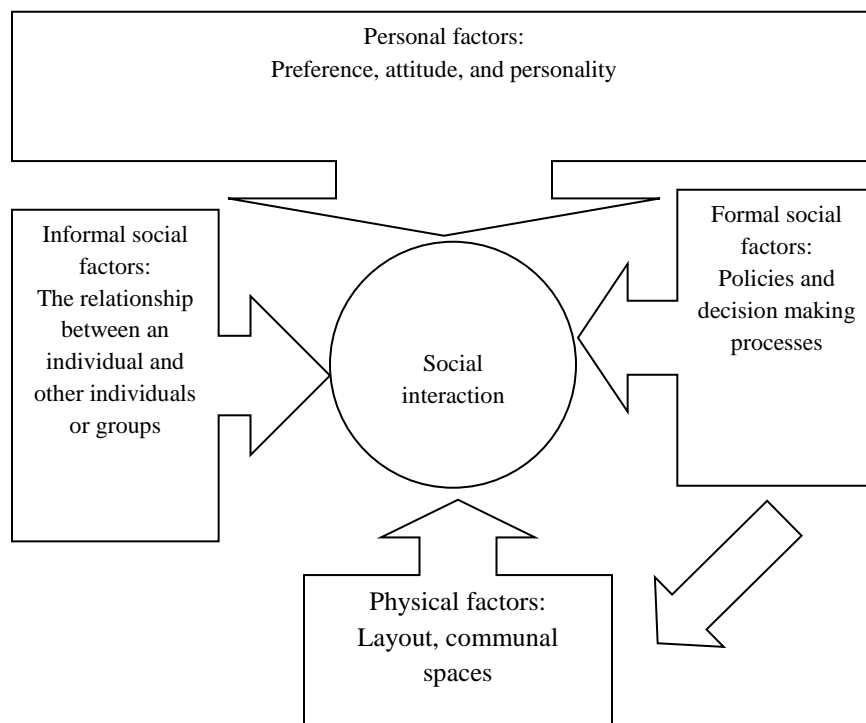


Figure 2.1: The interaction among physical, personal, social factors, and social interaction (Clitheroe et al., 1998, cited in Williams, 2005)

Mehta (2009) explained that physical, land-use, and social characteristics are considerable in designing each public open space, conducive to stationary, lingering, and social activities. Planning and design of urban public open spaces might also affect urban social interaction, people’s quality of life, and social inclusion (Pareja & Tapada, 2001). Overall,

social interaction is a perplexing issue that is gauged by numerous factors materialized through social encounters among different groups. Therefore, the following sections separately elaborate on the factors that affect the presence of people; or in other words, social interactions in public open spaces.

2.13.1.1 Visibility in Public Open Spaces

Tight control or visibility and complete anarchy or invisibility are unappealing in a public open space and stigmatize social interactions (Dijkstra, 2000). Nevertheless, scholars, such as Sennett (1970), Wilson (1991), supported disorder and its benefits in a public open space. Jacobs (1961) asserted that social control through complete visibility helps the users' safety and peace of mind in public open spaces. A quite number of scholars have contested the complete surveillance or the complete lack of it (Jacobs, 1993; Whyte, 2001). Whyte (2001) pointed out that a public open space with complete exposure or isolation is not appropriate. In fact, it is inferred that public open spaces should be designed in the way that strike a balance between visibility and invisibility through social control in order to achieve the ultimate goal that is safety of such spaces.

2.13.1.2 Impact of Public Art on Social Interactions in Public Open Spaces

The role of public art in enlivening public open spaces has been overstressed (Carr et al., 1992; Parfect & Power, 1997; Özsoy & Bayram, 2007). Tomlinson (1999) supported that public art epitomizes the shared characteristics of a society, which directly enhances social interaction in public open spaces. Within the context of Malaysia, public art is a tool for place making through improving its ambience culturally and aesthetically (Mustafa, 2009).

Hyperbolizing the significant role of public art, it possesses important role in changing the public domain. In fact, public art brings art into public open spaces and visually contributes to people's quality of life and their daily spatial experience of environment (Shin, 1999; Harvest, 2004). Supportively, Putrajaya Corporation (2006) confirmed the issue that public art enhances the aesthetic values of public open spaces and draws more people in for interaction. More specifically, the role of public art is to inculcate an embossed inter relationship among art, a public open space, and social environment (Putrajaya Corporation, 2006) with giving identity and sense of place to its setting (Moughtin et al., 1999; Miles, 1997; Shin, 1999; Weber, 2003; Mustafa, 2009). Mustafa (2009) in his study on the role of public art in public open spaces in Putrajaya, Malaysia asserted that utilization of public art is an endeavor to enhance the values of social and public open spaces. Bach (1992, p. 1) supported that '*public art can express civic values, enhance the environment, transform a landscape, heighten our awareness, or question our assumptions. Placed in a public site, this art is therefore for everyone, a form of collective community expression*'. In terms of social interaction, public art meets the social objectives of an inclusive public open space. In other words, it clears the way for social events and animated interactions among different cultural backgrounds in public open spaces, providing opportunities for '*cross-community and cross-cultural ties*' (Mustafa, 2009, p. 77). Therefore, public art is a tool '*to humanize public spaces and create meaningful places where people feel comfortable and relaxed*'. In fact, public art makes public open spaces safer through encouraging more groundbreaking management (Mustafa, 2009, p. 75).

Overall, it is no doubt that public art should be an impartible component of each public open space in order to enhance social interactions among different ethnic groups. In addition to that, the role of heterogeneity in creating places as the labyrinth of different activities done by diverse groups, which results in social inclusion, should not be underestimated.

2.13.1.3 Heterogeneity in Public Open Spaces

One of the stated discourses in public open spaces is the heterogeneity of these spaces. Accepting various activities in public open spaces creates a heterogeneous approach in which the inclusion of different identities and people rather than their formally or informally exclusion from homogeneous spaces is considered (Carr et al., 1992). This makes public open spaces more fascinating and safer as more eyes observe these places (Jacobs, 1961). Strategies causing exclusion in public open spaces result in social decomposition in communities. Accordingly, this segregation endangers social learning, personal development, and information exchange (Carmona et al., 2003). The value of heterogeneity according to Cooper (1998) in creating public open spaces is apparent if its antithesis is considered. In fact, mono-functional or single-minded spaces might threaten the inclusion of people with different activities and identities, and create '*exclusions, inequalities, and a 'private' ethos*'. The most worthwhile value that heterogeneity brings to public open spaces is that the hierarchies among people with different uses and identities are underestimated if not eradicated. In other explanation, no single use of these spaces is privileged over others. More sensibly, public open spaces are better to be places where people with different identities are deemed the collectivity of strangers with equal regard (Cooper, 1998, p. 477).

2.13.1.4 Accessibility of Public Open Spaces

Accessibility of public open spaces is an influential factor in augmenting the quality of social interactions (Rad & Ngah, 2013). In terms of accessibility, public open spaces are the places accessible to everybody where differences are touched (Young, 1990, 1995; Duffy, 2003; Holland et al., 2007). Nevertheless, in some cases, public open spaces might not be the most appropriate arenas for generating interethnic interactions (Amin, 2002). Accessibility is defined as *'the freedom or ability of people to achieve their basic needs in order to sustain their quality of life'* (Lau & Chiu, 2003, p. 197). To support the importance of accessibility, Harnik (2003) stated that a public open space is accessible to everyone regardless of their dwelling, physical capabilities or financial possessions. It should be arranged in such a way that every individual is equally served. In fact, accessibility should be given to healthy adults seniors with physical difficulty, mothers moving baby strollers and people who ride a bicycle.

People are more enthusiastic to use the public open spaces near their homes and workplaces (Thompson, 2007). Access to public open spaces might be considered one of the key issues in terms of the physical dimension of public realm, which might be both facilitated and constrained by the social environment. Yet, one of the effective factors that might act like a deterrent that rules out the achievement of social interactions in a public open space is the accessibility of such spaces itself (Talen, 2000; Pasaogullari & Doratli, 2004). An accessible public open space is thus the one to which many different people can come, but also the one where many different people can do many different things; it is an accessible node, but also an accessible place (Bertolini & Djist, 2003). Accessibility to all forms of public open spaces can be measured and used as an indication of the degree of their

dispersion. Dispersed spaces are more preferable than concentrated spaces. Access and dispersion are simultaneously captured by measuring the accessibility of a public open space (Talen, 2000). Distances between residents and public open spaces, when interrelated with the theory of maximizing access to public open spaces and minimizing walking distance, are the proposition that public open spaces should be well integrated within the residential fabric. Location and design of a public open space can play a significant role in bringing people together (Calthorpe, 1993).

There is a positive relationship between the accessibility of a public open space and utilization. More importantly, a well-used public open space is centrally located in a neighborhood, which has the proximity to residential units and has good visibility from the street, by being next to other public uses (Pasaogullari & Doratli, 2004). In fact, the accessibility of a public open space is related to how it is located in a congested fabric, which is well connected to both the neighboring context and the whole city structure. Therefore, public open spaces should be visible from different access points to draw more people strikingly. Unarguably, this enlivens the utilization of such spaces and tremendously affects the quality of social interactions among the users.

From a broader sense, city structure is so considerable whereas a compact city structure promotes physical accessibility, which causes reduction in travel distances to public open spaces (Helling, 1998). Levinson (1998) suggested that accessibility is shaped by the product of two measures, a temporal element (the travel time between two points) and a spatial element, reflecting the distribution of the activities occurred in public open spaces. Accessibility of a public open space is highly affected by its location to the extent that it will be empty of people most of the time if a dense population mass does not live nearby

(Gratz & Mintz, 2000). That is why access to a public open space depends on travel time and proximity to residential urban areas spread out in the city (Erkip, 1997). Similarly, Madden and Schwartz (2000) elaborated that accessibility of a public open space can be judged by its connections to its surrounding context, both visual and physical. This issue outlines the definition of a successful public open space in that it is easy to get to and get through; it is visible both from a far and near distance. In addition, the type of streets surrounding a public open space is an effective factor both for social interactions taken place and the accessibility of such a space. Given this, local streets are preferable to major arterial roads, and more specifically the presence of sidewalks is seen as a way to strengthen the linkage between private and public open spaces in the city (Talen, 2000). In fact, the statements above collectively concur that dispersion of public open spaces in relation to their locations in urban contexts in the city, which pronounces their physical and visual connections to the populated neighboring areas, plays a magnificent role in promoting the accessibility to such spaces. Undoubtedly, well-located public open spaces will create valuable nodes in the City Centers that ultimately enliven the public life.

2.14 Socially Successful (Convivial) Public Open Spaces

Mainly, factors affecting the use of and satisfaction of the users of public open spaces are classified as accessibility, congestion levels, measures of comfort, the variety of activities and facilities, indicators of quality, safety, and physical attractiveness or maintenance as an aesthetic consideration (Erkip, 1997). Similarly, facilities, amenities, safety, and comfort are the four significant factors that play an important role in people's use and satisfaction of public open spaces (Giles-Corti et al., 2005). Strongly supported, accessibility is deemed one of the important traits of a socially convivial (successful) public open space (Young,

1990; Kohn, 2004; Marcuse, 2006). Underpinning this, giving the equal access of different age groups and people with physical difficulties to public open spaces is essential for its vividness (Stauskis & Eckardt, 2011). However, accessibility alone is not the most determining factor for successful public open spaces. In fact, the control over a public open space should strike a balance between freedom and personal security for its users (Németh & Hollander, 2010). Whyte (2001) discussed five features of the most sociable public open spaces. These characteristics cited by Carmona et al. (2003, p. 169) are:

a) a good location, preferably on a main road, which is physically and visually accessible, *'b) streets being part of the social space-fencing off a space from the street isolated it and reduced its use'*, c) being levelled or rather levelled with the pavement (spaces above or below this are not significantly used), d) places for sitting, integral (e.g. steps, low walls) and explicit (e.g. benches, seats, etc.), and e) portable seats that enable different choices as well as *'the communication of character and personality'*.

Other than that, factors such as *'sun penetration, the aesthetics of the space, and the shape and size of spaces'* are of less importance (Carmona et al., 2003, p. 169). Design of a public open space edges influences its social success (Carmona et al., 2003). More specifically, the edge should provide formal or informal seating facilities (Alexander et al., 1977). In addition to various seating opportunities that attract diverse people and clear the way for the occurrence of varied social interactions, the existence of a vast spectrum of activities, which also increases the presence of people, is one of the prerequisites of a socially vivid public open space (Carmona et al., 2003; Mean & Tims, 2005; Dines et al., 2006). A socially successful public open space should have nodes of activities and people's presence (Llewelyn-Davies, 2000; Burton & Mitchell, 2006; Gehl, 2011), security and entertainment

(Holland et al., 2007), safety and comfort (Erkip, 1997; Burton & Mitchell, 2006; Holland et al., 2007), and calm areas for taking a break and people watching (Llewelyn-Davies, 2000; Burton & Mitchell, 2006). Obviously, this signifies that a vibrant public open space should engage people in activities both actively and passively. In fact, public open spaces are considered successful if they are not designed for specific groups of users, allowing diverse users to make the full use of the space. This directly contributes to the flourishing of socio-cultural exchange and the enhancement of the quality of lives (Ryan, 2006; Efroymson et al., 2009). A public open space should be safe and controlled to the level that functions both in day and night (Shaftoe, 2008).

In fact, instilling feeling of safety is a necessary component in successful urban design projects (Talen, 2008). The existence of entertainment is well established and documented in public open spaces over the history (Holland et al., 2007; Shaftoe, 2008). This entertainment comprises *'formal events such as festivals and bandstand concerts or through the enabling of busking and informal events such as bric-a-brac stalls and demonstrations'* (Shaftoe, 2008, p. 120). Although these events make city decision-makers unhappy, bring along vividness to public open spaces and offer considerable social and democratic benefits. This kind of attitude is one of the low-cost strategies, which brings color and delight to public open spaces and clears the way for the crystallization of everlasting potential for artists and performers in exercising their gifted talents (Shaftoe, 2008). Stauskis and Eckardt (2011) added that one of the most vital elements that ensure the liveliness of performances in public open spaces is the provision of an appropriate place for accommodating spectators. It should be big enough, while not too broad, well-located, and protected from direct sunshine, urban noise pollution, and rain. In fact, spectators' area should be designed and arranged in compliance with microclimatic considerations.

Specially, spectators should be given various seating opportunities through the provision of multi-functional street furniture. In addition, sheltered passages should be designed for passers-by, strangers, and people who do not want to be involved in performance to avoid deranging the smoothness and tranquillity of the spectators, and subsequently the performance on going. Overall, the circulation flow of both pedestrians and cyclists should be designed in pathways apart from calm places, ensuring a good accessibility of the space (Stauskis & Eckardt, 2011). If public open spaces are to be socially successful and animated, they must provide people's needs attractively and safely (Project for Public Space, 2001; Shaftoe, 2008). Concisely, animation of public open spaces that positively influences their social successfulness is simply achievable through vending, or even large public events such as fairs and festivals, even local or national activities, and entertainments (Madanipour, 2004; Mean & Tims, 2005; Holland et al., 2007; Shaftoe, 2008).

Similarly, but in a broader sense, the existence of public art and street performances and shows cause more people to stay within public open spaces in cities (David, 2008). People's participation in the events taking place in public open spaces creates a sense of community that strikingly affects their social interactions (Holland et al., 2007). Taking a comprehensive prospect, Madden and Schwartz (2000) elaborated that the four key qualities of accessibility, engagement in activities, comfortability, good image, and providing a sociable space where people do social interactions make a public open space successful. When a comfortable space presents itself well and has a good image, this is a key to its success. Comfort includes perceptions about safety, cleanliness, and the availability of places to sit (Pasaogullari & Doratli, 2004).

Maintenance is among the most important factors in successful place making, achieving comfort and increasing utilization. In addition, activities are the basic building blocks of a place, giving people a reason to come to a place (Pasaogullari & Doratli, 2004). The more activities included in a space, the more opportunities are provided to participate in (Madden and Schwartz, 2000). Mostly, access to use and enjoyment of high-quality open spaces impose a positive impact on the quality of life (Wong, 2007). One of the issues that make public open spaces socially convivial is providing the opportunities for people to enjoy. In this favor, people appreciate these spaces if provide them with the ways to observe the world surrounding (Shaftoe, 2008). Although a delightful public open space helps people watch or interact with others, it is vital to create a central core that draws people inside and convinces them to linger. This is achievable through creating hard and soft landscaping, public art, and entertainment (Shaftoe, 2008). In fact, combination of hard and soft landscaping, such as plantings, pavements in conjunction with microclimatic considerations, selection of proper lighting, colors, materials, and textures, gives a chance to design different areas in public open spaces, which welcome more social activities (Stauskis & Eckardt, 2011).

Behavioral characteristics, such as territoriality, interpersonal distance, distribution, and the need for different types of observation and communication, also contribute to the development of a socially convivial public open space (Canter, 1974). In fact, these factors create strong social interactions among groups, which directly influence the success of public open spaces. Shaftoe (2008) added that other factors, such as interpretation, coherence, legibility, sense of safety, intrigue and curiosity, aesthetics, and comfort and reassurance, affect the social conviviality of a public open space. Indeed, some of these characteristics relate to physical, while some others discuss visually spatial features of a

successful public open space. More importantly, although people mostly experience aesthetics of public open spaces visually, public open spaces might noticeably affect aural and olfactory senses the most. In addition, public open spaces should be integrated with natural elements (Shaftoe, 2008). Whyte (2001); Gehl (2011) asserted that people for social interaction in public open spaces need well-designed opportunities for conversation in order to speak and listen without interference. Therefore, the aesthetic experience of a public open space is in visual, aural, and olfactory manners. In addition, movement through public open spaces is in relation to non-visually aesthetic experience (Lennard & Lennard, 1995; Taylor, 2009). Feeling safe, comfortable, and happy are the factors that make a public open space inviting and evocative. This distinctive place responding to site's climate, context, and culture is genial and gathers a vast group of people to have a fanciful occasion (Jerde, 1998).

In terms of facilities and amenities, a convivial or successful public open space responding to people's social needs should provide affluent places for sitting (Holland et al., 2007; David, 2008; Shaftoe, 2008). Since seating requirements and locations are different from one individual to another one, it seems helpful to provide a vast spectrum of flexible and adaptable seating opportunities in any public open spaces (Shaftoe, 2008). Burton and Mitchell (2006) pointed out that providing well-designed footpaths and providing landscaping features, such as seating settings, trees, and others, affect the social successfulness of a public open space. In addition, providing adequate washrooms for both males and females also makes incentive for people to linger in public open spaces for social interactions (Holland et al., 2007).

Whyte (1989) tested whether location and size make a differentiation between successful and unsuccessful public open spaces. Location of a public open space also affects its social conviviality to the extent that if a public open space is located in isolated parts of the city or is difficult-to-access, although well-designed and maintained, it will not flourish (Shaftoe, 2008). Supporting this, a study done by Gallacher (2005) in Glasgow showed that public open spaces might be only successful in dense and City Centers with mixed-use urban cores. Given this, safety of the surrounding areas also influences the social success of a public open space (Shaftoe, 2008). Supporting the influence of location, Whyte (1989, p. 128) stressed that *'The real estate people are right about location, location, location. For a space to function truly well it must be central to the constituency it is to serve – and if not in physical distance, in visual accessibility'*. Visual accessibility plays a more important role in making a public open space socially successful than physical accessibility. Yet, the combination of both characteristics tremendously fosters the spatial human flow, provides a base for carrying out activities, and animates public open spaces.

Besides location, size is another factor that affects the social conviviality of public open spaces. Numerous studies on urban design have stressed optimum dimensions for public open spaces (Lynch & Hack, 2002; Alexander et al., 1977; Gehl, 2011). In terms of size, a public open space should not be too small or too large (Shaftoe, 2008). Supportively, Porta (1999) stated that public open spaces should not be too big to deter people's activities. Complementarily, Burton and Mitchell (2006) declared that public open spaces should be at an optimum size and informal with plenty of activities. In other words, the most comprehensive attribute is that public open spaces should be large enough to welcome various activities (Tibbalds, 2001; Shaftoe, 2008; Gehl, 2011). Public open spaces with uncontrolled size might be unsafe places where some conservative groups due to the fear of

crime are not willing to enter. This social exclusion might compromise the social vividness of public open spaces that results in social disintegration in societies. As a threat to the sense of community, this causes public open spaces to be territorial arenas that only limited groups of people use. Subsequently, this restriction to access makes public open spaces rather homogeneous and endangers the heterogeneity of such spaces.

Furthermore, the way a public open space is managed and its physical attributes are significant for its social success (Holland et al., 2007; Shaftoe, 2008). Accordingly, well-maintained and clean public open spaces are more socially successful (Shaftoe, 2008). Holland et al. (2007) asserted that public open spaces should not be oppressively over-regulated as this negatively affects their conviviality. Worpole and Knox (2007) mentioned that citizens possess right to regulate public open spaces. If a public open space is controlled or is not ruled by any specific groups, people will be able to adjust their social needs. From a holistic view, socially successful public open spaces should impose self-regulation on public behavior in the way that strengthens local distinctness and provides social activities to enhance people's social interaction (Mean & Tims, 2005). In fact, these places should be accessible for all, include well-operating management system providing self-organization, belong to a mix of cultures inviting diverse groups in using shared places, and avoid overregulated designs (Mean & Tims, 2005). Shaftoe (2008) discussed that managing a public open space is not just about making it safe and crime-free; in fact, a good management should make a public open space proactive, encouraging interesting activities, and provide a variety of reasons for people's gathering and lingering (Shaftoe, 2008). In fact, that a public open space fails to integrate people's social needs depends on the holistic view of how this place is enhanced in relation to different uses and needs (Mean & Tims, 2005; Shaftoe, 2008).

Inclusiveness is one of the most important factors that affect the social success of a public open space, i.e. everybody should feel welcome to public open spaces (Young, 1990; Kohn, 2004; Shaftoe, 2008). Madanipour (1996); Holland et al. (2007) put forth that public open spaces are inclusive if include all age and social groups, improve the sense of local distinctness, and provide a vast range of spaces considering different regulations. Self-segregation, i.e. that people avoid sitting nearby people who they do not know, is one of the ways that strengthen co-existence and community development, which consequently makes public open spaces as inclusive as possible (Mean & Tims, 2005; Holland et al., 2007). The difference between people's perceptions of built environment might result in self-segregation in public open spaces use that implies the inclusiveness and divisiveness of these places (Holland et al., 2007). From a psychological point of view, public open spaces should be designed in the way that people feel a sense of enclosure with being awe-inspiring. Besides that, public open spaces should possess distinctive characters and identity to inspire the sense of uniqueness, as they are complex and coherent (Shaftoe, 2008).

Some researchers, such as Billingham and Cole (2002); Carmona et al. (2003); CABE (2004a & b); Mean and Tims (2005); Holland et al. (2007); Gehl (2011), highlighted that the design of a public open space affects its social success and inclusiveness. Williams (2005) asserted that the significance impact of design on social interactions should not be overstated. Similarly, Shaftoe (2008) declared that design and physical layout of a public open space have softer and weaker impact on people's social needs, but location, management, animation, and culture are the issues that impose the highest impact on the social conviviality of such a place. Totally, whenever a public open space is successful, it flattens the way for communal activities, which this enhances public life. In this condition,

such a place carries communal meanings (Carr et al., 1992). That is why theorists in urbanism asserted that social and physical vividness and dynamism of a public open space play the pivotal role in forming its public culture (Amin, 2008). Putting all these together, socially successful public open spaces are deemed '*the symbols of a democratic city*' (Marcuse, 2006, p. 922). Sociability of a public open space is enhanced if such a place has inviting spaces for diverse groups of people, provides psychological and physical comfort, is desirable, and has permanent presence of people (Rad & Ngah, 2013).

2.15 People's Engagement in Public Open Spaces

It is strongly supported that older people fear crime in public open spaces more than younger people due to the differences in people's feeling of '*insecurity or inability to 'protect' [themselves] or withstand the effect of a crime or an attack*' (Yavuz & Welch, 2010, p. 2498). People's perceptions of using public open spaces are affected by their age for at different age stages their experiences and possibilities to use such spaces differ (McDowell, 1999; Terlinden, 2003; García-Ramon et al., 2004). Human behavior towards public open spaces is basically '*situational*': '*it is embedded in physical- and also in 'social', 'cultural' and 'perceptual'- contexts and settings*' (Carmona et al., 2003, p. 106). People's relationship with public open spaces is complex and contradictory in nature. While some people come for social interaction to achieve a sense of well-being through the chance of escaping from the hustle and bustle of routine life, others find out the crowdedness of urban life calmative and subsequently cherish it (Cattell et al., 2008). In general, people in public open spaces reveal their experiences of local elements, which this positively affects their well-being (Ellaway et al., 2001; Airey, 2003). People's engagement in public open spaces is underpinned with the understanding of their dynamic place involvement (Canter, 1985;

Scott, 1999). It has also a root in social cognitive theory (Bandura, 1986), in which people's activities are influenced by individuals' recognition of activity opportunities, their skills to propel their opportunities, and expected benefits from them (Thompson, 2007). Quite different, environmental support is the concept to figure out how dichotomies in physical outdoor environments might bring about differences in people's quality of life, either directly or by easing the capacity in order to undertake outdoor activities (Sugiyama & Thompson, 2007). In order to elicit the concept of environmental support, it seems vital to explore the concept of Personal Projects coined by little (1983). This constructivist method is considered a premise that strengthens and engages with individuals' daily lives (Thompson, 2007). It clarifies each person's desired activities and how the environment makes it easy or difficult to get an activity to be carried out (Thompson, 2007). With a critical view, this method helps to better figure out the potential for social or emotional engagement, which is offered by different public open spaces (Heft 1997; Kytta, 2006). In general, successful public open spaces have been deemed specifically adult spaces (Valentine, 1996). It signifies that adults' attitudes and older people's needs prevail; in contrast, perceptions, priorities, and needs of young people are seldom considered in public open spaces (Holland et al., 2007). As the similarity in the use of public open spaces, older people like younger people interact with people in the same or similar age groups (Holland et al., 2007). In Malaysia, old people are considered those who age 60 years and above (Ahmad & Ismail, 2011), while the youth are between 15 to 40 years old (Malaysian Youth and Sports Ministry, 2014).

2.15.1 Young People in Public Open Spaces

The process of doing social interaction and emerging identity in young people and teenagers are explained in three categories of experimentation, play, and leisure activities (Kleiber, 1999), in which *'play and learning are intimately intertwined'* (Hall, 1959, p. 56). Thompson et al. (2006) stated that access to public open spaces endows young people with physical development and wellbeing, emotional and mental health, and social development. Young people are benign most of the time; they just colonize some places as their practice of youth identity and contribution to their sense of place for they shift into adulthood. This causes young people to shape greater groups in the vast spectrum of locations and times in public open spaces than do adults (Holland et al., 2007). Teenagers are more inclined to use physically attractive spaces, albeit their interest to be engaged in public open spaces is more highlighted with the affordance of social support and activities (Thompson, 2007; Travlou, 2007). Largely supported, young people state that public open spaces are the places for performance and contest, where self-identity flourishes in relation to their peers and other members of the society (Thompson et al., 2004; Holland et al., 2007). Young people use public open space for different social functions (Lieberg, 1995). Hence, they stay in public open places from the beginning of time as such spaces offer opportunities for them to meet each other and talk, to show off or even to find a partner (Noorda & Veenbaas, 2000).

Public open spaces are very important for teenagers to foster rivalry and gain training for the adult's life, i.e. to gather knowledge to be used in other contexts and circumstances. For young people, public open spaces are dividable into places of interaction and retreat. Places of interaction are the spaces, which give the possibility for meeting and encountering the adult world and getting themselves to see and to be seen. Simultaneously, young people

use public open spaces as the places of retreat to be secluded from the adults' world (Lieberg, 1995). However, their hanging around in public open spaces is mostly considered a nuisance, which results in that they are insulted or hurt by others (Blok, 2001). Travlou (2007) declared that young people often use public open places for loitering for these spaces provide them with more independence, anonymity, and freedom from parental lookout. Young people's desire of escaping from the adults' supervision, which is an important developmental step in their life, has been stressed in different studies such as Noorda and Veenbaas (2000); Waiton (2001); Hampshire and Wilkinson (2002); Kraack and Kenway (2002); Malone (2002); L'Aoustet and Griffet (2004); Lieberg (2006); Holland et al. (2007); Shaftoe (2008). In fact, teenagers' understanding of public open spaces is unconventional and different from that of adults (Travlou, 2007). In general, young people's use of public open spaces is describable through their relationship with both their peers and adults (Tucker, 2003). Holland et al. (2007) stated that inter-ethnic social interactions occur among young people more than adults do. This implies that younger people are more potential for social interaction with a vaster group of people than older people are. Therefore, public open spaces should offer different social functions for young people to take full advantage of such spaces. As such, they show off themselves, meet each other in such spaces, and most importantly construct or even strengthen their identities (Lieshout & Aarts, 2008). All these themes together bring privacy and freedom for young people in public open spaces.

More importantly, designers should not exclude young people from public open spaces (Holland et al., 2007; Shaftoe, 2008). In fact, designers should intelligently and inclusively reply to young people's needs for social interaction in these spaces through getting them involved in the design process (Shaftoe, 2008). Location and the time needed for getting to

a public open space are important factors for young people's social interactions. Hence, public open spaces should be designed in the vicinity of young people's homes and closely managed by adults (Shaftoe, 2008). Holland et al. (2007) added that public open spaces should provide young people's needs, while they are legitimate and safe. More holistically, such spaces should be facilitated places where young people are safely enabled to meet and mingle, but this should be carried out without removing the frisson and excitement that they need for enjoyment (Percy-Smith & Matthews, 2001). Young people long for both structured and unstructured activities. In fact, different groups like different activities so that one size does not fit all (White, 1998). If places are imbued with social opportunities, the physical attractiveness is of less significance. Social opportunities for teenagers are meaningful with the existence of their friends without the adults' interference, which brings them the sense of freedom (Thompson, 2007; Travlou, 2007). As a communal trait between adults and teenagers, meeting other people is one of the most interesting hobbies, which explicitly accentuates the significance of social aspects of public open spaces (Thompson, 2007). Teenagers and older adults shape the largest groups of public open spaces daily visitors, albeit they differ in their lifestyles (Leisure Industries Research Center, 2001; Thompson, 2007).

2.15.2 Old People Public Open Spaces

Involving in regular physical activities in public open spaces is an important constituent of older people's social needs, which enhances their quality of life (Rejeski & Mihalko, 2001; McAuley et al., 2006). Walking has been deemed the least expensive and highly demanded physical activity (U.S. Department of Health and Human Services, 1996). In other explanation, for older people the most important impetus of going to public open spaces is

the need for a regular walk, which accessibility to these places provides this need (Thompson, 2007). Older people are more willing to be connected to public open spaces in the cities at different times compared to younger people. They are more sensitive to others' presence and more inclined to be in public open spaces earlier in the day. This propels them to shun places that are dark, deserted, and crowded with older children and young adults. In general, they prefer public open spaces monitored by visible security personnel (Peace et al., 2006; Holland et al., 2007). On top of all these discourses, the results of previous studies have shown that most of older people are nonchalant or unable to benefit from the full advantage of public open spaces (Holland et al., 2007). As the conciliation between old and young people's use of public open spaces, older people should be put in the picture how younger people use public open spaces based on their youth culture. Meanwhile, younger people should be aware of why their presence in public open spaces is considered a nuisance and threat by older people (Holland et al., 2007).

Older people carry out social interaction in public open spaces as the main daily source of outdoor recreation for an enjoyable experience. Their social interaction has a direct relationship with comfortability, safety, and easiness of public open spaces (Cattell et al., 2008). For older people with high life expectancy, quality of life is an important social issue, which public open spaces play an important role in enhancing it (Sugiyama et al., 2009). In fact, public open spaces promote old people's quality of life through clearing the way for social interactions (Bowling et al., 2003; Sugiyama et al., 2009). In general, use of public open spaces, which brings about social interactions, strengthens the sense of community (Kim & Kaplan, 2004; Kearney, 2006). Besides age, there are some other significantly influential factors, such as gender and culture, which outline people's social interactions as well as involvement in public open spaces.

2.16 Gender and the Use of Public Open Spaces

The way people experience public open spaces has had a long history in the field of architecture and urban planning, while a few cases from developing countries have been tracked (Whyte, 2001; Carmona et al., 2003; Gehl, 2011). The planning and architectural design of the spaces might bring in social inclusion or exclusion, while help to bring about a more balanced use of these spaces by men, women, regardless of their age, social, or ethnic background (Pareja & Tapada, 2001). The suitability of public open spaces should be of a consideration in the study of social interactions among men and women (McDowell, 1999; Garcia-Ramon et al., 2004). This explicitly reveals the effect of gender on the use of public open spaces for social interactions. Feminist scholars have revealed that most of attitudes towards urban studies and public open spaces have manly viewpoints. In other words, issues on public open spaces are mostly male-influenced as if men's needs are universal (Greed, 1996; Bondi, 1998; McDowell, 1999; Terlinden, 2003; Garcia-Ramon et al., 2004). As a proof, quite a number of studies stated that women mostly choose indoor places, while men are more inclined to spend their time in public open spaces (Abbott-Chapman & Robertson, 1999; James, 2001). A sizable number of studies contended that females feel more fearful in public open spaces than males (Yavuz & Welch, 2010). Fundamentally, studies demonstrated that females are scared of different things in public open spaces compared to males (Smith, 2008). With a similar viewpoint, some scholars, such as Bowlby (1987); Nava (1997); Listerborn (2005), commented that women feel safer to spend their time in commercial places such as department stores and shopping centers.

In contrast, Bru (1996) mentioned that women more determinedly contribute to urban design and issues of public open spaces. Similarly, a large number of studies declared that confrontation with public open spaces imposes more efficacious impact on women's daily lives than on those of men (Garcia-Ramon et al., 2004). That is why some studies showed that women use public open spaces more than men (Garcia-Ramon et al., 2002; Paravicini, 2002). The reason might be that women spend more time outdoors, which causes them to have a closer interaction with public open spaces within cities. Holland et al. (2007) in their study supported that older people (mostly women) are more inclined to attend public open spaces in multi-generation groups on weekends. Overall, the literature demonstrates a contradictory discourse on the use of public open spaces according to gender. In fact, some groups of scholars introduce these places as the arenas where the presence of men is more important, while some others value the role of women in enlivening such spaces more.

2.17 Culture and the Use of Public Open Spaces

Public open spaces reflect multifarious aspects of the societies they are embedded in (Calderon & Chelleri, 2013; Kratochvíl, 2013). Socially, public open spaces are deemed instrumental elements that tie societal communities and upgrade different cultures. Doing such, these places carry diverse connotations for different groups (Hernández Bonilla, 2013). The instrumental role of a public open space varies in different societies according to the attitude towards it in each culture (Al-Shams et al., 2013). Walzer (1986) mentioned that the character of a public open space delineates public life, culture, and communal conversations. Public open spaces help people portray their cultures and identities, while learning how to encounter versatility, diversity, and discrepancies (Mean & Tims, 2005). This diversity makes public open spaces contribute to forming the cultural identity of their

context by providing a sense of place for local communities (Giddings et al., 2011). A public open space is considered one of the challenging issues among urban scholars and urban planners. These places are the beds for meeting, exchanging ideas, and performing cultural performances (Mean & Tims, 2005; Özsoy & Bayram, 2007; Orum et al., 2009). With the same attribute, a public open space is a place for the controversy and exercise of citizens' rights, in which people from various backgrounds interact as a community (Ruddick, 1996; Staeheli & Thompson, 1997) for it provides the opportunity for group diversity (Ruddick, 1996). It seems vital to figure out how public open spaces are occupied by different social and cultural groups (Williams & Green, 2001). This reveals the extent to which public open spaces affect community cohesion and heralds the meanings, which people disclose to these places (Cattell et al., 2008).

Arefi and Meyers (2003) stated that the existence of cultural values and practices of various ethnic groups and social class strata are of the most salient characteristics of public open spaces in cities. In fact, use of a public open space expresses group deep-settled common values, such as those in public festivals, parades, cultural events, and political demonstrations, which these provide the practice of democratic rights such as freedom of gathering (Arefi & Meyers, 2003). With the same viewpoint, Mitchell and Staeheli (2005) introduced public open spaces as the places for enhancing social interactions, communal sharing, cultural integrations, and democratic expressions in cities. Rooted in his theory, Lynch (1960) stated that different social groups do not see the city the same way. More completely, Hayden (1995) elaborated that specific traditions of design and differences in the use of public open spaces are associated with different groups' intentions, illustrating differences in cultural meanings.

Involving in ethnic communities is one of the most challenging issues concerning the use of public open spaces, which makes these spaces more socially and culturally appropriate. Accordingly, considering the multicultural societies elucidates a permanent confrontation of different cultures; meanwhile, one dominant culture has the most influence on the national life (Wong, 2007). Expression of one culture is not necessarily embodied through the emergence of apparently culture-specific elements; in fact, if the memory is related to the specific elements, cultural vision will be created. The development of culture-specific programs assists in expressing different cultures in public open spaces of a multicultural society (Wong, 2007). Holland et al. (2007) in a study on public open spaces in England stated that people are seen in groups with more than one ethnic background. This inclusion of different ethnic groups integration might be the issue whether cultural differences arouse distinguished perceptions of public open spaces across the society. Scholars look at public open spaces in different ways (Orum & Neal, 2009). The first view discusses these spaces the grounds, which enable people to mingle with one another as well as getting across their ideas and point of views freely. Jacobs (1961) and Anderson (1992) supporting this viewpoint asserted that public open spaces should provide places, in which people can get to gather (Orum et al., 2009). The other view expresses public open spaces as political surveillance sites, which this is supported by the scholars who are fond of the use of these places for cultural activities. Based on this viewpoint, public open spaces clear the way not only for gathering, socializing, and exchanging ideas, but also for performing, expressing, and proclaiming cultural identities, which results in collective identities of a specific ethnic group or even the whole nation (Orum et al., 2009). Undoubtedly, this attitude comes true in a society like Malaysia consisting of Malay, Chinese, and Indian groups where each group possesses their own expectations, beliefs, cultural values, and political proclamation.

2.18 The Theoretical Framework

The main objective of this research is to identify the indicators of a successful public open space. This requires investigating the dominant theories on people's engagement with public open spaces. In achieving the objectives of the research discussed in Chapter One, the literature review identified the reasons for which people stay longer in public open spaces, the priority of people's needs according to their age groups, the factors that affect social interactions in public open spaces, and the characteristics of a responsive, convivial, and successful public open space. The theories concerning these urban issues in public open spaces form the theoretical framework of this research and embody the dependent and independent variables as the units of analysis. In fact, the emerging variables through various statistical analyses seek the public's evaluations of the role of the selected public open spaces in attracting people, providing their needs, and creating socially comfortable places for daily encounters with others in the society. The inferences from the results contribute to the betterment of the public life in similar situations as the selected public open spaces represent the major public spaces in the City Center of Kuala Lumpur. The theoretical framework shown in Figure 2.2 addresses the theories that contribute to eliciting the dependent and independent variables to achieve the objectives of the research.

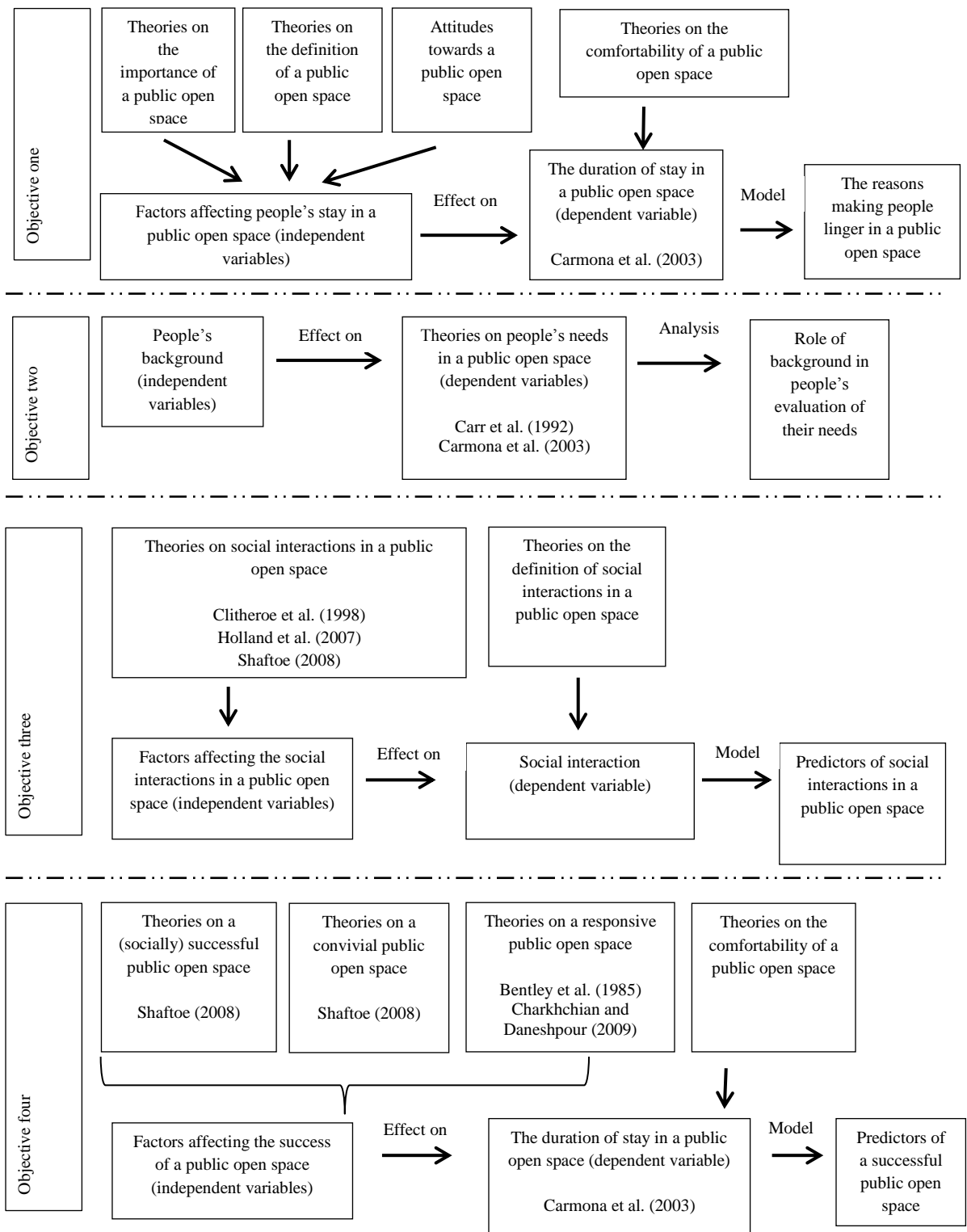


Figure 2.2: The theoretical framework of the research

2.19 The Linkage between Literature Review and the Objectives of the Research

The theoretical framework, shown in Figure 2.2, elaborates that reviewing the theories that address the importance of a public open space, its definition within an urban context, and attitudes towards it identified the opportunities that attract people to a public open space and make them stay longer (independent variables). Carmona et al.'s (2003) theory of comfortability revealed that the duration of stay in a public open space shows the degree of its comfort for the users (dependent variable). Identifying the impact of the independent variables on the dependent variable achieved the first objective of the research by presenting a model that showed the priority of the reasons for which people come to and stay in the public open spaces. In achieving the second objective, the critical review of the relevant literature extracted the needs in public open spaces (dependent variables). The suitable statistical analyses examined the role of background, such as age, gender, and ethnicity, in prioritizing the needs in the selected public open spaces. In addition, the theories concerning various aspects of social interactions outlined the factors that influence social interactions in public open spaces (independent variables). The impact of these emerging variables on the social interactions assisted the researcher in fulfilling the third objective. Lastly, the thorough review of the theories relating to a (socially) successful, convivial, and responsive public open space elicited the characteristics that address the success of a public open space (independent variables). As discussed earlier, the duration of stay that specifies the comfort level of a public open space determined the dependent variable in this stage. In conjunction with the fourth objective, the influence of the independent variables on the time spent produced a model that presented the indicators of a comfortable and successful public open space.

2.20 Gap Analysis

This section aims to review the preceding studies that concern different aspects of public open spaces in the Malaysian context. Identifying the findings of these studies assists in spotting the gaps in relation to the public life in the public open spaces in Malaysia. In addition, it highlights the significance of the research objectives in enhancing social interactions as well as determining the features of a successful public open space in the City Center of Kuala Lumpur. Briefly, this section reviews the methods applied, data collection instruments, and major findings of the recent PhD theses in similar situations.

Table 2.5: PhD Studies on the Urban Issues in Public Open Spaces in Malaysia

Title of study	Author	Year	Applied Method	Major Findings
Planning of Urban Residential Local Parks in Kuala Lumpur	Melasutra, M. D	2006	Quantitative method: questionnaire surveys	The provision of local parks, their design, and management are mostly insufficient for recreational purposes. The green and natural components of parks are significant for the social, ecological, and cultural aspects of neighborhood areas. Lastly, it explored the role of the pressure of globalization in the divergence between the qualities of grand parks, gardens, and local parks.
Place Attachment towards Shopping Districts in Kuala Lumpur City Centre, Malaysia	Ujang, N	2008	Mixed method: surveys and face-to-face interviews	The users' perception of public open spaces is influenced by the place attachment. The level of familiarity, length of engagement, degree of economic dependency, the role of users, and ethnic backgrounds are the factors that influence the depth of place attachment.
Appropriate Urban Public Open Space	Wan Abdullah, W. M. Z	2008	Mixed method: surveys, face-to-face interviews, and field observation	The physical-spatial factors contribute to people's satisfaction of the urban public open spaces. Activities influence people's attachment to the places. The combination of the two findings contributed to the justification of the qualities of the appropriate urban public open spaces of the case study.
Place Attachment and Meaning of <i>Padang</i> as a Public Space in Historic Cities of Malaysia	Harun, N. Z	2011	Mixed method: surveys and face-to-face interviews	Residents develop deep attachment to ' <i>Padang</i> '; however, change of physical character, discontinuity of place experience, and insecurity alter its meaning.

Source: Askari, 2014

Table 2.5 shows that the previous PhD studies focused on the issues relating to different aspects of public open spaces such as design, management, sense of place, and place attachment. In addition, they focused on the role of physical-spatial factors and socio-cultural activities in people's satisfaction of public open spaces. The review of the preceding relevant studies reveals that there is scant research about a successful public open space in Malaysia, especially in Kuala Lumpur city. Hence, this doctoral research aims to fill up the gaps relating to the enhancement of the public life in the City Center of Kuala Lumpur through determining the indicators of a successful public open space.

2.21 Summary

This chapter critically reviewed the theories concerning different aspects of public open spaces in both a global and local context. It addressed the opportunities and benefits that such important urban cores offer in cities. The review pinpointed the significant role of public open spaces in enlivening the public life in urban planning and design, establishing the social bonds among different ethnic groups, and arousing a sense of place in the users. A section chronologically discussed the role and place of public open spaces in Malaysia. In addition, this chapter reviewed people's needs according to age groups as well as the role of age in the use of public open spaces. Identifying the role of gender and culture in the way people use such spaces was another important issue discussed. Moreover, it analyzed the theories relating to miscellaneous dimensions of a responsive, comfortable, convivial, liked, and socially successful public open space. It also critically reviewed the previous studies on the relevant issues to find the urban gaps. Lastly, this chapter established the theoretical framework that embodied the independent and dependent variables, which assisted in testing the existing urban issues in the selected public open spaces.

CHAPTER 3

RESEARCH METHODOLOGY AND DATA ANALYSIS

3.1 Introduction

This chapter comprises nine sections and expresses the researcher's endeavour in elucidating the research methods and data analyses applied in this study. It elaborates on how different types of data collection methods were utilized to capture people's opinions about successful public open spaces. It introduces a mixed method including quantitative and qualitative approaches whereas a single method seems to be not efficiently sufficient in extracting a deep understanding of people's involvement in public open spaces. In addition, the most important contribution to the progression of the research was carried out through delineation of dependent variables, which were set as the units of analysis for further stages. Second part of this chapter justifies the selection of study areas by describing their socio-physical features and characteristics.

3.2 The Research Design

Collecting reliable and valid data is one of the most meticulous jobs in research. Inherently, none of the methods has privilege over any, unless the objectives of the research direct the researcher towards specific methods (O'Leary, 2004). The adopted method in this research is a quantitative approach qualitatively validated. This makes the data collection process conducive to a more profound exploration of the phenomenon. As Creswell (2008) stated, it pragmatically and sequentially involves collecting data to find out the best answers to the

problem statement. In more details, the research has taken on an exploratory design strategy. In this method as stated by Fraenkel et al. (2012), the researcher first does a quantitative study; but afterwards, there is a need to conduct a qualitative study to validate the results of quantitative approach. This approach has various strengths such as it clearly elaborates on the existing relationships between variables. Second, it helps to probe the relationships between variables deeply. In addition, this type of approach assists the researcher in cross validating the relationships extracted between variables, inasmuch as quantitative and qualitative approaches help to examine whether there is a convergence on a communal construal of the issue (Fraenkel et al., 2012). On the other hand, this approach has some drawbacks such as being time-consuming. It might be as a deterrent in research for most of the researchers who are expert in one approach only (Fraenkel et al., 2012).

Supportively, Mean and Tims (2005); Turel et al. (2007); Abbott-Chapman and Robertson (2009); Jabareen (2009) used both quantitative and qualitative methods to explore the use of public open spaces. The main objective of this research is to identify the characteristics of a public open space that makes all groups of people linger and enjoy that this leads to the enhancement of public life in City Centers. In this research, the main factor that measures the degree of success of a public open space is the time that people spend according to their gender and age group. Therefore, the time spent (as the dependent variable) representing the success is analyzed in relation to the factors that are considered the characteristics of a successful public open space (as the independent variables). This shows the predictors of a convivial public open space and also how much each of these factors affects the conviviality. In addition, the reasons that attract people to linger in public open spaces are tracked by considering the time spent (the dependent variable) and the factors that refer to the importance and functions of public open spaces (as the independent variables). People's

needs were explored based on their age groups for it was deemed that people possess different needs at different stages of their lives. The Principal Component Analysis identified the factors that map onto the social interaction as well as the success of a public open space. The main contribution of the results is to materialize the features of successful public open spaces in City Centers, where the need is more pronounced. The results in parallel with the existing rules and circulations could be taken into account for the future developments enhancing the quality of public life. To achieve all these, people's opinions on public open spaces were deeply explored through a self-administered questionnaire survey and validated via structured interviews. Overall, the following issues contribute to the structural framework of this research:

- 1) Identifying definition, background and theories on public open spaces, importance of such spaces, people's needs and their engagement in such spaces, and the role of these spaces in improving the urban public life in City Centers.
- 2) Synthesizing the characteristics of successful public open spaces and social interaction and the factors that affect it to map out the theoretical framework for the purpose of analysis
- 3) Data collection by the means of public surveys and structured interviews
- 4) Descriptive and inferential statistical analyses of the public's opinions and feedbacks towards the urban issues in public open spaces
- 5) Mapping the impact of the findings on people's engagement in the study areas
- 6) Documenting the findings in response to the objectives of the study and validating them through the experts' feedbacks to delve into the existing issues of the public open spaces in the City Center of Kuala Lumpur
- 7) Extracting the implication of findings and mapping out how the findings influence the future design of the public open spaces in the City Center of Kuala Lumpur

3.3 The Research Method: Quantitative Approach

In this research, through a sequential method, first a quantitative approach identified the people's evaluations of their engagement in the public open spaces as well as their opinions on the success of such spaces. In the second stage, a qualitative approach validated the results of the quantitative method and deliberated on the diverse issues concerning people's engagement in the public open spaces. This gives a clearer image of the existing situation of the study areas and assists the future studies in exploring more aspects in relation to such spaces. As Bazeley (2004) stated, this type of method enriches the understanding of the issues via confirming the conclusions, extending the knowledge or introducing new ways of pondering over the relevant matters.

Charkhchian and Daneshpour (2009) in their study on the users' opinions on different dimensions of a responsive public open space advocated the use of a similar method consisting of structured interviews and questionnaire-based public surveys. With a similar approach, Ujang (2010) in her study on seeking the place attachment and urban identity in the City Center of Kuala Lumpur city also supported the use of a method comprising questionnaire-based survey and in-depth interview. Ja'afar et al. (2012a) in a study on the traditional streets in the City Center of Kuala Lumpur also justified the appropriateness of a method including questionnaire surveys and interviews. Thomas (2003) and Muijs (2004) verified the suitability of quantitative approach by introducing it as a scientific elicitation of the phenomena and their relationship using numerical data. Through the quantitative method, the results of the study could be easily generalized over a vast population (Thomas, 2003). From the quantitative points of view, a systematic exploratory approach underpins this research in identifying the most suitable answers to the proposed objectives.

3.3.1 The Data Collection Instrument and Process of the Quantitative Approach

This section elaborates on the structure of the questionnaire, as the data collection instrument of quantitative approach, the process that resulted in finalizing the data collection instrument, and the process of data collection.

3.3.2 The Questionnaire-based Survey

The questionnaire-based survey was the data collection instrument of quantitative approach that identified the respondents' opinions and evaluations. The questionnaire was considered self-administered and well-structured in order to obtain more reliable and richer findings. The self-administered questionnaire includes questions, which are answered by the respondents (Fink, 2003). This kind of survey has some advantages over other types of data collection instruments. In particular, it is not costly and not time-consuming to gather information. Some studies, such as Hanyu (2000); Imamoglu (2000); Galindo and Hidalgo (2005); Ikemi (2005); Fawcett et al. (2008); Sugiyama and Thompson (2008); Akalin et al. (2009), have proven the suitability of the questionnaire-based survey for the similar studies and situations. Nevertheless, the difficulty of extrapolating the findings derived from the opinions of the respondents of sample size to the whole population, which necessitates the consideration of a systematic procedure, is one of the most challenging problems in this kind of research.

3.3.3 The Questions and Structure of the Questionnaire

The theories imbedded in the theoretical framework of the research (Figure 2.2) that were elaborated in Chapter 2, underlie the questions of the questionnaire survey. The researcher critically analyzed the theories and extracted the questions as the variables and units of analysis. The first part of the questionnaire covered the demographics of participants encompassing their ethnicity, age, and gender. The second part asked people to state the amount of time they usually spend in a public open space. Chronologically, the third part requested people to rate the degree of importance of public open spaces opportunities in making people stay and enjoy. This part included 15 close-ended questions and 1 open-ended question for exploring any missing factors. The questions related people's evaluations to design-based, socio-cultural, and well-being opportunities provided in public open spaces. Continuously, the fourth part requested participants to express their agreement to their needs in such spaces. This part included 18 close-ended questions as well as 1 open-ended question. The part 5 comprised 29 close-ended questions and identified the degree of people's agreement to the characteristics of a successful open space. The next part of the questionnaire asked people to reveal their agreement to the definition of the social interaction in public open spaces. Lastly, the next part investigated the agreement to the factors that influence social interactions in public open spaces.

3.3.4 The Wording of the Questions

Nachmias and Nachmias (1981) emphasized that the questions included in the questionnaire should be understandable by the respondents. Considering this fact, the wording of the questions selected for the questionnaire was rather neutral, i.e. the

participants were free to answer the questions. In fact, ambiguous questions, including technical terms considered inappropriate for respondents, irritating-emotion questions (Somekh & Lewin, 2005), difficult-to-ask, long, difficult-to-answer, and negative questions (Hoinville & Jowell, 1978), which might reduce the reliability of the questionnaire, were excluded from the questionnaire used in this research. The order of the questions was designed in such a way that the number of the questions was reduced reasonably, so that the participants would not feel bored when they were answering the questionnaire. Moreover, the earlier questions did not influence the next ones. The use of a conversational, concise, and accurate writing style provided a better chance for the participants to answer the questions more carefully.

3.3.5 The Scaling of the Questions

In this study, Likert's scale (Likert, 1932) was used to investigate the public's evaluations of public open spaces in the City Center of Kuala Lumpur. Likert's scale is an intelligence-related response with five-point scale, which is often used in questionnaire surveys. The efficiency of this kind of scaling has been emphasized in the similar studies previously conducted such as Hanyu (2000); Galindo and Hidalgo (2005); Ryan (2005); Akalin et al. (2009). In the third, fourth, fifth, sixth, and seventh part of the questionnaire, the public's evaluations of public open spaces were investigated using a five-scale assessment of *(1) strongly disagree, (2) somehow disagree, (3) neither agree nor disagree, (4) agree, and (5) strongly agree.*

3.3.6 The Pilot Study

Pilot study is a way to double check an instrument, such as a questionnaire, before it is made final (Fink, 2003). Hoinville and Jowell (1978) stated that pilot study is a way to redefine the wording, ordering, and to prune the questionnaire so that it becomes less lengthy. In other words, one of the outcomes of a good pilot study is to find out the length of time taken by the participants to complete a questionnaire (Fowler, 1988). As De Vaus (2002) stated, pilot study helps to consider steps such as flow, timing, and participants' interest in the actual survey. Therefore, pilot study is the best and safest way to ensure that the questionnaire will reliably reflect the participants' opinions. Taking this into consideration, a pilot study was carried out with 20 Malay, 18 Chinese, and 12 Indian respondents in July 2011 to make sure that the questions would rigorously convey the participants' opinions in the actual survey. During the pilot study, some of the questions, which conveyed unclear terminology in the participants' minds and imposed a negative impact on the results, were replaced with the easy-to-understand questions. The results of pilot study showed that some local participants were unable to understand most of English words used. Hence, to mitigate its negative impact on generalization of the results, the researcher used a Malay version of the questionnaire (apart from the English version) in the survey. In brief, the whole process of pilot study was for the sake of internal reliability of the questionnaire, i.e. to ensure that all the questions were jargon free and exactly measured what they intended to measure. In addition, this helps to ensure that the results of data analysis would be the same when the research is repeated over a period of time.

3.3.7 The Reliability of the Questionnaire

The Reliability Analysis assists in checking the reliability of the questionnaire. In achieving an acceptable level of internal reliability, the coefficient of Alpha must be at least 0.70 (Ryan, 2005; Akalin et al., 2009; Nunnally & Bernstein, 2010). The results showed that Cronbach's Alpha was 0.838 and 0.859 for the opportunities of a public open space, 0.835 and 0.941 for the people's needs, 0.944 and 0.920 for the characteristics of a successful public open space, and 0.851 and 0.906 for the factors that affect people's interactions, respectively for English and Malay version of the questionnaire survey. Hence, the results strongly proved the reliability of the questionnaire survey.

3.3.8 The Validity of the Results

In social sciences, *'validity refers to the appropriateness, meaningfulness, correctness, and usefulness of the inferences a researcher makes'*. Overall, there are three main types of validity such as *'content-related evidence of validity, criterion-related evidence of validity, and construct-related evidence of validity'* (Fraenkel et al., 2012, p. 147). Out of all types, this research considers the content-related validity in order to validate the results. Given this, in order to achieve the content-related validity, the content of the questionnaire survey questions has grown out of a thorough analysis of the current theories on the issues in relation to people's involvement with public open spaces. Hence, the format and content of the questions target at the very objectives of the research. As advocated by Fraenkel et al. (2012), any ambiguous variables that blackened the direct influence of independent variables on the dependent variables were avoided in order to increase the validity of the results and findings.

3.3.9 The Duration of Data Collection

Data collection was partially carried out in August and September 2011, and partially in January 2012. In average, 25 questionnaires were answered by the participants in one day. In addition, the response ratio was five to one, meaning that out of every five participants, one showed to be eager to cooperate and answer the questions. The second part of data collection, which was carried out qualitatively through structured interviews, was followed up during Jun-August 2012 and May-Jun 2014, inasmuch as arranging a date for conducting an interview is a daunting and time-consuming procedure.

3.4 The Sample Size

The question that arises here is that how many participants are to be used in the survey so that the results are statistically reliable. The most common way to choose the sample size is to consider 10 percent of the whole population (Mitra & Lankford, 1999). Since the population who use the public open spaces of the City Center of Kuala Lumpur is large and uncountable, calculation of 10% seems impossible due to the time and budget constraints.

Table 3.1: Determining the Random Sample Size from a Given Population

Population	Sample size
75000	382
100000	384
1000000	384
10000000	384

Adapted from the Table coined by Payne and McMorrisv (1975), at the Confidence Level of 95%; Margin of error + or - 5%

The Table above, which is adapted from the Table coined by Payne and McMorrisv (1975), shows that for the population above 100000, the sample size of 384 is close to accuracy and; therefore, reliable. For this reason, the allotted sample size of the public survey in this research was considered 400 people in order to ensure the generalizability of the extracted results and findings. In fact, the Confidence Level and Margin of error were considered 95% and + or - 5% respectively.

3.5 The Selection of Sample Size (Sampling Method)

Sample selection is very critical in the research process. Through appropriate sample selection, accurate information is gained for generalization. In this research, the participants consisted of passers-by who were Malaysian citizens, ranging from 13 to 50 years old and above. A research group consisting of four students of Architectural Studies were assigned to identify the major entrances (the most populous spots) of the study areas. In this line, as supported by Ja'afar and Usman (2009), the major entrances were identified by the means of observation techniques. The total sample size of 400 were divided within the three study areas, meaning that in each study area, approximately 133 people were asked to answer the questions. Out of 400 surveyed people, 240 were Malay, 110 Chinese, and 50 Indian to represent the Malaysia's population cross-section. In fact, using the systematic sampling method, every 4 passers-by were counted and requested to answer the questions in each entrance. Besides that, one of the most prevalent methods of sampling in quantitative approach is time-interval sampling. Johnson and Christensen (2011) described this sampling method as the one in which the researcher is involved in checking an event in specified time-intervals. Ja'afar and Usman (2009) supported the appropriateness of time-interval sampling for a similar research on public open spaces in Malaysia.

Considering the above statements, the researcher with the assistance of his team handed out the survey questionnaires to the respondents in the first 10 minutes of every hour. In a clearer explanation, through the application of a method, which was the hybrid of systematic and time-interval techniques, every 10 minutes, every 4 passers-by was counted and requested to answer the questions in each entrance of each study area. Moreover, approximately the equal ratio of males (50.5%) and females (49.5%) were taken into account in order to eliminate the gender-biased effect on the reliability and validity of the results. Overall, the respondents were chosen from a heterogeneous spectrum of people grounded in different backgrounds in order to attain an inclusive sample size that represents the whole population of the City Center of Kuala Lumpur.

Unavoidably, time is a factor that influences the use of public open spaces among different groups of users. In order to include a representative sample size, respondents were selected from different groups and within different periods. According to De Vaus (2002), a representative sample is the one in which the characteristics of the sample are the same as those of the whole population. In order to comply with the external validity of the results and increase the reliability of the sample size as Chiesura (2004) and Fraenkel et al. (2012) stressed, the researcher requested the respondents to fill up the questionnaires on weekdays, weekends, and public holidays in different hours of a day. For instance, data collection was carried out partly in the morning, afternoon, and evening. In addition, all groups, such as passers-by, residents, visitors, and workers, were included to reduce the biases that endanger the validity and reliability of the results and findings.

3.6 The Research Method: Qualitative Approach

Qualitative research targets deliberation on human environments imbedded in a specific context concerning either social norms or individual experiences (Hay, 2005). One of its privileges is the intensification of data over the extensiveness of quantitative data collection. Nevertheless, in a qualitative method, the threatening issues are danger of the researcher's bias (so-called subjectivity and self-reflexivity) and influence of the researched context constraints on the collection and interpretation of the results, which should be controlled and taken into account (Hay, 2005). In this regard, Dowling (2005) elaborated that the inter-correlation between society (the context), the individual researcher, and the research is conversable in relation to ethical issues of power and subjectivity. Subjectivity encompasses the researcher's personal bias and opinions, while the inter-subjectivity carries issues, such as meanings, interpretations, ethnic background, etc., that focus on the bond between the research and the context (Dowling, 2005). Therefore, a critical interpretation of the results is vital in order to achieve an ethically precise research (Kearns, 2005).

3.6.1 The Data Collection Instrument and Process of the Qualitative Approach

As the second stage of data collection, structured interview was deemed the most appropriate method for data collection in order to explore the experts' opinions about the successful public open spaces in more details. This strengthens and validates the results extracted from the questionnaire surveys. Besides the quantitative approach, the qualitative approach was employed in this research to achieve the methodological triangulation, which was introduced by Denzin (2006), as one of the four basic types of triangulation, namely as

data triangulation, investigator triangulation, theory triangulation, and methodological triangulation. The methodological triangulation is the one in which the researcher uses more than one method to collect data (Denzin, 2006; Risjord et al., 2001). In social sciences, the researchers use triangulation to show the intention of utilization of more than two methods, which is also named as '*cross examination*' (Cheng, 2005, p. 72). The following sections intended to elaborate on the way the interviews were carried out with the experts in the field. These sections discuss the procedure of selecting the interview questions, the procedure of conducting the interviews, and the way interviews scripts were analyzed to back up the data extracted from the questionnaires.

3.6.2 The Interview

In conducting an interview, what the researcher already knows is as important as what he/she wants to explore. What the researcher wants to know specifies the questions that he/she will ask. More importantly, what the researcher already knows will determine how he/she asks them (Leech, 2002). The following issues stated by Gray (2004) pinpoint the suitability of the interview as an appropriate data collection instrument in this research:

- There is a need to achieve very adapted data.
- There are opportunities required for a deep exploring.
- An acceptable return rate is required.
- Respondents are not familiar with the native language of the country or they have problems with written language.

There are various types of interviews that the objectives of the research assist the researcher in choosing the most appropriate one. In this research, the structured interview sounds explorative enough to extract the experts' opinions on different issues concerning people's involvement in the public open spaces thoroughly. Arksey and Knight (1999) introduced the structured interview as one of the best methods for gathering in-depth and detailed data in qualitative approaches. Interviews allow for a direct interaction between the researcher and the respondent. The researcher checks the accuracy and relevance of data as he/she collects them (Denscombe, 2005). This crosschecking contributes to the validity of the data collected (Tengku-Hamzah & Adeline, 2011). Another advantage of such kind of data collection method is the flexibility and high response rate as well as participation of the researcher in data collection procedure that might result in obtaining the accurate and elaborate results. Interestingly, the reason might be that the researcher is able to propel the direction of the interviews unbiasedly.

3.6.3 The Structured Interview

A structured interview is often named as a standardized interview in which the respondents are asked the same questions, wording, and sequence (Corbetta, 2003). In fact, it is the one, which is based on structured series of the questions and is completely standardized in terms of content (Kumar, 2008). Gray (2004) stressed that if questions are read out in the same tone for all the respondents, it is ideal and respondents will not be influenced by the tone of the researcher. Bryman (2001) elaborated that a structured interview is about aggregation of the replies from all the respondents who are given the same questions. Undoubtedly, this type of interview gives rigidity to the whole interview (Corbetta, 2003). David and Sutton (2004, p. 160) stated that one of the strengths of structured interviews is that '*prompting*

can be included with the questions and if a question is inappropriate, data on why no response was made can be recorded'. The interviewees in this research consist of the randomly selected Landscape Architects, Town Planners, and university lecturers. Out of all randomly selected interviewees, five replied and showed their enthusiastic in participating in the structured interviews. The results of interviews with these five respondents assisted this research in validating the data analyzed.

3.6.4 Conducting a Structured Interview

Preparation before the actual interview is an unavoidable necessity. During an interview, Gillham (2000) stressed that interviewer should make sure that respondents have:

- A clear-cut idea of why the researcher asks such questions;
- Elementary information about the goal of the interview and the research project included;
- The knowledge of the rough length of the interview and that the researcher records it (explaining why);
- A clear idea of the place and time of the interview

In light of essentials of a structured interview, in this research, the researcher briefed the interviewees in order to get them familiarized with the gist of the research. In this line, the researcher initiated the interviews by explaining the main point of each questions in order to give the straightforward direction to the interview. In order to mitigate the bias in the results of the interviews, the researcher tried to play the role of a conductor not a person who led to any preconceived answers, meaning that the researcher strictly avoided giving

directions to any specific answers. In fact, the researcher conducted the interviews in a way that interviewees feel free to voice their opinions. This is in a par with what Kumar (2008) stated as the atmosphere of an interview should be warm, responsive, permissive, and most importantly, free from all sorts of pressure and coercion. During interviews, the researcher took note of discussions and used them as transcripts. Some interviewees due to the nature of the structure interview preferred to answer the questions in their own words.

3.6.5 The Questions and Order in a Structured Interview

Hoyle et al. (2002, p. 144) stated that questions should both encourage respondents to fully reply and avoid bias arising *‘from social desirability, conformity, or other constructs of disinterest’*. One important consideration that rigorously affects the efficiency of conducting a structured interview is the way the researcher asks the questions in order to set up a rapprochement as well as a good rapport (Kumar, 2008). To achieve this, as Kumar (2008) stressed, the researcher contemplated the following points in asking the questions of the structured interviews:

a) The questions should be asked in an informal atmosphere, b) the questions should be asked as worded by the researcher, c) the questions should be asked in the same sequence as they have been planned, and d) in order to counteract misunderstanding and misinterpretation, the questions should be clearly voiced and in case of need repeated by the researcher. In addition, in some cases, the researcher tried to clarify the wording of the questions in order to remove the misgives caused by the terms that looked unclear and complicated to the interviewees.

3.6.6 The Ethical Issues in Conducting a Structured Interview

In conducting a structured interview, observing the research ethics is one of the most important issues. Respondents should not feel bothered or wounded by the interview. In addition, they should feel secure about the confidentiality of the answers. More importantly, the researcher should not utilize the interview as a deceptive tool for imposing issues to the respondents (Gray, 2004). Patton (2000) and Gray (2004) listed the following ethical issues that the researchers should consider in conducting a structured interview:

- A) Clarify the aims and goals of the interview to the interviewee
- B) Explain the issues from which the interviewee will benefit
- C) Assess the ways the interview might put the interviewee under stress or bad political reputation
- D) Reflect the responses by the interviewee to the extent that ensures the confidentiality and anonymity issues
- E) Inquire all the necessary kinds of consent in conducting the interview
- F) Data possession and permission to approach: assess who has the right to obtain the data and for what purpose
- G) Emotional wellbeing: consider how the interview affects the emotional wellbeing of the interviewer and interviewee
- H) Assistance: employ a consultant on principled matters during the study
- I) Data collection limits: how hard does the interviewer inquire about the data? how much time does the interviewer spend on gaining the data?
- J) How hard does the interviewer force the interviewee to answer the questions about which they might be doubtful?

Overall, the interviewer should bear in mind that the purpose of the interview is only to collect data and the researcher is strictly prohibited from changing or manipulating the respondents' opinions (Gray, 2004). A structured interview is efficacious upon the achievement of criteria such as validity, reliability, and respondents' reactions. The validity is the most important quality of a data collection instrument. It refers to the ability to measure what the researcher aims to measure and to predict what he/she aims to predict. A structured interview is valid if the interviewer's evaluations sufficiently and without bias foresee respondents' future performance (Pettersen & Durivage, 2008). In this research, the researcher best tried to conduct interviews fairly in order to bridge a good bond between the questions and the respondents. The reliability refers to the consistency of the results obtained through an instrument. In fact, if two or more interviewers evaluate the same respondent and the results are the same, the interview will be valid (Pettersen & Durivage, 2008). Furthermore, if the same interviewer evaluates two equivalent respondents and the results are the same, the interview will be valid as well. There would be no doubt that the interviewer should conduct the interviews in the way that respondents feel positive about the interview. Achieving this, the researcher is able to conduct the interviews more efficiently. In fact, there are some factors, such as the relevance of the questions, professionalism and reverence given to respondents by interviewer, and respondents' own opinions about the positivity of the interview process, that affect the respondents' attitudes during a structured interview (Pettersen & Durivage, 2008).

3.6.7 The Selection of Interviewees

The current research advances the components of a successful public open space in the sense that it meets people's needs mostly based on their age groups and builds up a salubrious place for people to mingle with each other. This necessitates the selecting an inclusively comprehensive group of interviewees with miscellaneous expertise. As discussed before, the researcher targeted the lecturers at public research-based universities and the practitioners across the fields of Landscape Architecture and Town Planning. To get the interviewees' permission to attend the interview, the researcher randomly sent the questions together with a cover letter stressing the confidentiality of the results to the experts whose expertise sounded relevant. In more details, a simple random sampling assisted in selecting the interviewees of the research. Overall, due to the time constraint five experts from the public universities, firms, and the City Hall Kuala Lumpur agreed to participate in the structured interviews. These interviewees were Dr. Mohd Johari Mohd Yusof from University Putra Malaysia, Asst. Prof. Dr. Nor Zalina Harun from the International Islamic University Malaysia, Miss. Norwahidah Binti Abdul Wahid, the Town Planner Officer in the City Hall Kuala Lumpur, Miss. Khairulizah Binti Jamaludin, the Town Planner Officer in the City Hall Kuala Lumpur, and Mr. Jasadikin Ab Sani from Jasa Reka Ent. The researcher conducted the structured interviews during Jun-August 2012 and May-Jun 2014. The length of the structured interviews took 1 to 1.5 hours according to the qualification and expertise of the experts and their eagerness in unveiling miscellaneous aspects of the discussions.

3.7 The Data Analysis

Analysis is one of the most important parts of a research in that it mainly engages the researcher in different aspects of the interrelation among variables. Responding to diverse prospects of engagement in the public open spaces, all types of analyses were in relation to the investigation of the best answers to the research objectives. The units of analysis encompassed the functions of public open spaces, people's needs, characteristics of a successful or convivial public open space, and the factors that influence social interactions in public open spaces. In the second stage of data analysis, the researcher analyzed the data collected from the interviews with the experts to get a practical confirmation on the results of the questionnaire surveys.

3.7.1 The Normal Distribution of Variables

The central limit theorem (CLT) introduced by Rice (1995) elaborated that '*The sampling distribution of sample means will more closely resemble the normal distribution as the sample size increases*' (Johnson & Kubly, 2008, p. 370). This theory declared that the sample size more than 50 would be considered as if normally distributed. Referring to this, inasmuch as the sample size of the current research is sufficiently large (400 respondents), it is deemed that the dependent and independent variables of the research are normally distributed.

3.7.2 The Principal Component Analysis

Throughout the history of research in communication, the scholars have proclaimed that the Factor Analysis is a popularly used statistical process (Park et al., 2002). The Principal Component Analysis (PCA) is a kind of data analysis approach that is rooted in Pearson's research (1901). It is a method to compact the lower dimensional sets of data out of higher ones (Ilin & Raiko, 2010). The scholars have widely highlighted and praised the PCA in their literature review (e.g. Diamantaras & Kung, 1996; Cichocki & Amari, 2002; Jolliffe, 2010; Bishop, 2006). In this research, the researcher used the Principal Component Analysis to identify and categorize the factors that carry the highest percentage of variance among all. Scholars, such as Mehta (2007) in a study on *'lively streets: determining environmental characteristics to support social behavior'*, Sugiyama and Thompson (2008) in their study on *'associations between characteristics of neighborhood open space and older people's walking'*, Sugiyama et al. (2009) in a study on *'associations between neighborhood open space attributes and quality of life for older people in Britain'*, Jabareen (2009) in a study namely, *'ethnic groups and the meaning of urban place: the German colony and Palestinians and Jews in Haifa'*, and Németh (2009) in a study on *'defining a public: the management of privately owned public space'*, stressed the suitability of Principal Component Extraction Method in the similar situations. Therefore, in this research, the researcher carried out this type of analysis to sift through the reasons that attract people to public open spaces, their needs, the factors that affect social interactions in such spaces, and the components of successful public open spaces.

3.7.3 The Independent Samples T-test

The Independent Samples (or two-sample) T-test is widely consumed in order to compare the means of two independent samples. In this research, the researcher employed this type of analysis to examine the impact of gender on people's opinions about the time they spend in public open spaces. In addition to that, this test showed whether the gender causes people to have significantly different opinions about the reasons that attract them to public open spaces as well as their needs in such spaces.

3.7.4 The One-way Analysis of Variance (ANOVA)

This test examines whether there is a statistically significant difference in the mean scores among the groups that outnumber two. In this research, the ANOVA test assisted the research in examining the impact of age and ethnicity on people's opinions about the time spent in public open spaces.

3.7.5 The Multivariate Analysis of Variance (MANOVA)

It is simply an ANOVA Test with several dependent variables. In other explanation, this type of analysis assists in finding out whether there is a statistically significant difference in the mean scores of various dependent variables among the groups that outnumber two. Given that, in this research, the MANOVA examined the role of age and ethnicity in the people's opinions about the reasons that attract them to public open spaces. In addition, it identified the differences among people's opinions about their needs in public open spaces according to the variables of age and ethnicity.

3.7.6 The Correlation Analysis

The Correlation Analysis is a test to measure the relationship between two or more variables. Scholars, such as Mehta (2007) in a study on *'lively streets: determining environmental characteristics to support social behavior'*, Sugiyama et al. (2009) in their study on *'associations between neighborhood open space attributes and quality of life for older people in Britain'*, Charkhchian and Daneshpour (2009) in their study of *'interactions among different dimensions of a responsive public space: case study in Iran'*, and Rogers and Sukolratanametee (2009) in their study on *'neighborhood design and sense of community: comparing suburban neighborhoods in Houston Texas'*, stressed the suitability of the Pearson Correlation Analysis in the similar situations. In this research, the Bivariate Correlation Analysis (Pearson) was employed to investigate the relationship between the reasons for staying in public open spaces and the time spent in such spaces. In addition, it was used to identify the relationship between the characteristics of a successful public open space and the time spent as well as the relationship between social interaction and the factors affecting it in a public open space. This type of test assisted in identifying the important role of age in the time that people spend in public open spaces. The literature review in Chapter 2 showed that age affects people's needs; therefore, the Bivariate Correlation Analysis (Pearson) investigated how people's needs vary across different age groups.

3.7.7 The Multiple Linear Regression Analysis

The Multiple Linear Regression Analysis is a statistical test to establish a model that shows the relationship between two or more independent variables and a dependent variable through making a linear equation. Scholars, such as Moirongo (2002) in a study of *'urban public space patterns: human distribution and the design of sustainable city centres with reference to Nairobi CBD'*, Mehta (2007) in her study on *'lively streets: determining environmental characteristics to support social behavior'*, Tang and Wong (2008) in a study on a *'longitudinal study of open space zoning and development in Hong Kong'*, and Rogers and Sukolratanameteer (2009) in their study on *'neighborhood design and sense of community: comparing suburban neighborhoods in Houston Texas'*, stressed the suitability of the Multiple Linear Regression Analysis in the similar situations.

In this research, this type of analysis established the models that confirm the factors that most attract people to public open spaces, the components of a successful public open space, and the predictors of social interactions in public open spaces. The assumption is that people frequent public open spaces in cities for different opportunities that these spaces offer. The tendency to these opportunities might arise from the change in attitude and physical response towards the built environment across different age groups. To dissect this more, a section in questionnaire survey consisting of 15 questions determined the people's evaluations of various reasons that attract them to the public open spaces. To determine the factors that outweigh, the Principal Component Analysis was a test to elicit the groups of components that carried the most weightage in attracting people. The factors in each component formed one variable and named based on its content. As such, different independent variables emerged. Furthermore, the respondents revealed the length of their

stay in the public open spaces, which was the dependent variable. At the next level of analysis, the Pearson Bivariate Correlation Analysis disclosed the relationship between the independent variables and the dependent variable. The independent variables that imposed the high impact on the dependent variable formed the variables of the next level of analysis. The ultimate goal was to create a model that explained how the independent variables (the reasons that attract people) influence the dependent variable (the time spent). Therefore, the posited model was Y (the time spent) = $a(X1) + b(X2) + c(X3) + d(X4) + \text{constant}$. In this model, $X1$, $X2$, $X3$, and $X4$ are the reasons that attract people to public open spaces. The Multiple Linear Regression Analysis helped to generate this model. The next chapter elaborates on this model.

Taking on the same procedure, a thorough analysis of theories on people's involvement in public open spaces resulted in a set of 26 questions that elicited people's opinions about the factors that influence social interactions in public open spaces. The Principal Component Analysis determined the factors that outweigh. Each component comprised various factors and formed one variable with a given name based on its content. This process extracted different independent variables for the further analyses. Afterwards, the Pearson Bivariate Correlation Analysis revealed the relationship between social interaction as the dependent variable and the independent variables. Similarly, the main goal was to form a model that shows how the independent variables influence the dependent variable. Therefore, the posited model was Y (social interaction) = $a(X1) + b(X2) + c(X3) + d(X4) + \text{constant}$. Similarly, the Multiple Linear Regression Analysis was a suitable statistical test to establish the model. In this model, $X1$, $X2$, $X3$, and $X4$ are the predictors of social interactions in a public open space.

The analysis of the theories on a successful, convivial, responsive, and liked public open space demonstrated that the length of stay in a public open space represents its success in meeting people's needs. A section in questionnaire encompassing 29 questions asked people to assert their opinions of the factors that contribute to the success of a public open space. To extract the factors that outweigh, the Principal Component Analysis elicited the groups of components that showed the features of a successful public open space the most. More specifically, each component comprising various factors formed one variable and named based on its content. Therefore, different independent variables emerged for the further analyses. The Pearson Bivariate Correlation Analysis demonstrated the relationship between the independent variables and the dependent variable. The independent variables that imposed the high impact on the dependent variable were the variables of the further analysis. Ultimately, the goal was to establish the model that comprehensively included the predictors of success of a public open space. Therefore, the posited model was Y (the time spent) = $a(X1) + b(X2) + c(X3) + d(X4) + \text{constant}$. Similarly, the Multiple Linear Regression Analysis was a suitable statistical test to establish the model. In this model, $X1$, $X2$, $X3$, and $X4$ are the predictors of a successful public open space.

3.7.8 The Analysis of the Experts' Opinions

As earlier discussed, a comprehensive questionnaire survey collected the data to achieve the objectives of the research. Therefore, the interviews conducted gathered the experts' confirmation in order to achieve practical results as well as a methodological triangulation, which strengthens the validity of the results. Through the Content Analysis, the researcher analyzed the data collected from the interviews to extract more information about the issues discussing diverse aspects of people's engagement in the public open spaces. The Content

Analysis is a way of extracting information and widely used in a qualitative research (Hsieh & Shannon, 2005). In fact, it is a systematic way of analyzing the data collected that assists in understanding the theoretical issues more thoroughly (Elo & Kyngäs, 2008). In different studies, Askari and Dola (2009); Ja'afar et al. (2012b); Askari et al. (2014) employed the Content Analysis in order to extract the theoretical issues concerning the cognitive approaches towards the physical and visual features of the built environment. The researcher carefully analyzed the data gathered from the structured interview scripts to extract the similarities and dissimilarities in the experts' opinions on the issues. In fact, the researcher took note of the experts' opinions and categorized them in relation to the following issues:

- 1) People's opinions about the time they spend in public open spaces according to their gender, age group, and ethnicity
- 2) The reasons that attract people to public open spaces and make them stay longer
- 3) People's needs in public open spaces according to their gender, age group, and ethnicity
- 4) The predictors of social interactions in public open spaces
- 5) The predictors of successful public open spaces

3.8 The Study Areas

The city chosen in this research, Kuala Lumpur, is the federal capital and the most populous city in Malaysia, founded in 1859 (Figure 3.1). It covers an area of 243 km² and its estimated population is 1.6 million as of 2010. Old Colonial, Asian traditions, Malay Islamic motives, Modern, and Postmodern Architectures mostly have been influencing the architecture of Kuala Lumpur city. It is the center of numerous cultural activities and events

in the country. It houses important places such as National Museum, Islamic Arts Museum, Petronas Philharmonic Hall, Kuala Lumpur Performing Arts Center, and National Art Gallery of Malaysia.



Figure 3.1: Map of Malaysia and the location of Kuala Lumpur city, Google Map 2014

The City Center of Kuala Lumpur (Figure 3.2) is a strategic zone, which covers 1,813 hectares. The major highways, such as Jalan Tun Razak from the east to the north, Mahameru Highway to the west, and the Middle Ring Road 1 to the south, bind the area. The City Hall Kuala Lumpur intends to initiate some incentives for increasing the population of the area from 128,721 people in 2000 to 245,600 in 2020. The area encompasses numerous historic, tourist, and commercial nodes. It houses the symbolic

public open space of Dataran Merdeka as well as the important landmarks such as Petronas Twin Towers at the KLCC and the KL Tower (City Hall Kuala Lumpur, 2004c).

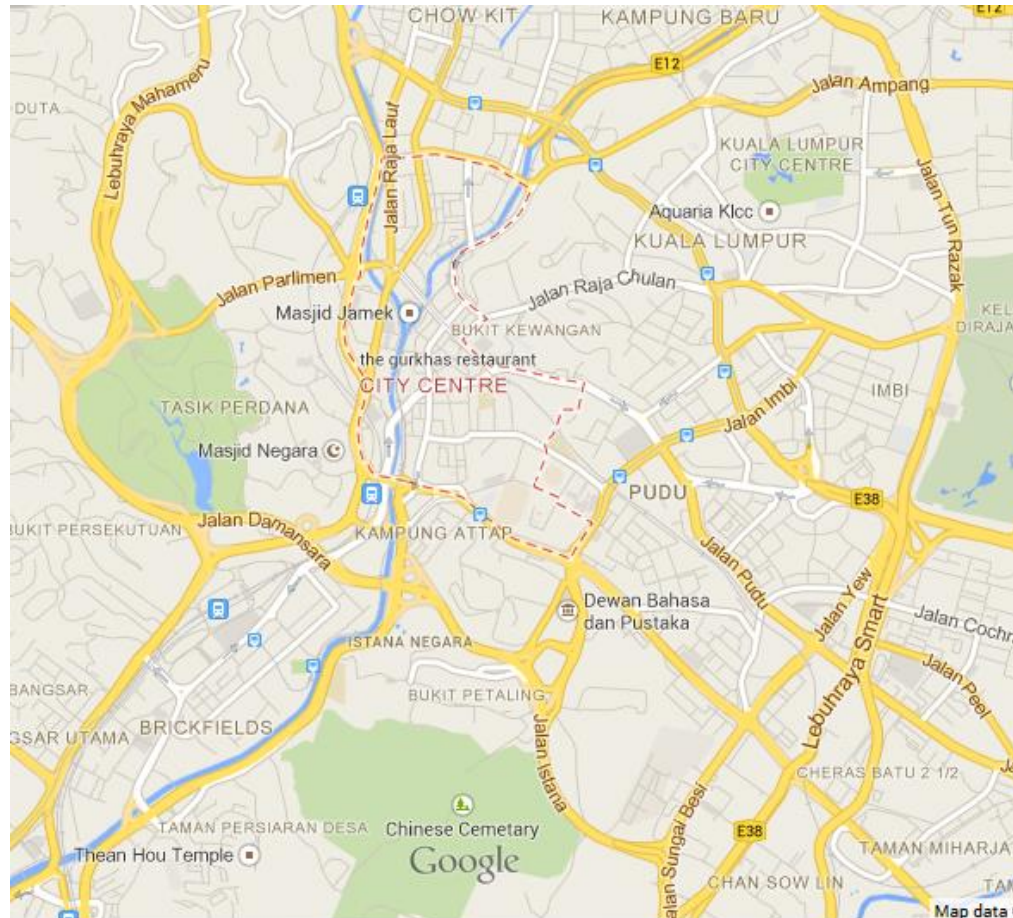


Figure 3.2: Map of the City Center of Kuala Lumpur, Google Map 2014

In this research, a hectic part of the City Center of Kuala Lumpur is the case study. Using a case study empowers the researcher to explore the data within the boundary of a specific context thoroughly. In more details, *‘Case studies, in their true essence, explore and investigate contemporary real-life [phenomena] through detailed contextual analysis of a limited number of events or conditions, and their relationships’* (Zainal, 2007, p. 1-2). The City Center of Kuala Lumpur is a strategic zone that possesses approximately 301 hectares of public open spaces (City Hall Kuala Lumpur, 2004b). Although public open spaces

provide an arena for social interaction as well as directly or indirectly participating in different activities, they differ in type and function. Some theorists opened a controversy that public open spaces are magnificent since they provide place for social interactions and political activities (Dijkstra, 2000; Madanipour, 2004; Shaftoe, 2008). Many designers and architects consider public open spaces the places that are empty spaces between buildings and publicly owned (Worpole & Greenhalgh, 1996). Overall, Kohn (2004) drew a conclusion that a public open space is a complicated concept in which multifarious and contradictory definitions are traceable. Carmona (2010b) categorized six urban space types in three overlapping categories based on the abovementioned typologies of public open spaces. These urban open spaces are civic space, public open space, left over space, undefined space, conspicuous space, and interface space. Deliberating on this classification, civic public open spaces seem to match the definition of a public open space in this research the best. In this line, the researcher randomly selected three study areas from the list of public open spaces in the City Center of Kuala Lumpur (shown in Table 2.3, p. 42).

The part chosen in the City Center of Kuala Lumpur (Figure 3.3) that houses the study areas of the research is located within the primary and secondary heritage zones (City Hall Kuala Lumpur, 2008). Indeed, the vicinity to important buildings, such as Sultan Abdul Samad Building and Masjid Jamek, which have been gazetted under the primary heritage zone (City Hall Kuala Lumpur, 2008), has imparted the significance to the area. The primary heritage zone contains a number of buildings, which are grouped and gazetted under Antiquities Act, located in the historic precincts around Merdeka Square and old Kuala Lumpur Railway Station and Complex. The secondary heritage zone includes a mixture of newer and older buildings, while some of the buildings are of significantly historical or architectural merit. The zone covers less contiguous areas, which include most

of the historical shop houses of the Old City Center (City Hall Kuala Lumpur, 2008). The secondary heritage zone covers four categories of heritage buildings. The category 1 includes buildings with architectural qualities with historical or cultural significance. The category 2 also includes the buildings of significant historical and/or architectural importance, but these are less than 100 years old. Meanwhile, the category 3 includes other buildings, which possess the characteristics of historical or architectural significance, and the category 4 contains shop houses, which are of purely contextual value. In addition to nominated heritage buildings, this zone encompasses the buildings devoid of the heritage value (City Hall Kuala Lumpur, 2008).



Figure 3.3: Location of the study areas, Google Map 2014

In more details, the Streets of Kinabalu, Pudu, and Tun Perak surround the zone that encompasses the study areas of this research. In addition, this zone accommodates some important Streets such as Masjid India and Petaling. Ujang (2010) and Ja'afar et al. (2012a) in their studies on the activities on traditional streets of the City Center of Kuala Lumpur stated these streets as the earliest traditional ones in the area. Previous studies done by Shuhana et al. (2007) and Shuhana (2011) introduced the traditional streets among the earliest constructs that contribute to the spatial structure of the cities in Malaysia. Two rows of shophouses usually fringe these streets. Activities, such as street food selling, hawking, labyrinth of social interactions, crowds of people waiting at bus stops and train stations, and the presence of shopping areas, such as Central Market and Flea Market of Petaling Street, have endowed the study area with socio-cultural traits, which have turned it into a hectic part of the City Center of Kula Lumpur.

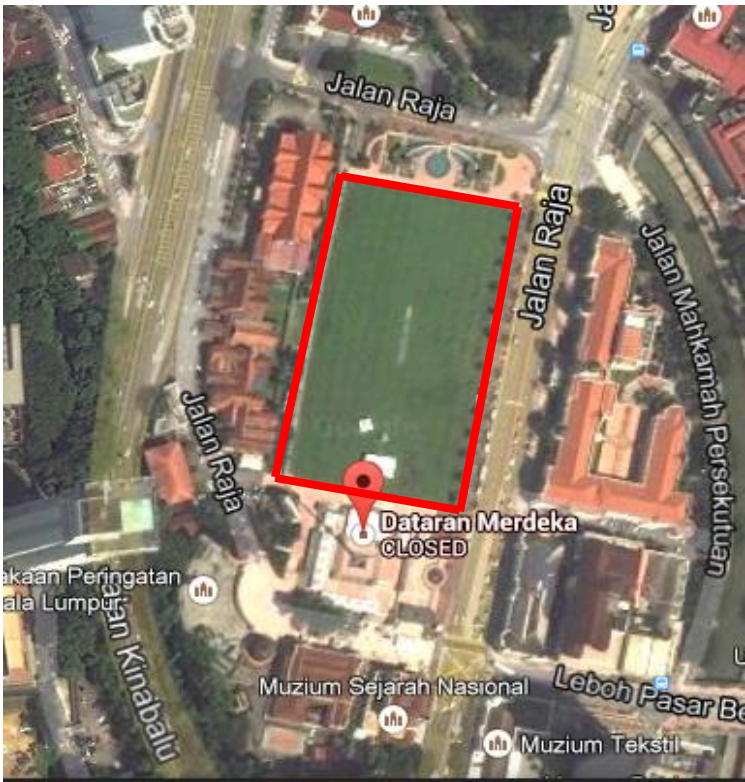


Figure 3.4: Dataran Merdeka, Google Map 2014



Figure 3.5: Photos of Dataran Merdeka

Dataran Merdeka (Independence Square) (Figure 3.4 & 3.5) is a major historical site in Kuala Lumpur for it is where Malaysians have been celebrating their independence each year since August 31, 1957. The Sultan Abdul Samad Building with a Moorish Style overlooks Dataran Merdeka and dates back to 1897. Moorish Architecture is the combined Islamic Architecture prevalent in North Africa and parts of Spain as well as Portugal. In the past, this building housed the administrative departments of the British Government, while today it includes the Supreme and High Courts as well as Infokraf, the Malaysian Handicrafts Center (Askari et al., 2014). Dataran Merdeka is among the early public open spaces introduced by British people to Malaysia (Harun & Said, 2008a). It is an exemplary public open space that reminisces about the colonial dominance reflecting the very essence of communal gatherings and social interactions. The ‘*Padang*’ originally housed a military area for police and army forces throughout the British Colony (Federal Department of

Town and Country Planning, 2005; Zakariya & Harun, 2013). Afterwards, it turned into the center of sports and recreation for the British. Mostly, it was used for cricket and football on a regular basis. The '*Padang*' evolved as the social and recreational hub and served its urban role of an administrative center. It, as a simple but brilliant public open space, has been maintained well since it was made by the British in 1884 (Harun & Said, 2008a). Harun and Said (2009) stated that Dataran Merdeka in Kuala Lumpur city has lost its originally social functions. Imposition of a concrete stage, a gigantic digital monitor, and hoisting of the world's tallest flag pole have mainly changed the characteristics of Dataran Merdeka, such an important historical site for the Malaysian society (Chandran, 2004). Although this square throughout the history has been deemed one of the most important arenas for people's social activities, the aforementioned issues concerning its social role in the City Center of Kuala Lumpur pinpoints that it is unsuccessful in meeting the needs of different age and ethnic groups. Therefore, this public open space with a strong history and possessing social potentials is worth being one of the study areas of the current research.

Dataran Merdeka with the approximate dimensions of 350m by 150m is surrounded by the major roads such as Jalan Raja, Jalan Raja Laut, and Jalan Sultan Hishamuddin. Although this public open space does not lie in the heart of the vibrant commercial and social districts, it has a good access to the heritage and commercial areas of Kuala Lumpur located on Jalan Tuanku Abdul Rahman and Jalan Masjid India (Harun & Said, 2008a, 2008b). Its vicinity to Majid Jamek LRT station connects this square to the other parts of the city. The field observation was carried out in 2013 to gather evidence on the urban issues occurring in the area. The results give a real insight into the people's involvement with the opportunities that public open spaces offer as well as the way people use such spaces. The systematic field observation showed that people of different age groups mainly use this

public open space for the facilities provided. People most of the time gather around sitting places that are different in type, function, and location. Different types of sitting places include the round ones that are sheltered and surrounded by greenery, the ones on the edges of water features and fountains, the long sitting places with attached greenery, and the step-like places that are located around the Malaysian flagpole. There are also some informal sitting places along the pedestrian flows that are used for inter-group interaction and discussion. People mostly show a tendency to sit around the sitting areas that are sheltered, surrounded by greenery, and located next to the water features such as pools and fountains. The observation demonstrated that people of the same groups and even different groups find this type of sitting arrangement most suitable for talking to each other, meeting friends, relaxing, group discussions, taking fresh air, and reading books, etc.

There are some washrooms and places for eating newly located on the lower level of this public open space. The long distance between the sitting areas and washrooms is a deterrent for old people in using this place. The place has a big open area in the center that is used for parades, festivals, and other types of social activities. Young people show to have a tendency for sitting on the places that have the least contact with other age groups. This type of sitting place facing wider open spaces provides more space for carrying out social activities with the maximum freedom in action. In contrast, middle-aged and old people occupy the round sitting places that are mostly devoid of young people. Some people come to the place for walking, refreshing, watching other people, and in general having a good time outside their homes.

Gullick (1994) cited in Harun and Said (2008a) introduced the area along Jalan Hang Kasturi (formerly Rodger Street) as an important public open space in the history of Kuala Lumpur City Center. By the 1890s, a new wet market was built along this street and the Old Market Square was transformed to a public open space, which is currently changed to Leboh Pasar Besar (Gullick, 1994). The square exists no longer and the area is surrounded by shophouses and busy with the nodes of residents who do their various activities (Harun & Said, 2008a). The researcher selected this open space as one of the study areas for its function, type, and socio-cultural characters conform to the definition of a public open space specified in this research.

The part selected from Jalan Hang Kasturi (Figure 3.6 & 3.7) is a public open space with the approximate dimensions of 200 m by 6 m. It is flanked by Central Market on one side and on the other side by a row of shophouses mostly in Neo-classical structures. An exemplary shophouse is the block at No 32-52 that was built around 1909. Most of these shophouses are the restaurants that serve Malaysian foods. The area leads to Jalan Tun Tan Cheng Lock from one side and to Leboh Pudu from the other side. It is well connected to the other parts of the city due to its location in the vicinity of Pasar Seni and Masjid Jamek LRT stations and Puduraya Bus Terminal. Therefore, many people are able to travel to the area even in the traffic jam hours. Two rows of trees that flank the area impart the maximum transparency to the buildings. There were some repetitive sitting places located around the trees as well as some telephone booths in the area. The observation of the area showed that people of different age and ethnic groups used the sitting places for taking a break, talking to each other, reading newspaper, and in general for social interaction. Unfortunately, the area has currently changed to a roofed pedestrianized walkway.



Figure 3.6: The public open space along Jalan Hang Kasturi, Google Map 2014



Figure 3.7: Photos of the public open space along Jalan Hang Kasturi

Masjid India Street situated in the City Center of Kuala Lumpur (Figure 3.8) is a main traditional shopping street that carries unique traits. These characters are socio-cultural and historical essentials that attract many visitors to the place (Ja'afar et al., 2012a). Cutting trees along this street has changed the public open space along that, a place for relaxation

created by shaded trees, to a roofed pedestrian bazaar (Ja'afar, 2006). Al Bashir (2008) stated that the place is a potential walkable street where people of different backgrounds, age groups, gender, and ethnicities might visit for shopping, eating, and doing social activities. Therefore, the area possessing the socio-cultural characters is a potential public open space and selected as one the study areas of the current research. Jalan Melayu and Jalan Bonus bind the selected part of the street in front of Masjid India, with an approximate dimension of 150m × 6m. It is located in the vicinity of the traditional shopping Street of Tuanku Abdul Rahman. In addition, its strategic location at a walking distance to Masjid Jamek LRT station attracts many passersby to the area.



Figure 3.8: The area in front of Masjid India, Google Map 2014

3.9 Summary

This chapter discussed the suitability of the research methods chosen. Through a sequential strategy, the research employed a quantitative approach qualitatively validated. In addition, this chapter elaborated on the data collection instruments of both quantitative and qualitative approaches. It showed how the quantitative method conducted was the base of the qualitative approach. This resulted in establishing the methodological triangulation that strengthens the validity of the results. In details, the discussions targeted at the arguments on a representative sample size as well as the process of choosing the respondents of this research. Moreover, this chapter elaborated on the structured interview as the data collection tool of the qualitative method. The way this type of tool was prepared and conducted and the process of selecting the interviewees were the main subjects discussed in the qualitative approach. It also addressed the suitability of different types of analyses in both quantitative and qualitative methods. The last part of this chapter discussed the selection of the study areas according to the definition of a public open space in this research. The next chapter aims to elaborate on the analyses and the results inferred.

CHAPTER 4

ANALYSIS AND RESULTS

4.1 Introduction

This chapter aims to discuss the analysis of data gathered from the questionnaire surveys as well as the experts' opinions about the issues concerning people's engagement in public open spaces. In addition, it elaborates on the results inferred from various types of analyses used. The first section of this chapter gives information about the demographic profiles of the participants. The second section discusses the reasons for which people use the public open spaces. The next section elaborates on the role of age, gender, and ethnicity in opinions about the needs. The fourth section gives a thorough analysis on the components of social interaction. The next chapter similarly presents the components of a successful public open space. Lastly, this chapter elaborates on the experts' opinions about the results derived from the questionnaire surveys that assist in obtaining the methodological triangulation.

4.2 The Participants' Demographics

This section elaborates on the demographic information of participants according to their backgrounds such as ethnicity, gender, and age. In Malaysia, Malay groups comprise 63.1%, Chinese 24.6%, and Indian 7.3% of the total population (Department of Statistics Malaysia, 2010). Since the research was conducted in the City Center of Kuala Lumpur, the capital city of a multi-racial country such as Malaysia, the target sample size was

thoroughly selected to represent Malaysia’s population cross-section including three major ethnicities of Malay, Chinese, and Indian.

Table 4.1: The Frequency of Participants Based on their Ethnicity

Ethnicity	Frequency	Percent
Malay	240	60.0
Chinese	110	27.5
Indian	50	12.5
Total	400	100.0

Table 4.1 above shows that sample size includes Malay (N= 240, 60%), Chinese (N= 110, 27.5%), and Indians as the smallest group (N= 50, 12.5%) out of 400 participants. This ethnic distribution signifies the important role of culture in shaping social ties among diverse groups of the society. In addition, the distribution demonstrates that the cultural issues influence social interactions across different sectarians in Malaysia.

Table 4.2: The Frequency of Participants According to their Gender

Gender	Frequency	Percent
Male	202	50.5
Female	198	49.5
Total	400	100.0

The results of Table 4.2 show that males and females nearly form the equal ratio in this research. More specifically, out of 400 participants, 202 people are males (50.5%) and the rest are females (49.5%). In fact, this equity eliminates the gender-biased effect on the reliability of the results. Complying with the age group percentages announced by the Department of Statistics Malaysia (2010), the research allocated a percent for each age

group similar to that of the whole population (as shown in Table 4.3). In this condition, the sample size obtained the same age profile as the population of the City Center.

Table 4.3: The Frequency of Participants According to their Age Groups

Age Groups	Frequency	Percent
13-20	129	32.3
21-30	107	26.8
31-40	72	18.0
41-50	55	13.8
51 and above	37	9.3
Total	400	100.0

The results in Table 4.3 indicate that the frequencies of people according to their age groups are 129 with the percentage of 32.3 for the people who are 13-20, 107 with the percentage of 26.8 for the people who are 21-30, 72 with the percentage of 18.0 for the people who are 31-40, 55 with the percentage of 13.8 for the people who are 41-50, and 37 with the percentage of 9.3 for the people who are 51 years old and above. This implies that the highest ratio has been allocated to young people including teenagers, while the smallest group are the old people who showed their reluctance to participate in the survey. More specifically, old people use the public open spaces in the early hours of a day in order to benefit from fresh air and regular physical activities that boost up their quality of life. The first section of the results discusses the reasons that attract people to come to and stay longer in the public open spaces.

4.3 The Time Spent in the Public Open Spaces

The assumption is that people possess different opinions about the time they spend in the public open spaces according to their gender, ethnicities, and age groups. The difference in

people’s opinions might be rooted in their perceptions of the built environment, which is complicated and perplexing in nature. In more details, the differences in people’s backgrounds make complicated interactions among people, the physical elements of the place, and socio-cultural meanings imbedded in the place, which this labyrinth makes it difficult to extract the reasons why people have different opinions towards the issues relevant to their engagement in the public open spaces.

4.3.1 The Role of Gender in People’s Opinions on the Time Spent in the Public Open Spaces

Presumably, males and females due to innately different perceptions of the public open spaces spend different length of stay in such spaces. In order to test this assumption, the Independent Samples T-test assists in examining whether people have different opinions about the time they spend in the public open spaces according to their gender difference.

Table 4.4: Descriptive Statistics for the Time Spent in the Public Open Spaces According to Gender

Variable	Gender	N	Mean	Std. Deviation	Std. Error Mean
Time Spent in Public Open Spaces	Male	202	2.2723	.81657	.05745
	Female	198	2.4495	.72306	.05139

The results of Descriptive Analysis shown in Table 4.4 indicate that the variable of time spent in the public open spaces obtained (Mean= 2.2723, Std. = 0.81657) for males and (Mean= 2.4495, Std. = 0.72306) for females. Despite the beliefs pronounced by the current theories on the daily lives of males and females, the results might insinuate that females show more passion in using the public open spaces of the study area. For this reason, the

role of females in the future design and planning of public open spaces in Malaysia should be more highlighted.

Table 4.5: The Independent Samples T-test for the Time Spent According to Gender

Time spent in a public open space	Levene's Test for Equality of Variances		T-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	7.062	.008	-2.296	398	.022	-.17722	.07717	-.32894	-.02550
Equal variances not assumed			-2.299	393.972	.022	-.17722	.07708	-.32876	-.02568

In order to examine the difference in the opinions of males and females about the time they spend in the public open spaces, the results of the Levene's Test in Table 4.5 indicate the significance level of .008 for the time spent; therefore, the premise of equality of variances is violated. Inevitably, the significance level of equal variances not assumed is used. Overall, the results show that there is a statistically significant difference for the means of time spent in the public open spaces between males and females ($t = -2.299$, $p = 0.022$). The results imply that males and females declare significantly different opinions about the time they prefer to spend in the study areas. Hence, the assumption that people have different opinions about the time they spend in the public open spaces according to their gender difference is statistically accepted. Some factors influence the difference in the length of time spent in the public open spaces between males and females. The next chapter aims to investigate these factors more thoroughly.

4.3.2 The Role of Age in People’s Opinions on the Time Spent in the Public Open Spaces

Different groups of people might spend different length of stay in a public open space. Young people might have better inter-relationships with other groups and subsequently feel more comfortable staying for social interactions in such spaces. In contrast, the assumption is that older people feel more conservative and prefer to use such spaces less frequently and only at specific hours of a day. More specifically, as people step in different stages of their lives, they might have different expectations from and perceptions of public open spaces, which this causes them to spend different periods according to their age groups. Hence, the proposed assumption is that people declare different opinions on the amount of the time they prefer to spend in the public open spaces according to their age groups. To test this assumption statistically, the ANOVA Test assists in examining the differences in opinions based on age groups.

Table 4.6: Test of Homogeneity of Variances for the Time Spent in a Public Open Space Based on Age Groups

Levene Statistic	df1	df2	Sig.
14.349	4	395	.000

The result of Table 4.6 clearly shows that Levene’s F Statistic has a significance value of 0.000 for the time spent in a public open space; therefore, the homogeneity of variances is violated.

Table 4.7: Robust Tests of Equality of Means of the Time Spent in a Public Open Space Based on Age Groups

Welch	Statistic ^a	df1	df2	Sig.
	8.671	4	137.786	.000

a. Asymptotically F distributed.

Since the results of Table 4.6 demonstrate that the homogeneity of variances is violated, it seems appropriate to refer to the Table showing the results of Welch Test (Table 4.7) instead of the Table illustrating the results of ANOVA. Accordingly, Table 4.7 shows that there is a statistically significant difference for the means of the time spent concerning people's age groups ($F(4,395) = 8.671, p = 0.000$). In addition, the results of the Games-Howell Test are used instead of those of the Tukey HSD Test.

The results of Games-Howell Test in Table 4.8 illustrate that there is a statistically significant difference for the means of the time spent in a public open space between the people who are 13-20 and 31-40 years old ($P = 0.009$), and between 13-20 and 41-50 years old ($P = 0.000$). In addition, there is a statistically significant difference for the means of the time spent in a public open space between the people who are 21-30 and 41-50 years old ($P = 0.001$). This proves the assumption that people of different age groups have different opinions about the time they prefer to spend in the public open spaces. In the next step, the Pearson Correlation Test assists in determining the relationship between age and the length of the time spent in public open spaces.

Table 4.8: The Multiple Comparisons for the Time Spent in a Public Open Space
According to Age Groups

	(I) Age	(J) Age	Mean Difference (I- J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	13-20	21-30	.15765*	.09707	.483	-.1084	.4237
		31-40	.37468*	.10921	.006	.0754	.6739
		41-50	.72417*	.11955	.000	.3966	1.0518
		51 and above	.29960	.13844	.196	-.0798	.6790
	21-30	13-20	-.15765	.09707	.483	-.4237	.1084
		31-40	.21703	.11316	.309	-.0931	.5271
		41-50	.56653*	.12317	.000	.2290	.9041
		51 and above	.14196	.14158	.854	-.2460	.5299
	31-40	13-20	-.37468*	.10921	.006	-.6739	-.0754
		21-30	-.21703	.11316	.309	-.5271	.0931
		41-50	.34949	.13294	.067	-.0148	.7138
		51 and above	-.07508	.15016	.987	-.4866	.3364
	41-50	13-20	-.72417*	.11955	.000	-1.0518	-.3966
		21-30	-.56653*	.12317	.000	-.9041	-.2290
		31-40	-.34949	.13294	.067	-.7138	.0148
		51 and above	-.42457	.15784	.057	-.8571	.0080
	51 and above	13-20	-.29960	.13844	.196	-.6790	.0798
		21-30	-.14196	.14158	.854	-.5299	.2460
		31-40	.07508	.15016	.987	-.3364	.4866
		41-50	.42457	.15784	.057	-.0080	.8571
Games- Howell	13-20	21-30	.15765*	.08433	.337	-.0744	.3897
		31-40	.37468*	.11102	.009	.0670	.6824
		41-50	.72417*	.13555	.000	.3452	1.1031
		51 and above	.29960	.15384	.308	-.1370	.7362
	21-30	13-20	-.15765	.08433	.337	-.3897	.0744
		31-40	.21703	.11722	.349	-.1072	.5413
		41-50	.56653*	.14067	.001	.1744	.9587
		51 and above	.14196	.15837	.897	-.3057	.5896
	31-40	13-20	-.37468*	.11102	.009	-.6824	-.0670
		21-30	-.21703	.11722	.349	-.5413	.1072
		41-50	.34949	.15812	.184	-.0891	.7881
		51 and above	-.07508	.17405	.993	-.5626	.4125
	41-50	13-20	-.72417*	.13555	.000	-1.1031	-.3452
		21-30	-.56653*	.14067	.001	-.9587	-.1744
		31-40	-.34949	.15812	.184	-.7881	.0891
		51 and above	-.42457	.19064	.180	-.9566	.1075
	51 and above	13-20	-.29960	.15384	.308	-.7362	.1370
		21-30	-.14196	.15837	.897	-.5896	.3057
		31-40	.07508	.17405	.993	-.4125	.5626
		41-50	.42457	.19064	.180	-.1075	.9566

*. The mean difference is significant at the 0.05 level.

Table 4.9: Correlations between Age and the Time People Spend in Public Open Spaces

		Time Spent in a Public Open Space
Age	Pearson	-.233**
	Correlation	
	Sig. (2-tailed)	.000
	N	400

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

The results of the Pearson Correlation Test in Table 4.9 reveal that there is an inverse relationship between people’s age and the time they usually spend in a public open space ($r = -0.233^{**}$, $p < 0.005$). This explicitly pinpoints that most probably people of older groups are less enthusiastic to linger in a public open space. Tacitly, the older people get, the less enthusiastic they are about frequenting public open spaces for social interaction and mingling with other groups, benefitting from the facilities, and promoting their quality of life.

4.3.3 The Role of Ethnicity in People’s Opinions on the Time Spent in the Public Open Spaces

Assumedly, ethnicity is the factor that makes people have significantly different opinions about the time they spend in a public open space. In order to test this assumption, the One-Way ANOVA Test aims to determine the statistically significant difference between the means of the time spent according to ethnicity. In fact, the ethnic differences that might bring about cultural conflicts bring about different perceptions across groups. These differentiated perceptions emerge various factors that either might make some groups stay longer or prevent some other groups from comfortably staying long in the public open spaces.

Table 4.10: Test of Homogeneity of Variances for the Time Spent in a Public Open Space Based on Ethnicity

Levene Statistic	df1	df2	Sig.
24.064	2	397	.000

The result of Table 4.10 shows that Levene's F Statistic has a significance value of 0.000 for the time spent in a public open space; therefore, the homogeneity of variances is violated.

Table 4.11: Robust Tests of Equality of Means of the Time Spent in a Public Open Space Based on Ethnicity

	Statistic ^a	df1	df2	Sig.
Welch	10.539	2	116.678	.000

a. Asymptotically F distributed.

Since the results of Table 4.10 show that the homogeneity of variances is violated, it seems appropriate to refer to the Table showing the results of Welch Test (Table 4.11) instead of the Table illustrating the result of ANOVA. Accordingly, the result of Table 4.11 clearly shows that there is a statistically significant difference for the means of the time spent in response to people's age ($F(2,397) = 10.539, p = 0.000$). In addition, the analysis shows that the results of the Games-Howell Test are used instead of those of the Tukey HSD Test.

Table 4.12: Post Hoc Tests for the Time Spent in a Public Open Space Across Ethnicities

	(I) ethnicity	(J) ethnicity	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	Malay	Chinese	.44545*	.08672	.000	.2414	.6495
		Indian	.14000	.11708	.456	-.1354	.4154
	Chinese	Malay	-.44545*	.08672	.000	-.6495	-.2414
		Indian	-.30545*	.12846	.047	-.6077	-.0033
	Indian	Malay	-.14000	.11708	.456	-.4154	.1354
		Chinese	.30545*	.12846	.047	.0033	.6077
Games-Howell	Malay	Chinese	.44545*	.09726	.000	.2154	.6755
		Indian	.14000	.11774	.464	-.1424	.4224
	Chinese	Malay	-.44545*	.09726	.000	-.6755	-.2154
		Indian	-.30545	.14034	.080	-.6388	.0279
	Indian	Malay	-.14000	.11774	.464	-.4224	.1424
		Chinese	.30545	.14034	.080	-.0279	.6388

*. The mean difference is significant at the 0.05 level.

The results of the Games-Howell Test in Table 4.12 show that there is a statistically significant difference for the means of the time spent in a public open space between Malay and Chinese ($P= 0.000$). In contrast, there is not a statistically significant difference for the means of the time spent in a public open space between Malay and Indian ($P= 0.464$) and between Chinese and Indian ($P= 0.080$). In fact, the results statistically reject the assumption that people have different opinions about the time they spend in a public open space according to their ethnicity. Interestingly, the results imply that ethnicity does not strongly affect people's opinions on the time they prefer to spend, and most likely, there are some other reasons that cause people to be more or less involved in public open spaces.

4.4 The Reasons that Make People Stay Longer in the Public Open Spaces

In general, people use the public open spaces to benefit from the opportunities that these spaces might provide. Explaining more simply, people from different age groups come to the public open spaces to spend their leisure time mingling with others, while simultaneously strengthening their social support. Therefore, there are series of reasons for

which each age group linger in the public open spaces. In this regard, the assumption is that social interaction is the most influential factor in attracting people to such spaces. To determine the reasons that attract people and make them linger in the public open spaces, first it seems essential to conduct the Principal Component Analysis as a statistical technique to classify the opportunities of such spaces. Table 4.13 portrays the results of the Principal Component Analysis concerning the opportunities provided.

Table 4.13: The Principal Component Analysis for the Opportunities of Public Open Spaces

Variables	Component		
	Factor 1	Factor 2	Factor 3
1) Various facilities for sitting and eating	.721		
2) Various facilities for buying and selling things	.710		
3) Various facilities for doing different activities such as playing sports, going on a picnic, etc	.695		
1) Interaction and mingling among all groups, races, and ethnicities		.711	
2) Knowing other cultures or expressing our culture to others		.809	
3) Sharing experiences with other groups to extend our general knowledge and to learn from one another		.729	
4) Practicing religious thoughts		.727	
1) Enjoying free time in order to be away from work, and daily chores			.743
2) Enhancing the quality of life			.706
3) Benefitting from emotional health and wellbeing			.717
% Variance explained	16.42	26.62	18.96

Extraction Method: Principal Component Analysis. Rotation converged in 3 iterations.

The results of the Principal Component Analysis in Table 4.13 determine the reasons that play the most important role in attracting people to public open spaces. Analysis of 15 variables embodied the convergence of three factors in three iterations of rotation that account for 62 percentage of the whole variance. The percentages of variance for these factors are 16.42%, 26.62%, and 18.96% respectively. The first factor, which refers to the facility-based opportunities, comprises the facilities and activities that such spaces offer.

These opportunities include places for sitting and eating as well as the facilities for buying and selling things, and provision of different activities such as playing sports, going on a picnic, etc. The second factor encompasses the social opportunities such as interaction and mingling among all groups, races, and ethnicities, knowing other cultures or expressing our culture to others, sharing experiences with other groups to extend our general knowledge and to learn from one another, and practicing religious thoughts. Lastly, enjoying free time in order to be away from work and daily chores, enhancing the quality of life, and benefitting from emotional health and wellbeing form the health-promoting opportunities. A quite number of studies have supported that public open spaces create an appropriate arena for people to come and do social interaction in order to know each other better and benefit from each other's social support. The results show that the factors that represent the social opportunities account for the most percentage of the reasons that make people linger in the public open spaces. In the next step, the Pearson Correlation Test assists in figuring out the extent to which each of the extracted factors makes people stay in the public open spaces. In fact, the time people spend in the public open spaces represents the level of comfort of such spaces.

Table 4.14: Correlation between the Time Spent and Opportunities

Factors		Facility-based Opportunities	Social Opportunities	Health-promoting Opportunities
Time Spent in a Public Open Space	Pearson Correlation	.813**	.696**	.723**
	Sig. (2-tailed)	.000	.000	.000
	N	400	400	400

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

The results of Table 4.14 indicate that facility-based opportunities ($r= 0.813^{**}$, $p< 0.01$), social opportunities ($r= 0.696^{**}$, $p< 0.01$), and health-promoting opportunities ($r= 0.723^{**}$, $p< 0.01$) have a strong relationship with the time spent in the public open spaces. Therefore, all of these factors might be influential variables in making people linger and enjoy in such spaces. Significantly, the designers should try their best to promote the facilities or opportunities that clear the way for social interaction and subsequently boost up the social support and comfort. In addition, the utmost effort should be taken into consideration to provide the arenas that promote people’s emotional health and quality of life. As such, people of different tastes and expectations hilariously enjoy their time being in the public open spaces, while protected from the hustle and bustle of daily urban pressure. These three factors might have interrelationship with each other that this negatively affects the overall correlation. In more details, the Pearson Correlation Test only shows the one-way correlations between the opportunities and the time spent. Therefore, the Multiple Linear Regression Analysis is stronger statistical test to figure out the factors that make people linger in the public open spaces more accurately.

Table 4.15: Model Summary^b for the Opportunities of Public Open Spaces

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.863 ^a	.744	.742	.39384	.744	384.112	3	396	.000

a. Predictors: (Constant), Health, Social, Facility-based, b. Dependent Variable: time spent in a public open space.

The adjusted R Square in Table 4.15 above shows that the factors account for 74.2% of the variance in the time spent, which is acceptable. In fact, this denotes that despite some other extraneous factors that might affect the time people spend in public open spaces, these extracted factors outweigh.

Table 4.16: ANOVA^b for the Opportunities of Public Open Spaces

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	178.737	3	59.579	384.112	.000 ^a
Residual	61.423	396	.155		
Total	240.160	399			

a. Predictors: (Constant), Health, Social, Facility based, b. Dependent Variable: time spent in a public open space.

The results of ANOVA shown in Table 4.16 confirm that the emerged model ($F 3,396 = 384.112, p < 0.0005$) is significantly reliable.

Table 4.17: Coefficients^a for the Opportunities of Public Open Spaces

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.813	.131		-13.812	.000
	Facility-based	.505	.035	.518	14.263	.000
	Social	.242	.041	.212	5.965	.000
	Health	.265	.040	.243	6.595	.000

a. Dependent Variable: time spent in a public open space.

Accordingly, the results of the Multiple Linear Regression in Table 4.17 point out that the time spent in public open spaces is dependent on the facilities provided, appropriate atmosphere for interaction with others, and provision of relief from the daily pressure of urban chores. In this favor, the relevant equation emerges is the time spent = 0.505 (facility-based factors) + 0.242 (social factors) + 0.265 (health-promoting factors) -1.813.

Explicitly, the results show that the most noticeable reasons that attract people into public open spaces are the facilities such as creating places for eating, shopping, and doing different activities such as playing sports. Less importantly, the factors that promote people's emotional health and make them relaxed from the hustle and bustle of busy urban life significantly make people stay longer in public open spaces. Finally yet importantly,

doing social interaction, sharing personal ideas and viewpoints, and performing political rallies are of less importance in attracting people to come to public open spaces and staying for a long period. The results implicitly demonstrate that when people use public open spaces in order to benefit from the facilities and promote their psychological and environmental health, they face diverse opportunities to interact with different groups and demand their political rights. Overall, the results reject the assumption that the need for social interaction is the most influential factor in attracting people to the public open spaces of the City Center of Kuala Lumpur.

4.4.1 People's Opinion about the Opportunities in Public Open Spaces

Assumedly, people assert different opinions about the importance of the functions of public open spaces according to their demographic backgrounds such as gender, ethnicity, and age. These diversities are rooted in the difference in people's attitudes towards the public open spaces. Some people use the public open spaces to take advantage of the facilities and environmental benefits, while prefer not to directly involve in the social activities. In contrast, some other groups come to benefit from the socio-cultural opportunities that such spaces create. Collectively, these differences create conflicts that make such spaces more inclusive and animated.

4.4.1.1 Opinions Based on Gender Differences

Presumably, males' perception of physical elements, social aspects, and environmental issues of public open spaces are quite different from that of females. This differentiation might emanate from their different attitudes towards the built environment. In this line, the

proposed assumption is that people have different opinions about the importance of the opportunities of public open spaces according to their gender. Therefore, the Independent Samples T-test seems suitable to test the difference in the means of public open spaces opportunities according to gender. Table 4.18 below indicates the mean and standard deviations for the males and females separately for each set of the functions provided in the public open spaces.

Table 4.18: The Descriptive Analysis of the Opportunities of Public Open Spaces Based on Gender

Variables	Gender	N	Mean	Std. Deviation	Std. Error Mean
Facility-based Opportunities	Males	202	4.0446	.79363	.05584
	Females	198	4.2020	.79312	.05636
Social Opportunities	Males	202	4.0446	.66392	.04671
	Females	198	4.1010	.69800	.04960
Health-promoting Opportunities	Males	202	4.1040	.73578	.05177
	Females	198	4.2677	.67896	.04825

The results of Table 4.18 demonstrate that facility-based functions obtained (Mean= 4.0446, Std.= 0.79363) for males and (Mean= 4.2020, Std.= 0.79312) for females. Social functions received (Mean= 4.0446, Std.= 0.66392) for males and (Mean= 4.1010, Std.= 0.69800) for females. In addition, health-promoting functions obtained (Mean= 4.1040, Std.= 0.73578) for males and (Mean= 4.2677, Std.= 0.67896) for females.

Table 4.19: The Independent Samples T-test for the Functions of Public Open Spaces Based on Gender

Variable		Levene's Test for Equality of Variances		T-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	95% Confidence Interval of the Difference	
							Lower	Upper
Facility-based functions	Equal variances assumed	2.461	.117	-1.985	398	.048	-.31345	-.00149
	Equal variances not assumed			-1.985	397.850	.048	-.31345	-.00149
Social functions	Equal variances assumed	2.462	.117	-.829	398	.408	-.19034	.07743
	Equal variances not assumed			-.829	396.057	.408	-.19041	.07750
Health-promoting functions	Equal variances assumed	.001	.977	-2.312	398	.021	-.30296	-.02448
	Equal variances not assumed			-2.313	396.562	.021	-.30285	-.02459

The results of the Independent Samples T-test in Table 4.19 demonstrate that the significance level of Levene's Test for Equality of Variances for all functions is above 0.05; therefore, the significance level of equal variances assumed is used for all functions. Given this, there is a statistically significant difference between males and females for the means of facility-based functions ($t = -1.985$, $p = 0.048$) and health-promoting functions ($t = -2.312$, $p = 0.021$). Nonetheless, there is not a statistically significant difference between males and females for the means of social functions ($t = -0.829$, $p = 0.408$). Implicitly, males and females possess different opinions on the importance of facility-based and health-promoting functions in the public open spaces. Unarguably, this might be rooted in the innate nuances between males and females' perceptions of public open spaces as well as the way they use these spaces in their daily lives. Overall, the results rather accept the

assumption that males and females declare different opinions about the importance of the opportunities that public open spaces provide. The reason might be that males and females use the public open spaces for different purposes.

4.4.1.2 Opinions Based on Ethnicity

In this section, the assumption is that there are statistically significant differences in the means of facility-based, social, and health-promoting opportunities based on the opinions of different ethnic groups. In testing this assumption, the Multivariate Analysis of Variance (MANOVA) as a statistical technique assists in examining the mean differences across the ethnic groups.

Table 4.20: Box's Test of Equality of Covariance Matrices^a Based on Ethnicity

Box's M	12.945
F	1.060
df1	12
df2	99974.654
Sig.	.389

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups. a. Design: Intercept + Ethnicity.

One of the assumptions of the MANOVA is the homogeneity of covariances. The result shown in Table 4.20 above illustrates that the significance level of Box's Test of Equality of Covariance Matrices is greater than 0.001 ($P = 0.39$). Therefore, the assumption of homogeneity of covariances was not violated and the results of MANOVA are valid and reliable. In fact, the significance value of Wilks' Lambda should be significant in order to determine whether the one-way MANOVA is statistically significant. Given this, Table 4.21 demonstrates that the one-way MANOVA is statistically significant.

Table 4.21: Multivariate Tests^d Based on Ethnicity

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^b
Intercept	Pillai's Trace	.968	3952.827 ^a	3.000	395.000	.000	.968	11858.482	1.000
	Wilks' Lambda	.032	3952.827 ^a	3.000	395.000	.000	.968	11858.482	1.000
	Hotelling's Trace	30.021	3952.827 ^a	3.000	395.000	.000	.968	11858.482	1.000
	Roy's Largest Root	30.021	3952.827 ^a	3.000	395.000	.000	.968	11858.482	1.000
Ethnicity	Pillai's Trace	.057	3.877	6.000	792.000	.001	.029	23.265	.969
	Wilks' Lambda	.943	3.888 ^a	6.000	790.000	.001	.029	23.328	.969
	Hotelling's Trace	.059	3.898	6.000	788.000	.001	.029	23.391	.970
	Roy's Largest Root	.048	6.273 ^c	3.000	396.000	.000	.045	18.818	.965

a. Exact statistic, b. Computed using alpha = .05, c. The statistic is an upper bound on F that yields a lower bound on the significance level. d. Design: Intercept + Ethnicity.

The results of Table 4.21 show that there is a statistically significant difference among people's opinions about the reasons that attract them to stay in the public open spaces (the opportunities of public open spaces) according to their ethnicity, $F(5, 790) = 3.9$, $P < 0.005$; Wilk's $\lambda = 0.94$, partial $\epsilon^2 = 0.03$.

Table 4.22: Levene's Test of Equality of Error Variances^a Based on Ethnicity

Variables	F	df1	df2	Sig.
Facility-based functions	1.090	2	397	.337
Social functions	1.269	2	397	.282
Health-promoting functions	.181	2	397	.835

Tests the null hypothesis that the error variance of the dependent variable is equal across groups. a. Design: Intercept + Ethnicity.

The results derived from Table 4.22 show that all the opportunities of public open spaces have the homogeneity of variances as their significance values are 0.337, 0.282, and 0.835 respectively, which all are greater than 0.05. After ensuring the homogeneity of variances for all the variables, the results derived from Table 4.23 demonstrate that ethnicity has a statistically significant effect on the facility-based opportunities, $F(2, 397) = 7$; $P < 0.05$; partial $\epsilon^2 = 0.03$, on the social opportunities, $F(2, 397) = 8.45$; $P < 0.05$; partial $\epsilon^2 = 0.04$, and on the health-promoting opportunities, $F(2, 397) = 3.81$; $P < 0.05$; partial $\epsilon^2 = 0.02$.

Table 4.23: Tests of Between-Subjects Effects Based on Ethnicity

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^b
Corrected Model	Facility-based Opportunities	8.616 ^a	2	4.308	6.998	.001	.034	13.997	.926
	Social Opportunities	7.549 ^c	2	3.774	8.449	.000	.041	16.899	.965
	Health-promoting Opportunities	3.812 ^d	2	1.906	3.812	.023	.019	7.624	.692
Intercept	Facility-based Opportunities	4437.988	1	4437.988	7209.552	.000	.948	7209.552	1.000
	Social Opportunities	4406.220	1	4406.220	9863.454	.000	.961	9863.454	1.000
	Health-promoting Opportunities	4696.128	1	4696.128	9392.342	.000	.959	9392.342	1.000
Ethnicity	Facility-based Opportunities	8.616	2	4.308	6.998	.001	.034	13.997	.926
	Social Opportunities	7.549	2	3.774	8.449	.000	.041	16.899	.965
	Health-promoting Opportunities	3.812	2	1.906	3.812	.023	.019	7.624	.692
Error	Facility-based Opportunities	244.382	397	.616					
	Social Opportunities	177.349	397	.447					
	Health-promoting Opportunities	198.498	397	.500					
Total	Facility-based Opportunities	7051.000	400						
	Social Opportunities	6819.000	400						
	Health-promoting Opportunities	7208.000	400						
Corrected Total	Facility-based Opportunities	252.998	399						
	Social Opportunities	184.897	399						
	Health-promoting Opportunities	202.310	399						

a. R Squared = .034 (Adjusted R Squared = .029), b. Computed using alpha = .05, c. R Squared = .041 (Adjusted R Squared = .036), d. R Squared = .019 (Adjusted R Squared = .014).

Table 4.24: Multiple Comparisons Tukey HSD Based on Ethnicity

Dependent Variable	(I) Ethnicity	(J) Ethnicity	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Facility-based functions	Malay	Chinese	.3144*	.09034	.002	.1019	.5269
		Indian	.2617	.12197	.082	-.0253	.5486
	Chinese	Malay	-.3144*	.09034	.002	-.5269	-.1019
		Indian	-.0527	.13382	.918	-.3675	.2621
	Indian	Malay	-.2617	.12197	.082	-.5486	.0253
		Chinese	.0527	.13382	.918	-.2621	.3675
Social functions	Malay	Chinese	.3163*	.07696	.000	.1352	.4973
		Indian	.0908	.10390	.657	-.1536	.3353
	Chinese	Malay	-.3163*	.07696	.000	-.4973	-.1352
		Indian	-.2255	.11400	.119	-.4936	.0427
	Indian	Malay	-.0908	.10390	.657	-.3353	.1536
		Chinese	.2255	.11400	.119	-.0427	.4936
Health-promoting functions	Malay	Chinese	.2227*	.08142	.018	.0312	.4143
		Indian	.0300	.10992	.960	-.2286	.2886
	Chinese	Malay	-.2227*	.08142	.018	-.4143	-.0312
		Indian	-.1927	.12060	.248	-.4765	.0910
	Indian	Malay	-.0300	.10992	.960	-.2886	.2286
		Chinese	.1927	.12060	.248	-.0910	.4765

Based on observed means. The error term is Mean Square(Error) = .500. *. The mean difference is significant at the 0.05 level.

Lastly, the results of Post Hoc Test in Table 4.24 demonstrate that there is a statistically significant difference for the means of facility-based opportunities between Malays and Chinese ($p= 0.002$). There is not a statistically significant difference for the means of facility-based opportunities between Malays and Indians ($p>0.05$), and between Chinese and Indians ($p>0.05$). There is also a statistically significant difference for the means of social opportunities between Malays and Chinese ($p= 0.000$). Nevertheless, There is not a statistically significant difference for the means of social opportunities between Malays and Indians ($p>0.05$), and between Chinese and Indians ($p>0.05$). In addition, the means of

health-promoting opportunities are significantly different between Malays and Chinese ($p=0.018$). Nevertheless, there is not a statistically significant difference for the means of health-promoting opportunities between Malays and Indians ($p>0.05$), and between Chinese and Indians ($p>0.05$). In fact, the results proved that there is a statistically significant difference for the means of facility-based, social, and health-promoting opportunities among different ethnic groups.

4.4.1.3 Opinions Based on Age Groups

The assumption is that the reasons for which people use the public open spaces differ according to their age groups. People due to the evolution of their needs and perception of the built environment in different stages of their life have different opinions on the importance of the reasons that attract them to the public open spaces. In this favor, the Multivariate Analysis of Variance (MANOVA) statistically assists in testing the differences in the means of the opportunities that attract people to the public open spaces according to age groups. The following sections explain how the MANOVA Test examines the difference in the means.

Table 4.25: Box's Test of Equality of Covariance Matrices^a Based on Age Groups

Box's M	37.430
F	1.528
df1	24
df2	134547.009
Sig.	.047

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups. a. Design: Intercept + Age.

As mentioned before, one of the assumptions of the MANOVA is homogeneity of covariances. In this line, the results of Table 4.25 above illustrate that the significance level of Box's Test of Equality of Covariance Matrices is greater than .001 ($P= 0.047$). Therefore, the assumption of homogeneity of covariances was not violated and the results of MANOVA are valid and reliable. In fact, the significance value of Wilks' Lambda should be significant in order to determine whether the one-way MANOVA is statistically significant. Given this, the results of Table 4.26 show that the one-way MANOVA is statistically significant.

Table 4.26: Multivariate Tests^d Based on Age Groups

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^b	
Intercept	Pillai's Trace	.974	4812.500 ^a	3.000	393.000	.000	.974	14437.499	1.000
	Wilks' Lambda	.026	4812.500 ^a	3.000	393.000	.000	.974	14437.499	1.000
	Hotelling's Trace	36.737	4812.500 ^a	3.000	393.000	.000	.974	14437.499	1.000
	Roy's Largest Root	36.737	4812.500 ^a	3.000	393.000	.000	.974	14437.499	1.000
Age	Pillai's Trace	.084	2.852	12.000	1185.000	.001	.028	34.221	.989
	Wilks' Lambda	.917	2.878	12.000	1040.072	.001	.028	30.400	.977
	Hotelling's Trace	.089	2.897	12.000	1175.000	.001	.029	34.761	.991
	Roy's Largest Root	.068	6.707 ^c	4.000	395.000	.000	.064	26.828	.993

a. Exact statistic, b. Computed using alpha = .05, c. The statistic is an upper bound on F that yields a lower bound on the significance level. d. Design: Intercept + Age.

Supportively, the results in Table 4.26 demonstrate that there is a statistically significant difference between people's opinions about the importance of the opportunities of public open spaces according to their age groups, $F(11, 1040) = 2.88$, $P < 0.005$; Wilk's $\lambda = 0.92$, partial $\epsilon^2 = 0.03$.

Table 4.27: Levene's Test of Equality of Error Variances^a Based on Age Groups

Dependent Variables	F	df1	df2	Sig.
Facility-based functions	.995	4	395	.410
Social functions	.651	4	395	.627
Health-promoting functions	1.044	4	395	.384

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Age.

The results of Table 4.27 show that all the opportunities of public open spaces have the homogeneity of variances ($P > 0.05$) as their significance values are 0.410, 0.627, and 0.384 respectively. In addition, the results of Table 4.28 indicate that age has a statistically significant effect on facility-based opportunities, $F(4, 395) = 6.37$; $P < 0.05$; partial $\epsilon^2 = 0.06$, on social opportunities, $F(4, 395) = 3.04$; $P < 0.05$; partial $\epsilon^2 = 0.03$, and on health-promoting opportunities, $F(4, 395) = 4.690$; $P < 0.05$; partial $\epsilon^2 = 0.04$.

Table 4.28: Tests of Between-Subjects Effects Based on Age Groups

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	Facility-based Opportunities	15.340 ^a	4	3.835	6.374	.000	.061
	Social Opportunities	5.531 ^c	4	1.383	3.045	.017	.030
	Health-promoting Opportunities	9.172 ^d	4	2.293	4.690	.001	.045
Intercept	Facility-based Opportunities	5406.868	1	5406.868	8986.528	.000	.958
	Social Opportunities	5366.395	1	5366.395	11817.818	.000	.968
	Health-promoting Opportunities	5634.672	1	5634.672	11523.880	.000	.967
Age	Facility-based Opportunities	15.340	4	3.835	6.374	.000	.061
	Social Opportunities	5.531	4	1.383	3.045	.017	.030
	Health-promoting Opportunities	9.172	4	2.293	4.690	.001	.045
Error	Facility-based Opportunities	237.657	395	.602			
	Social Opportunities	179.367	395	.454			
	Health-promoting Opportunities	193.138	395	.489			
Total	Facility-based Opportunities	7051.000	400				
	Social Opportunities	6819.000	400				
	Health-promoting Opportunities	7208.000	400				
Corrected Total	Facility-based Opportunities	252.998	399				
	Social Opportunities	184.897	399				
	Health-promoting Opportunities	202.310	399				

a. R Squared = .061 (Adjusted R Squared = .051), b. Computed using alpha = .05, c. R Squared = .030 (Adjusted R Squared = .020), d. R Squared = .045 (Adjusted R Squared = .036).

Table 4.29: Multiple Comparisons: Tukey HSD Based on Age Groups

Dependent Variable	(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.
Facility-based functions	13-20	21-30	.1138	.10143	.795
		31-40	.2823	.11411	.099
		41-50	.6010*	.12491	.000
		51 and above	.2560	.14466	.393
	21-30	13-20	-.1138	.10143	.795
		31-40	.1685	.11823	.612
		41-50	.4872*	.12869	.002
		51 and above	.1422	.14793	.872
	31-40	13-20	-.2823	.11411	.099
		21-30	-.1685	.11823	.612
		41-50	.3187	.13891	.149
		51 and above	-.0263	.15690	1.000
	41-50	13-20	-.6010*	.12491	.000
		21-30	-.4872*	.12869	.002
		31-40	-.3187	.13891	.149
		51 and above	-.3450	.16493	.226
51 and above	13-20	-.2560	.14466	.393	
	21-30	-.1422	.14793	.872	
	31-40	.0263	.15690	1.000	
	41-50	.3450	.16493	.226	
Social functions	13-20	21-30	.0180	.08811	1.000
		31-40	.0423	.09913	.993
		41-50	.3577*	.10852	.009
		51 and above	.0585	.12567	.990
	21-30	13-20	-.0180	.08811	1.000
		31-40	.0243	.10272	.999
		41-50	.3397*	.11180	.021
		51 and above	.0404	.12852	.998
	31-40	13-20	-.0423	.09913	.993
		21-30	-.0243	.10272	.999
		41-50	.3154	.12068	.070
		51 and above	.0161	.13631	1.000
	41-50	13-20	-.3577*	.10852	.009
		21-30	-.3397*	.11180	.021
		31-40	-.3154	.12068	.070
		51 and above	-.2993	.14328	.227
51 and above	13-20	-.0585	.12567	.990	
	21-30	-.0404	.12852	.998	
	31-40	-.0161	.13631	1.000	
	41-50	.2993	.14328	.227	
Health-promoting functions	13-20	21-30	-.0464	.09143	.987
		31-40	.2019	.10287	.286
		41-50	.3986*	.11261	.004
		51 and above	.0821	.13040	.970
	21-30	13-20	.0464	.09143	.987
		31-40	.2483	.10659	.138
		41-50	.4450*	.11602	.001
		51 and above	.1286	.13336	.871
	31-40	13-20	-.2019	.10287	.286
		21-30	-.2483	.10659	.138
		41-50	.1967	.12522	.517
		51 and above	-.1197	.14144	.916
	41-50	13-20	-.3986*	.11261	.004
		21-30	-.4450*	.11602	.001
		31-40	-.1967	.12522	.517
		51 and above	-.3165	.14868	.210
51 and above	13-20	-.0821	.13040	.970	
	21-30	-.1286	.13336	.871	
	31-40	.1197	.14144	.916	
	41-50	.3165	.14868	.210	

Based on observed means. The error term is Mean Square (Error) = .489. *. The mean difference is significant at the .05 level.

The results of the Multiple Comparisons (Tukey HSD) derived from Table 4.29 show that there is a statistically significant difference for the means of facility-based functions between the people who are 13-20 and 41-50 years old ($P= 0.000$), and between 21-30 and 41-50 years old ($P= 0.002$). For social functions, the results also illustrate that there is a statistically significant difference between people at the age of 13-20 and 41-50 years old ($P= 0.009$), and between 21-30 and 41-50 years old ($P= 0.021$). Lastly, there is a statistically significant difference for the means of health-promoting functions between people who are 13-20 and 41-50 years old ($P= 0.004$), and between the people at the age of 21-30 and 41-50 years old ($P= 0.001$). The results of MANOVA reveal that there is a statistically significant difference in people's opinions about the importance of the opportunities of public open spaces according to their age groups.

4.5 People's Opinions about Their Needs in the Public Open Spaces

People carry diverse perceptions and opinions about their needs in public open spaces according to their gender, ethnicity, and age group. Discussing the significant role of these discrepancies denotes a far-reaching vista towards the integrity and inclusion of public open spaces. In fact, this animation leads to the consolidation of social solidarity among different ethnic groups. Descriptive analysis illustrated in Table 4.30 confirms that among all people's needs, safety and security (Mean= 4.60, Std.= 0.65), ease and relaxation and being away from stress (Mean= 4.51, Std.= 0.62), natural elements such as trees, greenery, water features, etc. (Mean= 4.49, Std.= 0.60), and well-connected movement paths that help people easily walk around the place (Mean= 4.45, Std.= 0.50) are the factors that obtained the highest mean scores. Arguably, these factors are considered the most important needs in public open spaces. In fact, the results demonstrate that people

somehow strongly agree with the importance of such needs in public open spaces. Nevertheless, this agreement does not statistically second the significant of these factors and the need for the stronger analyses is obviously pronounced. In contrast, places for skateboarding (Mean= 3.33, Std.= 1.05), meeting and mingling with one another (Mean= 3.36, Std.= 1.26), and privacy (Mean=3.41, Std.= 1.09) are the factors that received the lowest mean scores. Nevertheless, this does not denote that these factors are trivial for the development of public open spaces. In fact, the reason for which these factors obtained low scores might be that they are not physically measurable. For instance, privacy and social interaction are the two significant factors that are sensed only upon the use of public open spaces. Overall, people reveal their agreement on the importance of such needs in public open spaces.

In the next level of analysis, the Principal Component Extraction method assists in delving into the factors that encompass the smaller numbers of variables accounting for a larger percentage of the whole variance. Technically, this type of analysis extracts the most important factors that include a more representative group of dependent variables. In more details, this analysis excludes the variables that are less significant in order to obtain the results that are more reliable. In fact, these extracted factors are the units used in any further sorts of analyses.

Table 4.30: Descriptive Analysis of People's Needs in Public Open Spaces

Variable	N	Mean	Std. Deviation	Variance
1) Safety and security	400	4.5675	.65308	.427
2) Ease and relaxation and being away from stress	400	4.5075	.62524	.391
3) Natural elements such as trees, greenery, water features, etc	400	4.4900	.60483	.366
4) Well-connected movement paths that help them easily walk around the place	400	4.4550	.49859	.249
5) Climatic comfort either naturally or artificially	400	4.3750	.64840	.420
6) Shelter to be protected from wind, sun, etc	400	4.3300	.71930	.517
7) Playing sports and doing activities such as reading, playing chess, etc	400	4.2900	.68342	.467
8) Sense of belonging to the place	400	4.2600	.50798	.258
9) Places for eating, drinking, and smoking	400	4.2575	1.64407	2.703
10) Lighting	400	4.1700	.70523	.497
11) Protection from nuisances like offensive groups	400	4.1275	1.00687	1.014
12) Seating opportunities to sit and take a break	400	4.1175	.87212	.761
13) Sense of support and comfort by others	400	3.9250	.80685	.651
14) Experimenting and exploring the environment	400	3.5250	1.10337	1.217
15) Wash room	400	3.5175	1.26042	1.589
16) Privacy	400	3.4150	1.09351	1.196
17) Meeting and mingling with one another	400	3.3650	1.26125	1.591
18) Places for skateboarding	400	3.3350	1.04906	1.101

Table 4.31: The Principal Component Extraction for People's Needs

Variables	Factors		
	Physical needs	Environmental needs	Social needs
1) Well-connected movement paths that help them easily walk around the place	0.729		
2) Natural elements such as trees, greenery, water features, etc	0.653		
3) Places for eating, drinking, and smoking	0.786		
4) Seating opportunities to sit and take a break	0.693		
5) Playing sports and doing activities such as reading, playing chess, etc	0.602		
6) Wash room	0.551		
7) Climatic comfort either naturally or artificially		0.673	
8) Ease and relaxation and being away from stress		0.732	
9) Protection from nuisances like offensive groups		0.726	
10) Sense of belonging to the place		0.744	
11) Safety and security		0.784	
12) Experimenting and exploring the environment			0.789
13) Meeting and mingling with one another			0.732
14) Privacy			0.855
15) Sense of support and comfort by others			0.738
% Variance explained	39.32	15.98	12.7

Extraction Method: Principal Component Analysis. Rotation converged in 3 iterations.

The results of the Principal Component Extraction method in Table 4.31 show that analysis of 18 variables extracted from the theoretical framework of the research, embodies the convergence of three factors in three iterations of rotation that account for 68 percentage of the whole variance. The percentages of variance for these factors are 39.32%, 15.98%, and 12.7% respectively. The first factor that refers to the physical needs includes well-connected movement paths, natural elements, places for eating, drinking, and smoking, seating opportunities to sit and take a break, playing sports and doing activities, such as reading, playing chess, etc. and wash room. The second factor referring to the environmental needs comprises good climatic comfort either natural or artificial, ease and relaxation and being away from stress, protection from nuisances like offensive groups, sense of belonging to the place, and safety and security. Lastly, the social needs entail the experimentation and exploration of the environment, meeting and mingling with one another, privacy, and the sense of support and comfort by others.

4.5.1 Opinions about Needs in the Public Open Spaces According to Gender

One of the assumptions of this research is that gender is one the influential factors in distinguishing the way public open spaces are perceived and used by different groups of people. Presumably, differentiated attributes between males and females result in different opinions about their needs in the public open spaces. This is probably due to the unavoidable differences between males and females' physic-psychological nature that would necessitate the different needs in the public open spaces.

Table 4.32: Descriptive Analysis of People’s Needs Based on Gender

Needs	Gender	N	Mean	Std. Deviation	Std. Error Mean
Physical needs	Male	202	4.2426	.47376	.03333
	Female	198	4.2929	.63330	.04501
Environmental needs	Male	202	4.3663	.55937	.03936
	Female	198	4.3990	.58527	.04159
Social needs	Male	202	3.6337	.84315	.05932
	Female	198	3.7727	.80219	.05701

The results of Descriptive Analysis in Table 4.32 illustrate that physical needs obtained (Mean= 4.2, Std.= 0.47) for males and (Mean= 4.3, Std.= 0.63) for females. The environmental needs obtained (Mean= 4.4, Std.= 0.56) for males and (Mean= 4.4, Std.= 0.59) for females. In addition, the social needs received the lowest mean scores among males and females. In fact, the mean score of social needs was (Mean= 3.6, Std.= 0.84) for males and (Mean= 3.8, Std.= 0.80) for females. To examine the differences of people’s opinions about their needs in the public open spaces according to gender, the Independent Samples T-test seems to be a suitable statistical analysis.

Table 4.33: The Independent Samples T-test for People’s Needs Based on Gender

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	95% Confidence Interval of the Difference	
							Lower	Upper
Physical needs	Equal variances assumed	5.616	.018	-.393	398	.694	-.16015	.08019
	Equal variances not assumed			-.393	388.354	.695	-.16049	.08033
Environmental needs	Equal variances assumed	1.391	.239	-.571	398	.569	-.14518	.07987
	Equal variances not assumed			-.570	396.312	.569	-.14523	.07992
Social needs	Equal variances assumed	3.305	.070	-1.689	398	.092	-.30090	.02277
	Equal variances not assumed			-1.690	397.649	.092	-.30081	.02269

The Levene's Test for Equality of Variances in Table 4.33 illustrates that significance level for the physical needs is less than 0.05, for the environmental needs is 0.239, and for the social needs is 0.07. In fact, the results of the Independent Samples T-test delineate that all significance levels are greater than 0.05; therefore, there is not a statistically significant difference in the means of needs for males and females. This demonstrates that men and women assent to their needs in the public open spaces. In fact, the results illustrate that despite what Terlinden, (2003); García-Ramon et al. (2004) asserted that people's use and experience of public open spaces are diverse since their genders differ, males and females demand the same needs in the public open spaces. This implies that gender does not strikingly affect people's basic needs; nevertheless, males and females in their psychological and social needs possess quite differentiated attributes towards the public open spaces.

4.5.2 Opinions about Needs in the Public Open Spaces According to Ethnicity

As stated before, numerous factors might affect people's opinions about their needs in the public open spaces. Among all, the assumption is that ethnicity plays an important role in differentiating people's needs. Hence, in this section, the proposed assumption is that there is a statistically significant difference in the means of people's needs for different ethnic groups. To examine this assumption, the One-way MANOVA is a suitable analysis that statistically identifies the differences in the means of needs among Malay, Chinese, and Indian groups.

Table 4.34: Box's Test of Equality of Covariance Matrices^a Based on Ethnicity

Box's M	19.306
F	1.581
df1	12
df2	99974.654
Sig.	.089

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups. a. Design: Intercept + Ethnicity.

One of the assumptions of the One-way MANOVA is the homogeneity of covariances. The result shown in Table 4.34 confirms that the significance level of Box's Test of Equality of Covariance Matrices is greater than 0.001 (P= 0.089). Therefore, the assumption of homogeneity of covariances was not violated and the results of the One-way MANOVA are valid and reliable. In fact, the significance value of Wilks' Lambda should be significant in order to determine whether the One-way MANOVA is statistically significant. Given this, the results of Table 4.35 demonstrate that the One-way MANOVA is statistically significant.

Table 4.35: Multivariate Tests^d for Needs Based on Ethnicity

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^b
Intercept	Pillai's Trace	.991	13794.014 ^a	3.000	395.000	.000	.991	41382.042	1.000
	Wilks' Lambda	.009	13794.014 ^a	3.000	395.000	.000	.991	41382.042	1.000
	Hotelling's Trace	104.765	13794.014 ^a	3.000	395.000	.000	.991	41382.042	1.000
	Roy's Largest Root	104.765	13794.014 ^a	3.000	395.000	.000	.991	41382.042	1.000
Ethnicity	Pillai's Trace	.099	6.866	6.000	792.000	.000	.049	41.195	1.000
	Wilks' Lambda	.901	7.013 ^a	6.000	790.000	.000	.051	42.075	1.000
	Hotelling's Trace	.109	7.159	6.000	788.000	.000	.052	42.952	1.000
	Roy's Largest Root	.106	13.964 ^c	3.000	396.000	.000	.096	41.893	1.000

a. Exact statistic, b. Computed using alpha = .05, c. The statistic is an upper bound on F that yields a lower bound on the significance level. d. Design: Intercept + Ethnicity.

The results of Table 4.35 indicate that there is a statistically significant difference between people's opinions about their needs in public open spaces according to their ethnicity, $F(5, 790) = 7, P < 0.0001$; Wilk's $\lambda = 0.9$, partial $\epsilon^2 = 0.05$.

Table 4.36: Levene's Test of Equality of Error Variances^a for the Needs Based on Ethnicity

Needs	F	df1	df2	Sig.
Physical needs	7.538	2	397	.056
Environmental needs	2.205	2	397	.112
Social needs	2.833	2	397	.060

Tests the null hypothesis that the error variance of the dependent variable is equal across groups. a. Design: Intercept + Ethnicity.

The results of Table 4.36 show that all people's needs have the homogeneity of variances as their significance values are respectively 0.056, 0.112, 0.06, and greater than 0.05.

Table 4.37: Tests of Between-Subjects Effects for the Needs Based on Ethnicity

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^b
Corrected Model	Physical needs	3.010 ^a	2	1.505	5.945	.003	.029	11.890	.878
	Environmental needs	.056 ^c	2	.028	.085	.918	.000	.170	.063
	Social needs	21.594 ^d	2	10.797	17.146	.000	.080	34.291	1.000
Intercept	Physical needs	5018.964	1	5018.964	19828.547	.000	.980	19828.547	1.000
	Environmental needs	5179.263	1	5179.263	15765.552	.000	.975	15765.552	1.000
	Social needs	3475.850	1	3475.850	5519.576	.000	.933	5519.576	1.000
Ethnicity	Physical needs	3.010	2	1.505	5.945	.003	.029	11.890	.878
	Environmental needs	.056	2	.028	.085	.918	.000	.170	.063
	Social needs	21.594	2	10.797	17.146	.000	.080	34.291	1.000
Error	Physical needs	100.488	397	.253					
	Environmental needs	130.422	397	.329					
	Social needs	250.003	397	.630					
Total	Physical needs	7337.000	400						
	Environmental needs	7813.000	400						
	Social needs	5755.000	400						

a. R Squared = .029 (Adjusted R Squared = .024), b. Computed using alpha = .05, c. R Squared = .000 (Adjusted R Squared = -.005), d. R Squared = .080 (Adjusted R Squared = .075).

From the results of Table 4.37, it is derived that ethnicity has a statistically significant effect on the physical needs, $F(2, 397) = 6$; $P < 0.005$; partial $\epsilon^2 = 0.03$, on the environmental needs, $F(2, 397) = 0.08$; $P > 0.05$; partial $\epsilon^2 = 0.000$, and on the social needs, $F(2, 397) = 17.15$; $P < 0.005$; partial $\epsilon^2 = 0.08$.

Table 4.38: Multiple Comparisons: Tukey HSD for the Needs Based on Ethnicity

Dependent Variable	(I) ethnicity	(J) ethnicity	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Physical needs	Malay	Chinese	-.1530*	.05793	.023	-.2893	-.0168
		Indian	-.2167*	.07821	.016	-.4007	-.0327
	Chinese	Malay	.1530*	.05793	.023	.0168	.2893
		Indian	-.0636	.08581	.739	-.2655	.1382
	Indian	Malay	.2167*	.07821	.016	.0327	.4007
		Chinese	.0636	.08581	.739	-.1382	.2655
Environmental needs	Malay	Chinese	.0189	.06600	.956	-.1363	.1742
		Indian	.0317	.08910	.933	-.1779	.2413
	Chinese	Malay	-.0189	.06600	.956	-.1742	.1363
		Indian	.0127	.09776	.991	-.2173	.2427
	Indian	Malay	-.0317	.08910	.933	-.2413	.1779
		Chinese	-.0127	.09776	.991	-.2427	.2173
Social needs	Malay	Chinese	.4917*	.09137	.000	.2767	.7066
		Indian	.4317*	.12336	.002	.1414	.7219
	Chinese	Malay	-.4917*	.09137	.000	-.7066	-.2767
		Indian	-.0600	.13535	.897	-.3784	.2584
	Indian	Malay	-.4317*	.12336	.002	-.7219	-.1414
		Chinese	.0600	.13535	.897	-.2584	.3784

Based on observed means. The error term is Mean Square (Error) = .630. *. The mean difference is significant at the .05 level.

The results of Post Hoc Tests in Table 4.38 demonstrate that there is a statistically significant difference in the means of physical needs between Malay and Chinese groups ($P = 0.023$) and between Malay and Indian groups ($P = 0.016$). Nevertheless, there is not a statistically significant difference in the means of physical needs between Chinese and

Indian groups ($P= 0.739$). In addition to that, there is not a statistically significant difference in the means of environmental needs among different ethnic groups. The results show that there is a statistically significant difference in the means of social needs between Malay and Chinese groups ($P= 0.000$) and Malay and Indian groups ($P= 0.002$). Notwithstanding, there is not a statistically significant difference in the means of social needs between Chinese and Indian groups ($P= 0.897$). This shows that ethnic differences make people assert different opinions about their physical and social needs in the public open spaces. Nevertheless, people regardless of their ethnicity declared similar opinions about their environmental needs. Most probably, environmental needs have the same importance across all ethnic groups. Overall, the results of Post Hoc Tests reveal that there is not a statistically significant difference in the means of all needs among different ethnic groups. The results tally with Al-Shams et al.'s (2013) statement that the instrumental role of a public open space varies in different societies, according to the attitude towards it in each culture. In addition to that, the results confirm that people's use and experience of public open spaces are diverse since their ethnicities differ. The scholars, such as Terlinden (2003) and García-Ramon et al. (2004), have clearly supported this premise.

4.5.3 The Role of Age in People's Needs in the Public Open Spaces

The assumption is that people encounter different physic-psychological changes at different stages of their lives. These changes ultimately raise different attitudes towards the elements of public open spaces as age groups differ. This might be the best answer to that why older people's needs are differentiated from those of younger groups. Hence, this nuance prompts urban designers to come up with the integrated designs that meet the needs of all age groups. The raised question is that *'how do people's needs change as their age groups*

differ?' The first step is to identify and classify the prevailing needs of people in the public open spaces. In the second step, the relationship between people's needs and age should be determined. In this line, the proposed assumption is that older people are less willing to explore the public open spaces and mingle with other groups compared to younger people.

4.5.3.1 The Correlation between Age and People's Needs in the Public Open Spaces

To ascertain what needs people of each age group are concerned about more, it seems suitable to employ the Pearson Correlation Analysis to find out the correlation between age and people's needs in the public open spaces. Overall, the results of this section form a cornerstone for the designers in classifying and prioritizing people's needs in the public open spaces of the City Center of Kuala Lumpur.

Table 4.39: The Correlations between Age and People's Needs in the Public Open Spaces

Independent Variable		Social needs	Environmental needs	Physical needs
Age	Pearson Correlation	-0.846**	0.275**	0.426**
	Sig. (2-tailed)	0.000	0.000	0.000
	N	400	400	400

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

The results of the Pearson Correlation Analysis in Table 4.39 demonstrate that people's age has a relationship with their physical, environmental, and social needs in public open spaces. The strongest relationship happens between age and social needs ($r = -0.846^{**}$, $p < 0.005$). This might show that the older people, the less they mingle with other groups. In fact, old people prefer to be away from younger groups who are sometimes deemed a nuisance. They mostly come to the public open spaces to benefit from a regular walk in order to enhance their life expectancy. In other words, older people utilize such spaces to

benefit from environmental opportunities. In addition, the results illustrate that age has a positive relationship with the physical needs ($r= 0.426^{**}$, $p<0.005$) and the environmental needs ($r= 0.275^{**}$, $p<0.005$). Practically, the results imply that the older people, the more the need for complying with their physical and environmental needs is sensed; therefore, this growth of needs should be intensively contemplated in the design of public open spaces in the City Center of Kuala Lumpur.

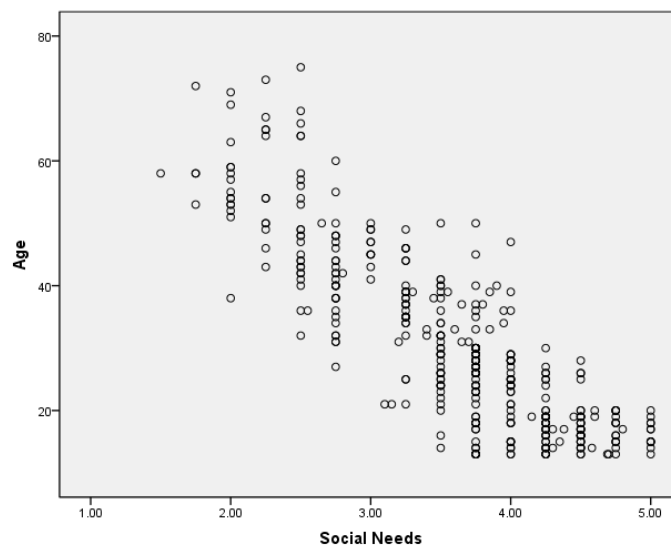


Figure 4.1: The Simple Scatter Diagram between age and the social needs

The Simple Scatter Diagram in Figure 4.1 shows a steadily inverse relationship between age and the social needs in the public open spaces, while social interaction is an undeniable necessity for all age groups. The overlaps in Figure 4.1 demonstrate that people across different age groups possess similar opinions about their social needs in the public open spaces. In addition, the Figure illustrates that the need for mingling and exploring the public open spaces gradually dim at the ages of 40 years old and above. In fact, these needs are rather more tangible between the ages of 13 and 30 years old.

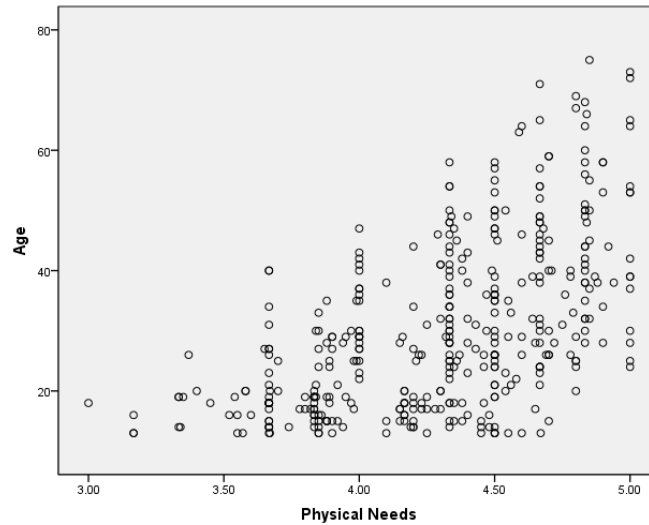


Figure 4.2: The Simple Scatter Diagram between age and the physical needs

Age, as indicated in Figure 4.2, has a relatively positive influence on the need for the provision of physical needs in public open spaces. The graph illustrates that older people are more concerned about their physical needs to the extent that, undoubtedly, the provision of physical needs leads to a physical and partially psychological comfort. Similar to the social needs, the overlaps in the Figure above show the consensus among age groups about their physical needs in the public open spaces of the City Center of Kuala Lumpur.

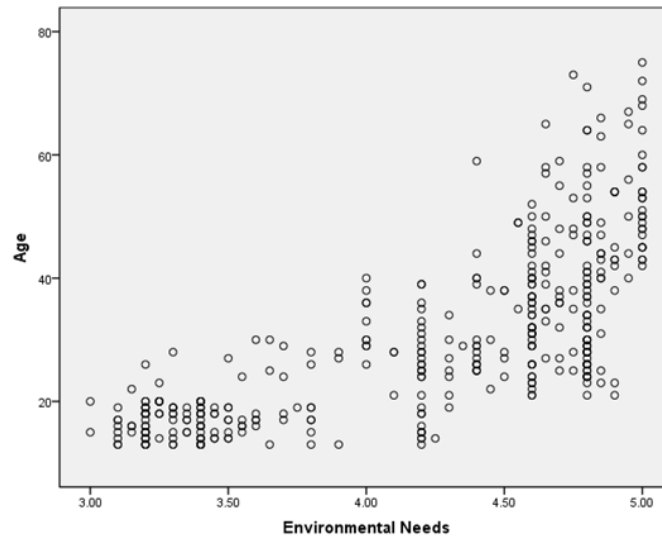


Figure 4.3: The Simple Scatter Diagram between age and the environmental needs

The Graph above, Figure 4.3 clearly shows that all groups are concerned about their environmental needs. More specifically, environmental needs are more prominent for the people who are 45 years old and above. People who are 13 to 40 years old possess the same tendency towards the provision of their environmental needs in the public open spaces. Similarly, people who are in the age group of 20 to 40 years old declare a similar opinion about the importance of environmental needs to those who are between 40 and 60 years old. This implies that despite there being a positive relationship between age and the need for the provision of environmental needs, environmental needs are significantly vital for the inclusiveness of public open spaces. From a different perspective, the success of a public open space is directly dependent on the extent to which the designers consider the environmental needs throughout the design process.

4.6 Social Interactions in the Public Open Spaces

Numerous factors influence the occurrence and quality of social interaction in the public open spaces. These factors concern the urban issues that make people involved with both other groups and the place. The Principle Component Extraction method as a suitable statistical analysis aims to explore the factors that weigh the most percentage of variance in representing the components of social interaction. Among 26 items derived from the theoretical framework of the research that influence social interaction, the results of analysis shown in Table 4.40 illustrate the convergence of four components in four iterations of rotation that account for 66 percentage of the whole variance. The percentages of variance for these factors are 17.45%, 19.73%, 14.16%, and 14.66% respectively. The first component refers to the personal factors such as age, ethnicity, culture, gender, social class, education level, and religion. The second component referring to the physical factors includes the existence of physical obstacles, such as uneven surfaces, the arrangement of the elements that construct a public open space, the presentation of public art, enough pedestrian paths that allow people to easily move, architecture, physical outlook, visual attractiveness of the place, location of the place, ease in finding a public open space, and easy access to a public open space. The third component concerning the managerial factors comprises the rules that people should follow in a public open space, the way a public open space is ruled, controlled and managed, cleanliness of the place that is controlled by the management body, safety, and security. Lastly, the social factors comprise the relation among people in their groups and with other groups, equal right given to all groups of people in using a public open space, people presence that animates the place, events, such as lunch-time concerts, art exhibitions, festivals, annual events, and unusual events, and the mixture of various types of activities, such as playing sports and formal and informal

gatherings. The results supported that these emerged factors represent different aspects of social interaction; therefore, considered the independent variables for the further Correlation and Regression Analyses. Since the ultimate objective of this section is to find out the predictors of social interaction in the public open spaces, in the first step, the Pearson Bivariate Correlation Test assists in exploring the relationship between the independent variables and social interaction as the dependent variable. The Table 4.41 shows the results of the Pearson Bivariate Correlation Test.

Table 4.40: Principal Component Analysis for the Factors that Represent Social Interaction

Variables	Component			
	1	2	3	4
Age	.752			
Ethnicity	.717			
Culture	.735			
Gender	.686			
Social class	.769			
Education level	.702			
Religion	.707			
Existence of physical obstacles such as uneven surfaces		.746		
Arrangement of the elements that construct a public open space		.748		
Presentation of public art		.544		
Enough pedestrian paths that allow people to easily move		.569		
Architecture, physical outlook, and visual attractiveness of the place		.720		
Location of the place		.812		
Ease in finding a public open space		.646		
Easy access to a public open space		.583		
Rules that people should follow in a public open space			.708	
The way a public open space is ruled, controlled and managed			.715	
Cleanliness of the place that is controlled by the management body			.802	
Safety and security of a public open place			.769	
Relation among people in their groups and with other groups				.602
Equal right given to all groups of people in using a public open space				.723
People presence that animates the place				.558
Events such as lunch-time concerts, art exhibitions, festivals, annual events, and unusual events				.760
Mixture of various types of activities such as playing sports, formal and informal gatherings				.768
% Variance explained	17.45	19.73	14.16	14.66

Extraction Method: Principal Component Analysis. Rotation converged in 4 iterations.

The results derived from the Pearson Bivariate Correlation Analysis in Table 4.41 show that the strongest correlation exists between social factors and social interaction ($r= 0.886^{**}$, $P < 0.01$). In fact, it explains that enhancing the relationship between groups, inclusiveness, making public open spaces more animated by people’s presence through holding socio-culturally diverse activities, such as contests, bands, festivals, competitions, and other formal and informal gatherings, drastically augment social interaction in the public open spaces and enhance the quality of public life in the City Centers. The personal factors including people’s backgrounds ($r= 0.760^{**}$, $P < 0.01$) and managerial factors, such as the rules enforced by the management body, cleanliness, safety, and security ($r= 0.705^{**}$, $P < 0.01$) influence social interaction. Lastly, the physical factors describing the physical characteristics, such as architecture, physical outlook, visual attractiveness of the place, location, access, elements, public art, etc. ($r= 0.623^{**}$, $P < 0.01$) have a rather strong relationship with the success of social interaction among diverse groups of people in the public open spaces. This signifies that social interaction is a complicated issue in nature, inasmuch as numerous factors affect its quality. Therefore, this involves urban designers, planners, landscape architects, architects, and even policy makers in enhancing social interactions in the public open spaces. In fact, the impact of these factors on each other makes identifying the predictors of social interaction a challenging issue in the contemporary urban design practice.

Table 4.41: The Pearson Correlations between Social Interaction and Influential Factors

Dependent Variable		PF	MF	PHF	SF
Social	Pearson Correlation	0.760**	0.705**	0.623**	0.886**
Interaction	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	N	400	400	400	400

** . Correlation is significant at the 0.01 level (2-tailed). PF= Personal Factors, MF= Managerial Factors, PHF= Physical Factors, SF= Social factors.

Therefore, identifying the predictors of social interactions in the public open spaces requires a more advance analysis. The Multiple Linear Regression Analysis determines a model that shows a more reliable relationship between the predictors and social interaction. As mentioned before, the results of the Pearson Correlations Analysis indicated that all four factors had a strong relationship with social interaction; therefore, they are the potentially independent variables in the Multiple Linear Regression Test. Given this, the assumption is that the physical, managerial, social, and personal factors affect social interactions in a public open space. Adjusted R Square shown in Table 4.42 confirms that four factors account for 83.6% of variance in social interactions, which is quite high and acceptable.

Table 4.42: Model Summary^b for Social Interaction and Influential Factors

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.915 ^a	.837	.836	.24853	.837	508.213	4	395	.000

a. Predictors: (Constant), SF, PHF, MF, PF, b. Dependent Variable: Socialization.

The results shown in Table 4.43 support that the model emerged ($F_{4,395} = 508.213, p < 0.0005$) is significant and reliable. In fact, the Table shows that at least one of the factors affects social interactions that this proves the assumption previously mentioned. Therefore, the results of ANOVA demonstrate that there is a statistically significant relationship between at least one of the above-mentioned factors and social interactions in the public open spaces.

Table 4.43: ANOVA^b for Social Interaction and Influential Factors

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	125.562	4	31.391	508.213	.000 ^a
	Residual	24.398	395	.062		
	Total	149.960	399			

a. Predictors: (Constant), SF, PHF, MF, PF, b. Dependent Variable: Socialization.

The results of the Multiple Linear Regression Analysis in Table 4.44 indicate that social interaction in the public open spaces is reliant on the physical, managerial, social, and personal factors. Therefore, the emerged equation is that social interaction in a public open space = 0.026 + 0.291 (managerial factors) + 0.273 (physical factors) + 0.323 (personal factors) + 0.612 (social factors).

Table 4.44: Coefficients^a for Social Interaction and Influential Factors

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.026	.092		.280	.780
MF	.291	.025	.296	8.593	.000
PHF	.273	.026	.275	6.819	.000
PF	.323	.028	.333	9.875	.000
SF	.612	.033	.617	18.725	.000

a. Dependent Variable: Social Interaction.

The model showed that all the managerial, physical, personal, and social factors significantly influence social interaction in the public open spaces. The strongest influence belongs to the social factors that mainly concern enhancing relationship among ethnic groups, inclusiveness, and the diverse socio-cultural activities. In contrast, the physical factors of appearance, location, physical and visual accessibility, pedestrian flows, design, and public art impose the least significant impact on the quality of social interactions in the

public open spaces of the City Center of Kuala Lumpur. In fact, the results imply that the physical factors are essential for attracting people, while the social factors make people do activities, mingle with others, and animate the places. Furthermore, the managerial factors that refer to the management system of public open spaces and the personal factors, such as age, gender, and other socio-cultural discrepancies, significantly influence the quality and the type of social interactions in the public open spaces. Supported by the results of the analysis, the following Diagram, Figure 4.4, shows the strength of impact of the influential factors on social interactions in the public open spaces. This integration of impacts might be a cornerstone that assists the designers in outlining the factors that are essential for designing socially successful public open spaces.

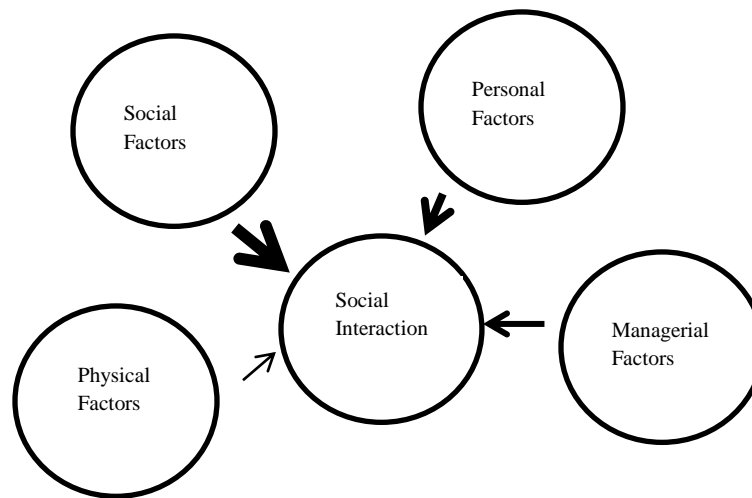


Figure 4.4: The relationships between social interaction and influential factors in the public open spaces

The City Hall Kuala Lumpur plays a major role in managing the public open spaces of the City Center at a macro level. Its role mostly concerns providing amenities, such as public parking and washrooms, maintenance, and licensing for installing facilities, such as stalls, and holding miscellaneous socio-cultural activities. There are several departments in the City Hall Kuala Lumpur that deal with different managerial aspects of public open spaces.

Licensing & Petty Traders Management Department as a unit of business controls supervises operating, licensing, and enforcing actions against various business activities and petty merchants in the Federal Territory of Kuala Lumpur. Physical Planning Department provides, maintains, and implements plans for the development of Kuala Lumpur city. The development plan comprises the structure and local plans. It also prepares the plan of open spaces (mainly known as green spaces) and public open spaces in Kuala Lumpur city. The Urban Planning Department is another important department within the City Hall that plays a major role in encouraging more developments in Kuala Lumpur. In fact, its vision and mission are on a par with the policies and the strategic plan structure of Kuala Lumpur. Therefore, a major role of this department is to control the future development of public open spaces in the Federal Territory of Kuala Lumpur, specially the City Center (City Hall Kuala Lumpur, 2014). The role of the City Hall Kuala Lumpur in managing a public open space depends on its type, size, and function. For instance, the City Hall Kuala Lumpur deals with booking Dataran Merdeka for holding activities, maintaining the place, controlling its safety and security, and providing public amenities such as washrooms, lighting, and parking lots. From a micro level, the Central Market is in charge of managing the roofed public open space along Jalan Hang Kasturi. The Role of City Hall Kuala Lumpur in managing small-scale public open spaces, such as the pedestrianized walkways in front of Masjid India and along Jalan Hang Kasturi, is to license different activities and facility applications as well as ensuring the enforcement of all actions and applications in compliance with the rules and policies.

4.7 Successful Public Open Spaces

As stated in Chapter 1, the ultimate objective of the research is to determine the characteristics of a successful public open space. As widely supported in the literature review, a successful public open space is a place that meets the needs of all groups of people to make them linger and enjoy. In line with what Carmona et al. (2003) stressed, comfort is vital for creating a successful public open space, which is measured by the length of time people spend in the public open spaces. Therefore, in this research, the time spent represents the success of a public open space. The results of Descriptive Analysis of the characteristics of a successful public open space in Table 4.45 show that safety and security (Mean= 4.36, Std.= 0.8), sufficient moving opportunities (Mean= 4.34, Std.= 0.65), good location (Mean= 4.28, Std.= 0.67), and having sufficient washrooms and hard landscaping such as suitable outdoor furniture and informative signs (Mean= 4.26, Std.= 0.69) are the variables that obtained the highest mean scores. In contrast, historical significance (Mean= 3.7, Std.= 0.73), arousal of sense of curiosity (Mean= 3.8, Std.= 0.7), giving people opportunities to accomplish their desires and goals among other people (Mean= 3.9, Std.= 0.72), and making people directly involved in activities and events held by different groups (Mean= 3.97, Std.= 0.77) are the variables that received the lowest mean scores. Despite receiving low mean scores, the assumption is that these features are essential for the design of successful public open spaces.

Table 4.45: Descriptive Analysis of the Factors that Contribute to the Success of Public Open Spaces

Variables, N= 400	Mean	Std. Deviation
1) A public open space should be safe and secure.	4.3575	.80081
2) A public open space should include well-connected elements and give sufficient moving opportunities.	4.3375	.64780
3) A public open space should be in a good location, mainly in dense locations and City Centers to be easily found and accessed.	4.2800	.66912
4) A public open space should have sufficient washrooms and hard landscaping such as suitable outdoor furniture and informative signs.	4.2575	.69455
5) A public open space should be sunlit and clear of trash.	4.2300	.76062
6) A public open space should give people ease that makes people stay with relief and peace of mind.	4.2300	.84492
7) A public open space should have attractive views and elements, soft landscaping such as green spaces and water elements, etc.	4.2225	.73098
8) A public open space should facilitate people to watch people, fountains, public art, performances, etc.	4.2150	.72808
9) A public open space should provide access for all groups of people.	4.1975	.73814
10) A public open space should have different focal and gathering places.	4.1375	.66686
11) A public open space should be commensurate with human scale.	4.1200	.67953
12) A public open space should have places for shopping and eating.	4.1075	.77940
13) A public open space should provide different activities such as sports for different people at different times and occasions.	4.1075	.72267
14) A public open space should have daily interaction and animation.	4.0875	.71493
15) A public open space should make people feel sense of belonging to the place.	4.0850	.69569
16) A public open space should give people privacy such as feeling of boundaries between themselves and others.	4.0800	.77142
17) A public open space should have various seating facilities such as formal, informal, and movable.	4.0775	.70551
18) A public open space should make people feel hospitable to others.	4.0775	.66904
19) A public open space should be connected to its context.	4.0550	.63481
20) A public open space should present public art to the people.	4.0425	.71201
21) A public open space should be neither so small nor so big.	4.0200	.73549
22) A public open space should present symbolic and cultural elements that strengthen different cultures.	4.0075	.72371
23) A public open space should have a high-quality architecture.	4.0050	.78199
24) A public open space should be memorable and distinctive.	4.0000	.77233
25) A public open space should include events such as band concert, fairs and festivals, anniversaries, etc.	3.9850	.70783
26) A public open space should make people directly involved in activities and events held by different groups.	3.9750	.77192
27) A public open space should give people opportunities to accomplish their desires and goals among other people.	3.9400	.71951
28) A public open space should arouse people's sense of curiosity.	3.8500	.69188
29) A public open space should have historical significance.	3.6925	.73094

Sequentially, it seems necessary to spot the variables that carry the most percentage of variance and represent the factors that affect the success of a public open space. In this line, the results of the Principal Component Analysis displayed in Table 4.46 categorize and highlight the most influential variables. These classified variables emerge as components that form the factors used in the further analyses.

Table 4.46: The Principal Component Analysis for a Successful Public Open Space

Variables	Component				
	1	2	3	4	5
A public open space should give people ease that makes people stay with relief and peace of mind.	.775				
A public open space should be safe and secure.	.817				
A public open space should present public art to the people.	.574				
A public open space should be sunlit and clear of trash.	.709				
A public open space should be in a good location, mainly in dense locations and City Centers to be easily found and accessed.	.688				
A public open space should be commensurate with human scale.	.775				
A public open space should be connected to its context.	.713				
A public open space should arouse people's sense of curiosity.					.627
A public open space should present symbolic and cultural elements that strengthen different cultures.					.500
A public open space should make people feel sense of belonging to the place.					.753
A public open space should make people feel hospitable to others.					.592
A public open space should have historical significance.					.742
A public open space should be memorable and distinctive.					.634
A public open space should provide different activities such as sports for different people at different times and occasions.		.722			
A public open space should facilitate people to watch people, fountains, public art, performances, etc.		.607			
A public open space should make people directly be involved in activities and events held by different groups.		.604			
A public open space should include events such as band concert, fairs and festivals, anniversaries, etc.		.659			
A public open space should have daily interaction and animation.			.537		
A public open space should provide access for all groups of people.			.681		
A public open space should give people the privacy such as feeling of boundaries between themselves and others.			.717		
A public open space should have places for shopping and eating.				.665	
A public open space should have different focal and gathering places.				.630	
A public open space should be neither so small nor so big.				.700	
A public open space should have various seating facilities such as formal, informal, and movable.				.605	
A public open space should have sufficient washrooms and hard landscaping such as suitable outdoor furniture and informative signs.				.672	
A public open space should have a high-quality architecture.				.565	
A public open space should have attractive views and elements, soft landscaping such as green spaces, and water elements, etc.				.717	
A public open space should include well-connected elements and give sufficient moving opportunities.				.615	
% Variance explained	20.6	13.2	9.8	22.3	18.1

Extraction Method: Principal Component Analysis. Rotation converged in 14 iterations.

The results of Table 4.46 show that analysis of 29 variables emerged the convergence of five factors in fourteen iterations of rotation that account for 84 percentage of the whole variance. The percentages of variance for these factors are 20.6%, 13.2%, 9.8%, 22.3%, and 18.1% respectively. The first factor, which addresses the variables of ease that makes people stay with relief and peace of mind, safety and security, public art presentation, being sunlit and clear of trash, good location and accessibility, being commensurate with human scale, and connection with the context, is called physical success. The second factor, which is named activity success, concerns the variables of provision of different activities, facilities to observe others, direct involvement with the activities, and events such as concerts, festivals, etc. The third significant factor, which refers to social success, covers the variables such as daily interaction and animation, inclusiveness of all groups of people, and privacy among different groups. The variables, such as places for shopping and eating, different focal and gathering places, optimum size, various seating facilities, such as formal, informal, and movable, sufficient washrooms and hard landscaping, such as suitable outdoor furniture and informative signs, a high-quality architecture, attractive views and elements, soft landscaping, such as green spaces and water elements, etc., and well-connected elements and giving sufficient moving opportunities, form the design success of a public open space. In the end, the meaning success of a successful public open space addresses the variables of arousal of people's sense of curiosity, symbolic and cultural elements that strengthen different cultures, sense of belonging to the place, hospitality to others, historical significance, and memorability and distinctiveness. Overall, the previously mentioned factors represent the characteristics of a successful public open space; therefore, the Bivariate Correlation Analysis in Table 4.47 determines the relationships between these factors as the independent variables and the time spent as the dependent variable.

Table 4.47: The Correlation between the Time Spent and the Characteristics of a Successful Public Open Space

The Dependent Variable		Physical success	Meaning success	Activity success	Social success	Design success
Time Spent in a Public Open Space	Pearson Correlation	0.785**	0.762**	0.780**	0.786**	0.801**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000
	N	400	400	400	400	400

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

The results of the Bivariate Correlation Analysis shown in Table 4.47 pinpoint that the time people usually spend in the public open spaces has a strong relationship with various attributes such as the physical success ($r= 0.785^{**}$, $p< 0.01$), meaning success ($r= 0.762^{**}$, $p< 0.01$), activity success ($r= 0.780^{**}$, $p< 0.01$), social success ($r= 0.786^{**}$, $p< 0.01$), and design success ($r= 0.801^{**}$, $p< 0.01$). Hence, the results affirm that the factors, which enhance the design of public open spaces, make people linger and most contribute to the success of such spaces. In fact, the provision of places for shopping and eating, different focal and gathering places, optimum size, various seating facilities, such as formal, informal, and movable, sufficient washrooms and hard landscaping, such as suitable outdoor furniture and informative signs, a high-quality architecture, attractive views and elements, soft landscaping, such as green spaces and water elements, etc., and well-connected elements and giving sufficient moving opportunities are the design features that make people feel comfortable in the public open spaces the most. Less substantially, the social success of a public open space, which relates to daily interaction and animation, inclusiveness of all groups of people, and privacy among different groups, plays an important role in making public open spaces comfortable for the users.

The results demonstrated that environmental and psychological comfort, safety and security, displaying public art, being sunlit, cleanliness, good location and accessibility, being commensurate with human scale, connection with the context, providing different activities, passive and active involvement with the activities, and events, such as concerts, festivals, and cultural performances, contribute to the conviviality (success) of the public open spaces of the City Center of Kuala Lumpur. Moreover, the factors that endow meaning to public open spaces play the least role in making people feel comfortable in such spaces. Given this, it is obvious that despite receiving the lowest correlation correspondence, these factors are still remarkable in making public open spaces successful. Arguably, receiving low correlation with the success of a public open space might be due to people's awareness and perception towards such factors. The interrelationships among the above-mentioned factors affect the extent to which these factors outline the success of a public open space. Hence, the Multiple Linear Regression Analysis seems an appropriate test to determine the predictors of a successful public open space more statistically thoroughly.

Table 4.48: Descriptive Statistics of the Predictors of a Successful Public Open Space

Variables	Mean	Std. Deviation	N
Time spent in a public open space	2.3600	.77583	400
Physical success	3.9725	.85941	400
Meaning success	3.7750	.87538	400
Activity success	4.0250	.89239	400
Social success	3.9325	.89440	400
Design success	3.9625	.87636	400

The Descriptive Analysis in Table 4.48 shows that the activity success (Mean= 4.02, Std.= 0.89) and the meaning success (Mean= 3.7750, Std.= 0.87) respectively obtained the highest and lowest mean scores. In addition, the physical success obtained (Mean= 3.97, Std.= 0.86), the social success (Mean= 3.93, Std.= 0.89), and the design success (Mean= 3.96, Std.= 0.88). Collectively, the results statistically demonstrated that people mostly agree that all these factors are remarkable in giving comfort to them in the public open spaces of the City Center of Kuala Lumpur.

Table 4.49: Model Summary^b for the Predictors of a Successful Public Open Space

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.871 ^a	.758	.755	.38422	.758	246.560	5	394	.000

a. Predictors: (Constant), design successfulness, social successfulness, meaning successfulness, activity successfulness, physical successfulness, b. Dependent Variable: time spent in a public open space.

To carry out the Multiple Linear Regression Analysis statistically, the assumption is that at least one of the factors of design, social, meaning, activity, and physical success affects the time people spend in a public open space, which represents its success. Adjusted R Square shown in Table 4.49 illustrates that five factors account for 75.5% of variance in the time spent, which is quite high and acceptable.

Table 4.50: ANOVA^b for the Predictors of a Successful Public Open Space

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	181.995	5	36.399	246.560	.000 ^a
	Residual	58.165	394	.148		
	Total	240.160	399			

a. Predictors: (Constant), design successfulness, social successfulness, meaning successfulness, activity successfulness, physical successfulness, b. Dependent Variable: time spent in a public open space.

The result of ANOVA in Table 4.50 supports that the model emerged ($F_{5,394} = 246.560$, $p < 0.0005$) is significant and reliable. In fact, the Table shows that at least one of the factors affects the time spent in a public open space, which this statistically accepts the assumption previously stated.

Table 4.51: Coefficients^a for the Predictors of a Successful Public Open Space

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.990	.098		-10.131	.000
	Physical success	.257	.046	.272	7.841	.003
	Meaning success	.324	.039	.353	9.478	.000
	Activity success	.378	.040	.401	9.911	.000
	Social success	.539	.039	.581	14.482	.000
	Design success	.443	.045	.469	10.627	.000

a. Dependent Variable: the time spent in a public open space.

The results of the Multiple Linear Regression illustrated in Table 4.51 confirmed that the physical, meaning, activity, social, and design success are the factors that make comfortable public open spaces. The emerged equation is that the time spent in a public open space, which represents its conviviality= 0.257 (the physical success) + 0.324 (the meaning success) + 0.378 (the activity success) + 0.539 (the social success) + 0.443 (the design success) - 0.990 . The results statistically pinpointed that despite there being a strong correlation between the design and the success of a public open space, a socially successful public open space in the City Center of Kuala Lumpur is the most comfortable place where people of different ethnic groups prefer to go and enjoy. The factors that contribute to the social success of a public open space, improve the coexistence among ethnic groups, and make such an ideal place are daily interaction and animation, inclusiveness of all groups of people, and privacy among different groups.

4.8 Experts' Opinions on People's Involvement in the Public Open Spaces

Presumably, the experts in the field of urban design and planning, such as landscape architects, town planners, and academicians, due to education level, experience, and comprehensive perception towards the built environment declare deep understanding of the issues concerning various aspects of the public open spaces. For this reason, the following sections address the experts' opinions that validate the findings of the questionnaire survey and present a deeper face of the existing issues relating to the public open spaces of the City Center of Kuala Lumpur. In fact, the experts' opinions implying the practical design-centric suggestions assist the designers in the future development of public open spaces in the context of Malaysia.

4.8.1 The Effect of Background on the Time Spent in the Public Open Spaces

In conjunction with the quantitative analysis, the results of interviews demonstrate that the physical capacity, the purpose for which people use the public open spaces, the difference in needs, interests, and preferred activities, and the free time people have due to their occupational status determine the amount of time spent across age groups. People of different age groups use the public open spaces for different reasons arising from their needs and perceptual attitudes. Young people despite having a tendency for colonizing the public open spaces, mostly use such places due to their curiosity and passion in exploring the environment. Young people are more energetic than older groups and might have more free time to spend in the public open spaces. The nature of activities also determines the time spent. Young people like active involvement, while aging people prefer passive involvement such as sitting, reading, eating, and people watching. Old people show to be

more secluded than younger people; hence, they come to such spaces at certain times a day and occupy the more controlled and securer public open spaces compared to the younger groups. In addition, the result of interviews pinpoints that most of public open spaces in the City Center respond to the facilities that provide young people's needs. This might be the reason why adults and old people are not able to take full advantage of such spaces and spend less time compared to the young groups. The experts' opinions delineate that male and female might spend different amount of time in the public open spaces of the City Center. Due to their vulnerability to extraneous conditions, females are in exposure to the latent dangers in the public open spaces more; hence, they either stay shorter than males or come to such spaces in a group to encounter the predicaments and social barriers more safely. Putting all together, the physical capacity, the purpose of use, security, safety, and privacy concerns justify the difference in the time spent between males and females. In addition, the difference in cultural aspects and perception also contribute to this gender-based discrepancy. Due to the issues, such as social privacy, safety, security, and religion-imbedded discrepancies that bring about socio-cultural restrictions in Malaysia, women might feel more exposed to contingency in the public open space. Hence, they might feel less socio-psychologically comfortable to stay long in such spaces. In fact, the results pinpointed that public open spaces should be reasonably safe and secure to the extent that maximizes social privacy for longer stay of females. The following statements verify all the above-mentioned issues concerning the time spent according to age group, gender, and ethnicity.

'It goes back to the physical capacity of age groups. Young people feel have more energy compared to the elderly; therefore, stay longer in such spaces. Facilities are mostly tailored to the needs of younger people than those of older people. Females due to their physical capacity have less energy level compared to males; hence, might spend less time in such spaces. They are scared of the threats might encounter in exposure to other groups. Culturally based, we got used to Malaysian culture regardless of different ethnicities or races. They [people] look for the facilities provided. I suppose that different ethnicities have the same period of time as well as energy to spend in such places.' (Dr. Mohd Johari Mohd Yusof, Landscape Architect & Academician, 2014)

'Yes, this is largely because of the nature and location of the areas inasmuch as none of them is meant for recreational purposes; therefore, I believe that majority of the users only use the public open spaces as a threshold, but Dataran Merdeka.' (Dr. Nor Zalina Harun, Academician, 2014)

'Young people are active groups and have a lot of time for coming to the public open spaces. We usually see them in groups exploring such spaces. They freely chitchat with each other, chill out, and do active involvement in such spaces. In contrast, old people prefer passive activities such as talking, relaxing, and people watching; hence, they may spend less time compared to the young groups. In general, different groups have their own purpose of coming to the public open spaces that this causes them to spend a specific amount of time there. Safety concern and the purpose of use are the important factors that influence the time people of different gender might spend. Females in Malaysia usually come with their friends, spouses, and relatives, while males come on their own and may spend more time there. In Malaysia, I suppose that people regardless of the differences in ethnic issues come to the public open spaces in order to take advantage of whatever facilities and opportunities exist.' (Khairulizah Binti Jamaludin, Town Planner in the City Hall Kuala Lumpur, 2014)

'Age groups have different interests. In addition, the preferred activities differ across age groups. Adults have less time to go around and mingle in the public open spaces compared to teenagers. Young people easily meet their friends and play games, etc. Males feel more comfortable sitting in the public open spaces than females. For instance, females are so concerned about the privacy, safety, and security in such spaces. We share everything together. We just use whatever our government provides regardless of our race or ethnicity. In Malaysia, there is not a public open space specifically designed for a certain ethnic group.' (Norwahidah Binti Abdul Wahid, Town Planner in the City Hall Kuala Lumpur, 2014)

‘Teenagers may have more time to spend in the public open spaces compared to adults. In Malaysia, adults mostly work; hence, might have less time to spend. People of different age groups spend different length of time because of the nature of activities differs from group to group. For instance, old people prefer to do activities that do not need so much energy such as sitting, watching people, talking to their friends, and reading newspapers. Younger people due to their energy level are actively involved in the activities. Age groups possess different abilities to do activities, which might be the reason why they spend different periods. Cultural aspect, safety, and perception contribute to the differences in gender-based opinions on activities done the in public open spaces. In contrast, in my opinion, people of different ethnic groups should not have different opinions on the type of activities they do in such spaces.’ (Jasasikin Ab Sani, Landscape Architect & Academician, 2014)

The experts stated that people regardless of their ethnic differences use the facilities provided and participate in the activities offered in the public open spaces of the City Center of Kuala Lumpur. Therefore, ethnicity dose not significantly contribute to the amount spent in the public open spaces. Unarguably, a vast range of reasons that sometimes turn into a complicated issue in urban design and planning affect the amount of time spent in the public open spaces. Considering this, even people from the same ethnic groups, family, gender, and age group might spend their time differently in the public open spaces.

4.8.2 Opportunities in the Public Open Spaces

The opportunities offered in the public open spaces vary in nature, inasmuch as some are tangible and some other intangible. There is no proof that each of these two categories has precedence over the other since each group of opportunities benefits the users differently. The results of structured interviews with the experts confirm that in Malaysia due to cultural perceptions people use facilitated public open spaces that provide them with the places for eating, smoking, sitting, doing activities, etc. Due to the awareness towards different opportunities in the public open spaces, people admire the facilities more than

social benefits and health-promoting opportunities, which are not observable. Nevertheless, the designers should not underestimate these intangible or in other words immeasurable opportunities that indirectly benefit the users. The results imply that people are not aware of the opportunities that public open spaces provide them for social interaction and communication with each other. In addition, they might not seriously consider the role of the public open spaces in boosting up their health and quality life. In fact, upon the use of public open space for benefiting from the facilities provided, the users are aware of such opportunities that are undeniably important for their social and environmental comfort. Narrowing down to the context of the research, it is indisputable that in a multicultural society like Malaysia socio-cultural factors significantly influence the way people are attracted to the public open spaces. The following statements from the experts in the fields of urban design, town planning, and landscape architecture support the results:

‘It is due to the public’s perception of the public open spaces. Since we got our dependence from the British in 1957, people have been narrowly acknowledging the open spaces in cities due to the cultural perceptions. People only consider parks, gardens, and recreational areas open spaces. Largely in Malaysia, people use public open spaces for benefiting from the facilities such spaces provide. Sitting places, places for eating and shopping, washrooms, chess tables, etc. are observable. It is because of the awareness towards the opportunities of public open spaces. Nevertheless, social opportunities and wellbeing indirectly benefit the users.’ (Dr. Mohd Johari Mohd Yusof, Landscape Architect & Academician, 2014)

‘Facilities like benches and gazebos are the main factors that benefit people. The reason is that facilities affect social and health-promoting opportunities. Facilities are tangible, but social and health-promoting benefits not. We rarely see people of different ethnic groups sitting together in Dataran Merdeka, along Jalan Hang Kasturi, and in front of Majid India.’ (Norwahidah Binti Abdul Wahid, Town Planner in the City Hall Kuala Lumpur, 2014)

‘Yes, it is due to the knowledge and awareness of the benefits of public open spaces. Facility-based benefits of public open spaces present tangible physical elements that offer activities to the users. In contrast, social and health-promoting benefits normally refer to the attributes of public open spaces that are not visually observable.’ (Jasasikin Ab Sani, Landscape Architect & Academician, 2014)

Dr. Nor Zalina Harun (2014) stated that the selected public open spaces in the City Center of Kuala Lumpur are the urban thresholds where people use before reach their destination. Therefore, the facilities provided, such as place for sitting, eating, and meeting people, attract people the most.

‘Yes, I would agree with the findings as long as the study areas are well specified in terms of function. The places selected are far from residential areas and majority of the users are the tourist or people who use them as a threshold before they reach their destinations. This suggests that facilities, such as sitting, eating, and meeting people/friends, could be the most important activities conducted/seen/observed.’ (Dr. Nor Zalina Harun, Academician, 2014)

From a deeper viewpoint, Khairulizah Binti Jamaludin, a Town Planner in the City Hall Kuala Lumpur (2014) asserted that facilities in the public open spaces influence the way the users use such spaces, how they interact with each other, and the purpose of coming for taking fresh air and promoting wellbeing. She added that maintenance, design, accessibility, and providing enough parking lots are the urban factors that play a major role in attracting people to the public open spaces in the City Center of Kuala Lumpur.

‘We usually know what the public open spaces have in terms of facilities. People easily face many choices of facilities provided. Overall, facilities of public open spaces are observable and affect some other factors, such as the way people use these spaces, how they interact with each other, and the purpose of coming for taking fresh air and promoting wellbeing. In addition, other factors, such as maintenance, design, accessibility, and providing enough parking lots, play a major role in attracting people to the public open spaces in the City Center of Kuala Lumpur.’ (Khairulizah Binti Jamaludin, Town Planner in the City Hall Kuala Lumpur, 2014)

From cultural attitudes, Malaysians show a passion for using the public open spaces that are well equipped with the social facilities, such as eateries, that sell local foods of all ethnic groups. Providing such facilities makes people feel more socio-culturally comfortable in using such spaces more frequently. The role of users is a determining factor in that how and why the users occupy a public open space. Therefore, each group might have a specific reason for which they come to the public open spaces. In line with that, striking a balance between social and cultural factors strengthens ethnic groups' attachment to the public open spaces in the City Center of Kuala Lumpur.

4.8.3 The Role of Gender and Ethnicity in People's Needs in the Public Open Spaces

The results of content analysis show disagreements about the role of gender and ethnicity in determining people's needs in the public open spaces in the City Center of Kuala Lumpur. Some experts due to their perceptions of public open spaces asserted that people regardless of their gender and ethnicity have the same needs. This group focuses on the facilities and activities in the public open spaces. They believe that people in Malaysia regardless of their gender and ethnicity use the facilities equally and do socio-cultural activities happening in such places. In addition, this group believes that people perceive the public open spaces equally according to their gender and ethnicity and use such spaces for the same purposes. The following statements declared by the experts verify these premises:

'People do not perceive public open spaces according to their gender and ethnicity. They see the outdoor facilities as their needs; in contrast to fashion, which ethnicity and gender affect the way it is perceived.' (Dr. Mohd Johari Mohd Yusof, Landscape Architect & Academician, 2014)

‘Well, whether male or female, people should not have different opinions about their needs in the public open spaces. What happens in the contemporary contexts of Malaysia is that whatever facilities such spaces have we share and use. In the public open spaces in Malaysia, there is not activity that is only bound to either males or females. Males and females have the same needs and do the same activities too. People of different ethnic groups use the public open spaces equally. In Malaysia, the public open spaces do not have specific facilities for different ethnic groups. For instance, Malays also do Taichi (a kind of Chinese exercise) and Indians and Chinese might be involved in kite playing too.’ (Khairulizah Binti Jamaludin, Town Planner in the City Hall Kuala Lumpur, 2014)

‘We, Malaysians use the public open spaces for the same purposes. We go there to exercise, sit, take fresh air, meet friends, etc. We do not have different perceptions of needs according to our gender or ethnicity.’ (Norwahidah Binti Abdul Wahid, Town Planner in the City Hall Kuala Lumpur, 2014)

Slightly different, some experts stated that males and females due to their perceptions towards and expectations from the public open spaces have different needs. Despite believing that males and females have the same need, this group declared that the need for safety and security is more important among females than males. To this group, the difference in physical ability and interest in doing activities may cause different needs between males and females in the public open spaces in the City Center of Kuala Lumpur. Moreover, they declared that people in Malaysia regardless of their ethnicity have the same needs in the public open spaces. In fact, people of different ethnic groups use such spaces for the same purposes and facilities as long as socio-cultural activities do not violate their religious beliefs and culture.

‘Based on the findings of my studies conducted on ten public open spaces in Malaysia, it was revealed that ethnicity does not influence people’s opinions about their needs in the public open spaces. Nevertheless, in Malaysia males use the public open spaces more than females. This causes them to have different opinions about their needs as long as they have different expectations from and perceptions of such spaces. For instance, females are concerned about the security and safety of public open spaces more than males.’ (Dr. Nor Zalina Harun, Academician, 2014)

'In Malaysia, males and females may have different needs in the public open spaces as they have different physical abilities and interests in doing activities. Ethnicity should not affect the opinions on needs in the public open spaces as long as activities happening in such spaces do not violate their culture and beliefs.' (Jasasikin Ab Sani, Landscape Architect & Academician, 2014)

4.8.4 The Role of Age Group in Prioritizing Needs in the Public Open Spaces

The results of survey demonstrated that people's needs in the public open spaces comprise physical, environmental, and social. The priority of the needs varies according to age groups. This implies that the needs are vital and considerable in all age stages from adolescence to senescence. The statements by the experts showed that old people are more concerned about their physical and environmental needs; in contrast, are less inclined towards mingling with other age groups, especially young people in the public open spaces. Young people are concerned about their social needs more than older groups. They are ubiquitous all over the public open spaces, while colonizing some places to do their activities. This group needs to strengthen their social stability within their collectives and among other groups. Therefore, young people explore and experience the places to quench their thirst for discovery. Older people due to physical difficulty compared to younger groups are reluctant to explore the public open spaces and mingle with other groups; hence, they prefer to take advantage of environmental benefits in order to boost up their quality of life. They come to the public open spaces in order to benefit from a regular walk as a response to their physical activity cycle. Overall, older people prefer passive involvement in the public open spaces such as talking to friends, sharing their experience and memories, watching people doing activities, reading, etc. The following sentences quoted from the experts support the results:

'I agree. Through my observation, the elderly fill most of public open spaces in Malaysia. It goes back to the culture in Malaysia; the elderly do not easily communicate with younger people. Culturally, for ice breaking, the younger should first greet the elderly. This might be the start of mingling between these two groups.' (Dr. Mohd Johari Mohd Yusof, Landscape Architect & Academician, 2014)

'The elderly are the frequent users. Yes, I strongly agree as some of them are engaged with the places almost every day and for those who have retired, chatting with friends, sitting, and looking at people are among their preferred activities. These activities require less move/ physical energy. In contrast, young people normally go to the public open spaces for recreational purposes, playing games, etc. They are energetic and uncontrollable. Now they are here, later you observe them somewhere else doing some activities or mingling with their friends in their colonies.' (Dr. Nor Zalina Harun, Academician, 2014)

'It is a natural attitude that aging people do not have energy to do active activities. It is the time for them to relax. Their age refers to their physical condition to the extent that they like passive involvement in the public open spaces. In contrast, young people are energetic and go around exploring such places and mingling with others. You may find it different in the parks in Malaysia. In Bukit Kerinchi Recreational Park, you see old people also doing jungle trekking and are engaged with the environment the same as the young. You might see them around the waterfalls and overall, both young and old people do activities there.' (Khairulizah Binti Jamaludin, Town Planner in the City Hall Kuala Lumpur, 2014)

'Old people sit and talk to each other in their own groups. Some of them may go around based on their physical abilities. Mostly, they are involved in passive activities that require not that much energy. Public open spaces in Malaysia are planned to meet young people's needs more than those of the elderly. Hence, young people go around and mingle easily with their peers or other groups. One another important issue relating to our public open spaces is that the disabled's needs are not considered in most of such places. We have only two city parks that value the needs of the disabled, one Metropolitan Kepong Park and the other one Titiwangsa Park.' (Norwahidah Binti Abdul Wahid, Town Planner in the City Hall Kuala Lumpur, 2014)

'The physical ability and perception of doing activities are different among age groups. Older people prefer passive activities such as sitting, eating, reading, taking, and watching people, while the younger people prefer active involvement; they go around, explore, and mingle with other groups.' (Jasasikin Ab Sani, Landscape Architect & Academician, 2014)

Overall, the results imply that people in all age stages are concerned about their physical, environmental, and social needs. Due to physic-psychological changes; for instance, social needs will be more prominent in some age groups, while the importance of these needs wanes in other age groups. The experts pointed at the role of cultural beliefs in the use of the public open spaces in Malaysia among young and old people. Culturally accepted, the results revealed that young people should break the ice in social interactions in Malaysia, since the older people do not easily communicate with the young groups. In addition, the experts declared that most of the public open spaces in Malaysia only respond to the needs of young people. For this reason, older people feel deprived of taking full advantage of such spaces; nevertheless, they form a large portion of the frequent users.

4.8.5 The Factors that Affect Social Interactions in the Public Open Spaces

Social interaction in the public open spaces addresses the involvement of people with the place and other groups. It might be a normal talk between two friends, engaging in social activities, observing people doing activities, etc. Social interaction is a perplexing issue in nature, since various factors affect its quality. Collectively, the results of survey outlined that a quite number of factors influence social interactions in the public open spaces. These influential factors encompass personal, such as people's backgrounds, managerial, physical, and social. The results derived from the interviews with the experts showed that all these factors influence social interactions in the public open spaces. The experts asserted that the design of a public open space, use of the sitting places that maximize the social contact and exchange among people, giving a sense of relaxation, and providing activities are the main factors in enhancing the relationships among groups. In fact, these factors create inclusive public open spaces where different ethnic groups have a good time

by doing activities and contacting others. The experts declared that managerial, personal, and physical factors affect the social factors that significantly contribute to good relationships among groups, make public open spaces inclusive and animated, and address the socio-cultural activities provided. They mentioned that the social factors are the main target of a welcoming design that attracts the users and endows them with a sense of attachment to the place. In Malaysia, due to the cultural diversity people of different ethnic groups do not comfortably mingle with strangers in the public open spaces. This urban deterrent lowers the quality of social interactions among communities. Therefore, the experts pronounced the need for welcoming design elements that make the public open spaces inclusive of the strangers who comfortably mingle with others.

‘Yes I agree. Social interaction relates to the success of the design of a public open space. If the design is encouraging, we will have better social interaction among groups. Seating facilities play an important role in social interaction. In some parks, the designers only provide two-seater places, one seat for two people, which this design attitude influences the enhancement of relationship among groups.’ (Dr. Mohd Johari Mohd Yusof, Landscape Architect & Academician, 2014)

‘The way we do social interaction depends on the situation of public open spaces. We usually do not go to such places alone. I will go to the public open spaces; for instance, Jalan Hang Kasturi, if the design is welcoming enough. If the place gives me a sense of relaxation and I am able to make a good relationship with strangers across different ethnic groups, then I will be enthusiastic to visit such places. It shows why the social factors are the things that make our ultimate desire of having a good time in such places.’ (Khairulizah Binti Jamaludin, Town Planner in the City Hall Kuala Lumpur, 2014)

‘Social factors make good relationships among groups, give them privacy, and provide them with social comfort. This is what we look for in our multicultural communities in Malaysia. These factors are influenced by all other factors such as, background, physical condition, and management; therefore, social factors are the main target in improving the quality of social interactions in the public open spaces.’ (Norwahidah Binti Abdul Wahid, Town Planner in the City Hall Kuala Lumpur, 2014)

'In my opinion, the design of public open spaces strongly influences social interactions among different groups in such spaces. The public open spaces that promote the needs of local communities will improve the social interactions. Social factors enhance the social interactions among ethnic groups and promote more activities.' (Jasasikin Ab Sani, Landscape Architect & Academician, 2014)

Dr. Nor Zalina Harun (2014) stated that the personal factors do not significantly influence the quality of social interactions in the public open spaces of the City Center of Kuala Lumpur. She added that people's backgrounds influence the selection of the type of public open spaces preferred. Moreover, she agreed that the social factors generate a sense of attachment and belonging, which are the two important factors in creating successful public open spaces.

'I derived from my previous findings that personal background does not influence social interaction in the public open spaces whereas such a factor influences the selection of the type of public open spaces. Public open spaces offer more public eyes; thus, provide security. Yes, I would agree that social factors are the most influential in improving the quality of social interaction in the public open spaces as frequent uses generate more interactions among people. These interactions may create place attachment as well as place belonging. Both are important components in places based on the studies that proved that contemporary public open spaces could bind people together.' (Dr. Nor Zalina Harun, Academician, 2014)

4.8.6 The Characteristics of a Successful Public Open Space

The theories reviewed in the Chapter 2 supported that comfortable public open spaces are socially successful. The results of questionnaire surveys showed that a public open space obtains its conviviality through physical, meaning, activity, social, and design success. The experts believe that social success is the ultimate goal in making successful public open spaces in Malaysia. They declared that privacy, security, and providing different types of activities are the factors that contribute to socially successful public open spaces in

Malaysia. The experts justified the vital role of social access by pointing to the premise that social factors assist in creating socially strong relationships among different ethnic groups, obtaining personal privacy being involved in the public open spaces, and achieving the social support of other groups. They added that although Malaysians use the public open spaces for the facilities provided in the first place, the physical factors are of a less significance compared to the social factors, which relate to the eventual goal of making successful places. People should feel comfortable staying, mingling with others, and being actively engaged in the socio-cultural activities in the public open spaces. The following statements clearly show how the experts concur with the precedence of social success over other factors:

‘I agree. Culturally accepted, we got used to multi-cultural values in Malaysia. Different activities should be taken into consideration. In fact, the more activities, the more people come to the public open spaces. This directly influences the social success of a public open space as the ultimate goal.’ (Dr. Mohd Johari Mohd Yusof, Landscape Architect & Academician, 2014)

‘We need to enhance the relationships among ethnic groups in Malaysia; make people comfortably use and mingle with each other in such spaces. Privacy, security, providing different activities tailored to ethnic groups are the important social factors that play a significant role in making successful public open spaces. In between, although the physical look and architecture of a place are important, they are of a secondary priority. People should feel comfortable staying, mingling with others, and being actively engaged in the socio-cultural activities. In Malaysia, we do not have any public open spaces that have the features of a specific architecture; therefore, the physical factors might be less significant in making successful public open spaces.’ (Dr. Nor Zalina Harun, Academician, 2014)

‘Malaysians are attracted to the public open spaces by the physical factors as well as the facilities provided in the first place. Social factors are again the main target as long as help to establish good relationships among different ethnic groups, have personal privacy in getting involved in the public open spaces, and get the social support of others. This is important in making successful public open spaces in Malaysia.’ (Norwahidah Binti Abdul Wahid, Town Planner in the City Hall Kuala Lumpur, 2014)

'I think, since in Malaysia the public open spaces are normally meant for social activities; therefore, social factors that are influenced by other factors, such as the physical condition, meaning, activities, and design, will play a major role in the success of such spaces.' (Jasasikin Ab Sani, Landscape Architect & Academician, 2014)

Khairulizah Binti Jamaludin (2014) asserted that providing a variety of activities and socio-cultural options are the urban factors that significantly influence the social success of a public open space, which is the ultimate ring that a designer looks for in the design process. To her, the meanings that public open spaces bear are less significant in creating comfortable public open spaces than the physical factors such as architecture, outlook, location, accessibility, attractiveness, etc. She believes that in Malaysia people easily touch or sense the role of physical factors; nevertheless, do not care about the meanings attached to the public open spaces, since they lack enough knowledge in understanding them.

'For me, activities play an important role in making successful public open spaces, but the activities done in the public open spaces affect its social success. Such spaces should provide various activities and options to the users. We might have carnivals ongoing; some people might be interested in jogging; some others just see people doing activities. To me, the meanings attached play a less important role in the success of such spaces than the physical factors. I think that people in Malaysia do not care about meanings, inasmuch as they do not understand, but they easily touch the physical factors. Again, the social success is the eventual ring that we look for in the public open spaces, since we live in a multicultural society and need to have strong social bonds with others.' (Khairulizah Binti Jamaludin, Town Planner in the City Hall Kuala Lumpur, 2014)

The results supported that the success of a public open space strongly hinges on its social inclusiveness rather than merely on its physical attractiveness. In fact, the meanings attached, physical outlook, diverse activities, and responsive design are the important urban factors that contribute to socially successful public open spaces in Malaysia. The physical

features, architecture, and socio-cultural activities show their significance in making successful public open spaces by imparting cultural meanings to such spaces.

4.9 Summary

This chapter discussed the analyses of the data gathered from the questionnaire surveys as well as the results inferred. Moreover, it elaborated on the experts' validation of the results of analyses. The results showed that the selected public open spaces offer the opportunities for doing activities, social interactions among different groups, improving the emotional wellbeing, strengthening social support and solidarity, etc. Nevertheless, the facilities provided, such as places for sitting, eating, talking, reading, sufficient washrooms, etc. are the factors that play the most important role in attracting the users to stay longer in the places. The experts from landscape architecture, town planning, and academic expertise, elaborated that people due to their awareness of the public open spaces easily sense the facilities provided, while the social and health-improving benefits are not tangible for them.

Public open spaces provide the users with their social, physical, and environmental needs. The results pinpointed the priority of these needs over each other across age groups. The young people showed to have a tendency for exploring the places, doing activities, and mingling with both their peers and other age groups. This age group forms their colonies in the public open spaces to do activities, show off, and strengthen their social support. In contrast, the results revealed that people of older age groups mostly those who age 60 years old and above care about their physical and environmental needs more than social needs. The experts stated that old people mostly face physical problems and show a tendency for passive activities such as reading, sitting, talking to their friends, and watching people. This

group uses the public open spaces for a regular walk that strikingly improves their quality of life. They prefer well-facilitated places that are safe and devoid of young people. They hardly explore the public open spaces that this lowers the possibility of mingling with other people. In addition, the experts elaborated on the role of cultural values in Malaysia and revealed that the old people form a large number of the users of public open spaces who do not easily communicate with young people. They added that most of the public open spaces in the City Center of Kuala Lumpur respond to the needs of young groups, which this causes the old groups not to take advantage of the benefits in such spaces.

Social interaction in a public open space addresses the interplay between people and the place. It varies from a normal talk between two persons to activities carried out by different groups. The results of surveys demonstrated that background, management, physical features and characteristics, and social factors significantly influence the social interactions in the public open spaces. In line with the results, the experts pinpointed the most significant role of the social factors that establish good relationships among groups, provide miscellaneous activities, give people privacy, and provide them with social comfort. To them, this is what the designers and policy makers look for as inclusive public open spaces in the multicultural communities in Malaysia. In Malaysian context, a successful public open space is a socially comfortable place where offers numerous activities to people of different ethnic groups and has a welcoming design that increases the social inclusiveness. The experts pinpointed the major role of social factors in making people feel comfortable staying, mingling with others, and being actively engaged in the socio-cultural activities in the public open spaces. In fact, the social factors assist the designers in striving to improve the public life in the public open spaces of the congested City Centers.

CHAPTER 5

FINDINGS AND DISCUSSIONS

5.1 Introduction

This chapter elaborates on the findings of the research. It aims to dissect the dimensions of the findings critically. The role of backgrounds, such as age, gender, and ethnicity, in the use of the public open spaces and priority of the needs, identifying the factors that influence social interactions, and determining the characteristics of a successful public open space in the City Center of Kuala Lumpur are the main subjects discussed in this chapter. In fact, this chapter considers the impact of the findings on the improvement of the public life in the selected study areas. Moreover, it targets at comparing the findings with the relevant theories that concern various aspects of public open spaces. This might give insights into the impact of the theories on the context of the study.

5.2 The Role of Background in the Time Spent in the Public Open Spaces

The findings demonstrated that gender imposes a significant impact on the opinions about the length of stay in the public open spaces. It shows that males and females due to the difference in the purpose of coming and activities provided prefer to spend different length of time in the public open spaces of the City Center of Kuala Lumpur. Security, privacy, physical condition, visual and physical accessibility, location, and size are the important urban factors that influence the gender-related decisions about the length of stay in the public open spaces. Scholars showed to have different perspectives on the difference

between males' engagement in the public open spaces and that of females. Some scholars, such as James (2001); Terlinden (2003); Listerborn (2005), believe that males spend their time in public open spaces more than females. Overall, this group declares that females prefer to frequent shopping centers, as these places seem safer for them. In contrast, some others, such as Bru (1996); Garcia-Ramon et al. (2002); Paravicini (2002), demonstrate that women use public open spaces more than men do. Overall, the results show that men and women have differentiated attitudes towards the use of public open spaces.

The findings showed that people of different age groups have different opinions about the time they prefer to spend in the public open spaces. The results conform to what Terlinden (2003) and García-Ramon et al. (2004) stated that people's perceptions towards the use of public open spaces are in direct relationship to their age groups, inasmuch as the experiences and possibilities of using such spaces differ according to age groups. Similarly, teenagers' understanding of public open spaces is unconventional and different from that of adults (Travlou, 2007). Accordingly, Holland et al. (2007) affirmed that young people shape greater groups in vast spectrum of locations and times in public open spaces than adults. This might be the reason why younger people prefer to spend more time in such spaces than older people. In addition, as Peace et al. (2006) and Holland et al. (2007) stated, older people prefer to use public open spaces at the times different from younger people. They are more sensitive to others' presence and more inclined to be in public open spaces earlier in the day. Similarly, as Holland et al. (2007) declared, older people perceive the younger people and teenagers as a nuisance and threat for their privacy and social comfort. This might lead to the point that older people prefer to use public open spaces without the presence of younger people, especially teenagers.

Furthermore, the findings conveyed the point that older people spend less time in the public open spaces of the study area in the City Center of Kuala Lumpur than younger groups. It shows that despite the need for social interaction, the use of facilities, and promotion of quality of life, older people prefer not to frequent the public open spaces of the study area due to the fear of the presence of younger people that might disturb their social comfort. In addition, older people show their reluctance to come to the selected public open spaces as they think these spaces are devoid of the facilities that absorb their attention. In contrast, younger people come to the public open spaces to mingle with their peers, thereby strengthening their experimental development stage. Despite young people's passion for experiencing the public open spaces that results in mingling with other groups, on some occasions, they prefer to be secluded from other age groups and need more freedom in action without adults' supervision. Overall, the reason why older people do not use the public open spaces as frequently as younger people, despite their need for social interaction, a regular walk, and promoting their quality of life, is discussable in what Peace et al. (2006) and Holland et al. (2007) pointed out that older people shun places that are crowded by older children and young adults. This demonstrates that most of older people are nonchalant or unable to benefit from the full advantage of the public open spaces (Holland et al., 2007).

Interestingly, the findings implied that ethnicity does not strongly affect people's opinions on the time they prefer to spend in the public open spaces. Cultural differences that might arise across ethnic groups do not influence the length of the time people spend in the public open spaces of the City Center of Kuala Lumpur. The reason might be that people in Malaysia regardless of their ethnic difference use the public open spaces for the facilities and the benefits that these places offer. Hence, the length of the time spent is most probably

dependent on the urban issues such as the expectation from such places, the purpose of coming, the exclusion of offensive groups, facilities provided, security level, cleanliness, physical outlook, location, visual accessibility, personal privacy, and the socio-cultural activities happening in such places. Overall, people regardless of their background will stay longer in the public open spaces if they feel physically and psychologically comfortable.

5.3 The Predictors of a Longer Stay in the Public Open Spaces

The findings showed that the facilities, such as creating places for sitting, eating, shopping, and doing different activities and playing sports, are the most important factors in making people stay longer in the public open spaces of the City Center of Kuala Lumpur. Promoting emotional health, relaxing and escaping from the hustle and bustle of tiring urban life, enhancing the quality of life, doing social interactions, sharing personal ideas and viewpoints, obtaining knowledge about other cultures, and practicing religious thoughts are the factors that significantly make people stay longer in the public open spaces. The findings concur with Giles-Corti et al.'s (2005) statement that facilities and amenities play an important role in people's use and satisfaction of public open spaces. In conjunction with what Stauskis (2010) and Stauskis and Eckardt (2011) stressed, making social activities smoothly ongoing requires that the design of public open spaces include adequate social infrastructure as well as a variety of services. As declared by the scholars, such as Chiesura (2004); Harlan et al. (2006); Hansmann et al. (2007); Song et al. (2007), the findings confirm that public open spaces relate to physical and psychological health.

In a broader sense, the results support that public open spaces are substantial in improving individual wellbeing as well as community life and health. Cattell (2008) supported this premise well. The public open spaces with their far-reaching benefits enhance the psych-psychological health of the society by facilitating the social cohesiveness of the urbanites (Bedimo-Rung et al., 2005; Leslie et al., 2010; Lee & Maheswaran, 2011). In parallel with Fermino et al.'s (2013) findings, the findings of the research reveal that public open spaces through providing leisure and physical activities make salubrious urban living for people. As Karuppannan and Sivam (2012) stressed, the results emphasize a remarkable consideration to the public open spaces for their substantial contribution towards social interactions and quality of life in urban areas. It carries the very exact delineation of what Németh and Hollander (2010) pronounced that public open spaces are the vital lifeblood of cities structures where different types of interactions among diverse groups might take place. The findings imply that the selected public open spaces lack the facilities such as sufficient sitting places and washrooms. The design of such spaces should be attractive and welcoming so that people of different cultures and ethnicity feel comfortable mingling with strangers. For instance, the potential public open spaces in front of Masjid India and along Jalan Hang Kasturi have turned into the roofed pedestrianized walkways that do not have sufficient public facilities. These public open spaces are only shopping destinations and do not significantly contribute to improving the wellbeing and social comfort of the users in the City Center of Kuala Lumpur. The significant civic public open space of Dataran Merdeka is the place where important socio-cultural activities and national events take place. Despite its important role in enlivening the public life in the City Center, the place is not successful in creating social relations among different ethnic groups.

5.4 The Role of Background in the Importance of Opportunities

The findings demonstrated that gender is the factor that influences people's opinions about the importance of the facilities and health-promoting benefits of public open spaces. It insinuates that males and females assert different opinions about the role of the public open spaces in the City Center of Kuala Lumpur in providing the facilities, such as places for eating, sitting, and shopping, etc., and promoting the users' psychological and emotional wellbeing. In contrast, they significantly assent to the important role of the public open spaces in enhancing the social relationships among ethnic groups and strengthening the social solidarity in communities in the City Center of Kuala Lumpur. From ethnic differences, the findings showed that people of different ethnic groups have different opinions about the importance of the opportunities in the public open spaces. In fact, the cultural issues bring about the differences in perceptions of and expectations from the miscellaneous benefits in the public open spaces among ethnic groups in Malaysia. Furthermore, the findings showed that people of different age groups possess significantly different opinions about the importance of the opportunities in the public open spaces. It implies that people's expectations from the physical, environmental, and social aspects of the public open spaces vary according to their age groups.

The findings pointed at the belief supported by McDowell (1999); Terlinden (2003); García-Ramon et al. (2004) that people's perceptions of using public open spaces are affected by their age for at different age stages their experiences and possibilities to use such spaces differ. The reason that people reveal different opinions about the importance of the opportunities that attract them to the public open spaces is traceable in Carmona et al.'s (2003) finding elucidating that human behavior towards public open spaces is

fundamentally dependent on the physical, social, cultural, perceptual, and situational aspects of the places. In more details, it has a root in people's recognition of activity opportunities, their skills to propel their opportunities, and expected benefits from them (Thompson, 2007). Therefore, people's evaluations of the opportunities offered in the public open spaces give the designers insights into improving the design of such spaces.

5.5 The Role of Age in Prioritizing the Needs in the Public Open Spaces

The findings indicated that the older people, the less they explore the public open spaces and mingle with other groups. The older people are more concerned about their physical and environmental needs. Overall, the findings aimed to give a comprehensive stress to the negligence in considering the needs of younger people in public open spaces. This is in line with what Holland et al. (2007) stated that adults' attitudes and older people's needs prevail and; in contrast, the designers seldom consider the perceptions, priorities, and needs of young people in public open spaces. The results elaborated on young people's passion for experiencing and exploring the public open spaces of the City Center of Kuala Lumpur. Young people most of the time gather in groups in different parts of public open space as a necessity of their youth social identity development cycle. In strengthening their sense of place, they need to involve in leisure activities, play sports, and experiment different facets of public open spaces. This justifies and furthers what Holland et al. (2007) and Lieshout and Aarts (2008) discussed that young people are harmless most of the time; therefore, they just colonize some places as their practice of youth identity and contribution to their sense of place for they shift into adulthood. This causes young people to shape greater groups in the vast spectrum of locations and times in public open spaces than adults. Putting all the benefits together, public open spaces impart socio-physical and emotional wellbeing to

young groups, which has been supported by Thompson et al. (2006). Supportively, the results imply what Thompson (2007) and Travlou (2007) declared that teenagers are more inclined to use physically attractive spaces, albeit their interest to be engaged with public open spaces is more highlighted with the affordance of social support and activities. As stated by Tucker (2003); Thompson et al. (2004); Holland et al. (2007), the results support that engagement in public open spaces makes younger people foster their self-identity in response to their peers and other members of the society. This stresses the findings of the research that younger people are more willing to be in exposure to the social opportunities in public open spaces than older people. Therefore, public open spaces should host various social activities to engage young people in the activities more. This emphasizes the point that young people hang at public open spaces since the beginning of time as such spaces offer opportunities for them to meet each other and talk, to show off or even to find a partner (Noorda & Veenbaas, 2000).

Considering older people's involvement in the selected public open spaces, the findings demonstrated that this group by stressing their physical needs hopes to benefit from the environmental comfort in such spaces. Therefore, on a par with Rejeski and Mihalko (2001); McAuley et al. (2006); Thompson (2007), the results supported that involving in regular physical activities in the public open spaces is an important constituent of older people's needs, which enhances their quality of life. Due to physical difficulties, older people show their reluctance to explore public open spaces, which this lowers the chance of mingling with other groups, especially younger people such as teenagers. More specifically, the other reason that might lessen older people's social interactions with other groups is hidden in Peace et al. (2006) and Holland et al.'s (2007) declaration that they are more sensitive to others' presence and more inclined to be in public open spaces earlier in the

day. This prompts them to shun places that are dark, deserted, and crowded with older children and young adults. In general, old people prefer the public open spaces monitored by visible security personnel. Therefore, this group is most of the time unable to benefit from the full advantage of public open spaces (Holland et al., 2007). Undoubtedly, older people also need to mingle with their peers, as stressed by Cattell et al. (2008), this social interaction has a direct relationship with comfortability, safety, and easiness of public open spaces. For older people, public open spaces play an important role in enhancing their life expectancy and quality of life (Sugiyama et al., 2009). In fact, these spaces promote old people's quality of life through the clearing the way for social interactions (Bowling et al., 2003; Sugiyama et al., 2009). The findings stressed that young people are more interested in direct involvement in the public open spaces such as exploring, discovering, and doing different activities and sports. In contrast, the old people prefer to sit and talk to their friends, share their ideas and viewpoints, walk regularly in safe and secure places, and watch people doing activities. The design of the selected public open spaces in the City Center of Kuala Lumpur should welcome both young and old people. For instance, the designers should strike a balance between the needs of young and old people in Dataran Merdeka. The place should provide more youth-related socio-cultural activities and give them more action in forming their colonies away from other groups' control. Despite having some gazebos, the place is not successful in providing the older groups with their social needs such as talking to their friends, watching the scenes, enjoying their time without the presence of young people.

5.6 The Predictors of Social Interactions in the Public Open Spaces

The findings showed that the managerial, physical, personal, and social factors significantly influence social interactions in the public open spaces of the City Center of Kuala Lumpur. The physical factors impose the lowest significant impact on the quality of social interactions. It implies that people come to public open spaces for social interactions and are not merely concerned about the physical condition of such spaces. The findings showed that the factors of architecture, physical outlook, visual attractiveness of the place, the elements used for construction, location, and accessibility significantly influence social interactions in the selected public open spaces. The results are in line with the declaration of Pasaogullari and Doratli (2004) that frequently used public open spaces are centrally located in a neighborhood, which has proximity to residential units, has good visibility from the street by being next to other public uses. Additionally, the findings supported that people are more enthusiastic to use the public open spaces near their homes and workplaces, as stressed by Thompson (2007). Overall, the results highlighted what Rad and Ngah (2013) stated that accessibility of public open spaces is an influential factor in augmenting the quality of social interactions. The strategic location of the selected public open spaces near major streets and train stations is an important urban factor in attracting the users.

Public art that usually portrays the pictorial culture of nations is substantial in enhancing social interactions in the public open spaces. Therefore, due to various reasons that might be rooted in the cultural attributes towards public open spaces, most people in the City Center of Kuala Lumpur have accepted public art as an inseparable component of public open spaces. In Malaysia, there are two possibilities in which public art drastically

improves social interactions across ethnic groups by increasing the inclusiveness in public open spaces. First, physical features and socio-cultural meanings should inhere in public arts displayed in the public open spaces that commemorate national jubilation and triumph. Besides that, these public arts should portray culturally valued physical elements adored by ethnic groups. In more details, public arts should comprise the features and symbolic elements of Islamic Architecture as well as the features and motives used in the sculptures and god images of Hindu and Buddhist temples to attract more heterogeneously inclusive groups to the public open spaces. Overall, this concurs with the belief supported by Tomlinson (1999); Project for Public Space (2001); Weber (2003); David (2008); Mustafa (2009) that public art augments the quality of social interactions. In addition, the results accentuated the substantial role of public art in enlivening public open spaces, as advocated by Carr et al. (1992); Parfect and Power (1997); Özsoy and Bayram (2007).

The rules that control the safety and security of a public open space and cleanliness are the significant urban factors that affect social interactions in the selected public open spaces. Scholars, such as Pasaogullari and Doratli (2004) and Holland et al. (2007), support this premise as well. The findings conformed to Shaftoe (2008) and Talen's (2008) statement that the feeling of safety in day and night should be instilled as a necessary component of successful urban design projects. In Malaysia, applying groundbreaking management strategies should assure people of safety and security. Installing big public displays like digital boards that act like CCTVs, increases inclusiveness that directly improves social interactions in the public open spaces of the City Center of Kuala Lumpur. In addition to that, the presence of security guards from any ethnic groups who frequently control the places significantly contributes to creating the socio-psychologically comfortable public open spaces where social interactions easily happen across ethnic groups. The selected

public open spaces lack the security facilities that assure people of their physical and social comfort. In addition, the management of such spaces should enforce stricter rules in excluding offensive groups, pickpockets, and drunken people who might conduct antisocial behaviors. In addition, the management bodies in the public open spaces in front of Masjid India and along Jalan Hang Kasturi should enforce frequent cleaning programs that ensure salubrious places for the users.

People's background, such as age, gender, culture, religion, ethnicity, social class, and educational level that influence their opinions, also affect social interactions across different groups. Scholars such as Garcia-Ramon et al. (2004) and Holland et al. (2007) have advocated this premise well. Accordingly, these factors might cause numerous types of interactions such as personal, intergroup, and intragroup. The management of the public open spaces in the City Center of Kuala Lumpur should mitigate the conflicts between young and old people, who mostly consider each other a nuisance. Malaysia is a country in which diverse groups of different social classes with different monthly incomes exist; therefore, the management of the public open spaces should be hospitable enough for low-income social classes of the society as well.

Of the utmost significance and influence, enhancing the relationship among groups of people, giving rights to all groups to use the public open spaces, and holding a vast spectrum of social activities that involve all groups are the urban factors that most contribute to the enhancement of social interactions in the public open spaces of the City Center of Kuala Lumpur. The findings confirmed that the existence of a vast spectrum of activities, such as formal and informal events, national celebrations, concerts, and street performance, increases the presence of people that directly enhances social interactions

among heterogeneous groups in the public open spaces. A plethora of scholars, such as Carmona et al. (2003); Madanipour (2004); Mean and Tims (2005); Burton and Mitchell (2006); Dines et al. (2006); Holland et al. (2007); Shaftoe (2008); Gehl (2011); Rad and Ngah (2013), supported the role of socio-cultural activities in enlivening the public open spaces. In fact, such well-organized social events impart positive values to the urban areas, by gathering society together and offering socio-environmental benefits (Pugalis, 2009). Implicitly, to achieve this, the design and size of public open spaces should be welcoming to various activities (Tibbalds, 2001; Shaftoe, 2008; Gehl, 2011).

More importantly, the findings of the research supported that inclusiveness strongly increases the quality of social interactions, inasmuch as everybody feels free to come to such spaces. This premise has been supported by numerous scholars, such as Kohn (2004); Mean and Tims (2005); Holland et al. (2007); Shaftoe (2008), considering different aspects of social interactions in public open spaces. In enhancing social interactions among people, as asserted by Campos and Golka (2005), public open spaces should not be too exposed, while should provide good views and instill some sorts of privacy for un-programmed activities. Visibility and visual perception are given a specific attention on how people mingle and experience public open spaces and are considered the two influential factors in the design of public open spaces (Bada & Farhi 2009; Bada & Guney, 2009). There is a relationship between social interactions and privacy (Charkhchian & Daneshpour, 2009). One type of privacy that plays a significant role in social interactions in public open spaces is physical privacy. If physical privacy is well-defined and established in an environment, such as a public open space, a broader spectrum of individual choices of interactions will take place. Avoiding contacting other groups and controlling spatial zones are the ways to establish privacy in public open spaces (Ramezani & Hamidi, 2010). The study areas are

welcoming places where people of different groups easily come to. Providing more activities, such as seasonal, optional, and optional, strikingly improves social interactions in the study areas. The design of sitting places does not offer opportunities for different types of social contacts among people. For instance, the lack of sufficient sitting places in the public open spaces in front of Masjid India and along Jalan Hang Kasturi decreases social interactions among groups. In addition, the design of the public open spaces of the City Center of Kuala Lumpur should assure people of the physical and psychological privacy. In Dataran Merdeka, the arrangement of sitting places does not provide people with personal privacy.

In Malaysia, cultural barriers, as social deterrents, make ethnic groups more or less conservative in creating strong social bonds with other groups. To eradicate the social barriers among diverse groups in Malaysia, public open spaces should provide various places with different levels of privacy. In this condition, the place preserves personal privacy for those who want to be secluded from others. Therefore, various types of sitting places and design elements strike a balance among different sorts of interactions. Based on the size, the public open spaces should provide social events suitable for all groups. For instance, Dataran Merdeka should provide opportunities for carrying out all kinds of performances ranging from Islamic practices to Chinese Lion Dance and Indian rituals. This inclusiveness due to the provision of different activities, as Carmona et al. (2003) accentuated, arouses the sense of discovery that animates the public open spaces in the City Center of Kuala Lumpur. Therefore, no specific group's culture is overestimated and all groups feel a strong sense of belonging and attachment to the place.

5.7 The Predictors of Successful Public Open Spaces

The findings showed that the physical, meaning, activity, social, and design success are the factors that make comfortable public open spaces in the City Center of Kuala Lumpur. The most significant predictor of a successful public open space encompasses the factors that contribute to its social success. These factors include daily interaction and animation, inclusiveness of all groups of people, and privacy among different groups. The designers should consider these urban factors in the future development of public open spaces. The findings imply that there is a complicated labyrinth of factors with strong inter-relationships, which contributes to the success of a public open space in the City Center of Kuala Lumpur. The findings showed the social perspective of the research attitude towards public open spaces, as declared by Goodsell (2003) and Houssay-Holzschuch and Teppo (2009), in which the way diverse people use such spaces is of a prime significance. Given this inclusiveness, public open spaces welcome groups of diverse cultures and interests for social interactions and interrelations with others (Ortiz et al., 2004).

The findings in line with what Giles-Corti et al. (2005) stated, supported that facilities are the significant factors that play an important role in people's use and satisfaction of the selected public open spaces. Another important factor that influences the social success of a public open space is the design of its edge (Carmona et al., 2003). Therefore, the findings stressed that the inner spaces and edges of the public open spaces of the City Center should have formal or informal sitting facilities to create opportunities for social interactions. Holland et al. (2007); David (2008); Shaftoe (2008) stressed the role of providing different types of sitting places in improving the social inclusiveness of a public open space. As stressed by Carmona et al. (2003), a responsive public open space is the place flexible for

various occasions as well as being a fostering space by providing people with diverse choices. This research supported Charkhchian and Daneshpour's (2009) findings that a responsive public open space is discussable within physical, activity, social, and meaning success. Besides that, the findings revealed that the design of a public open space plays an important role in making it responsive to people's needs. As stated by Carr et al. (1992), the selected public open spaces in the City Center should be indiscriminate. They should be accessible for all groups of people, including diverse age groups, social classes, the disabled, and even informal organizations. CABE and DETR (2001) and Gehl (2002) supported that accessibility of all groups influences the social success of a public open space. To achieve this, the management and design of the study areas should make people regardless of their social classes and physical conditions proud of using the place. Designing various types of sitting spaces and cozy places that instill the sense of privacy significantly contributes to socially successful public open spaces in the City Center of Kuala Lumpur. Such socially inclusive spaces create a strong sense of social solidarity and support among their users (Amin, 2008; Rad & Ngah, 2013).

In line with what Stauskis (2010) and Stauskis and Eckardt (2011) stated, the public open spaces in the City Center should provide a variety of services, users' interests, and social infrastructures acting like the catalysts for fostering social activities. The City Hall Kuala Lumpur should enact the rules that allow all ethnic groups to conduct their activities in the public open spaces without any statutory or managerial limitations. Rad and Ngah (2013) stated that attractiveness of a public open space hinges on providing sufficient sitting spaces, places for holding special events, such as street performances, presenting public arts, and social activities that bind people to the place. Madanipour (2004); Mean and Tims (2005); Holland et al. (2007); David (2008); Shaftoe (2008) have also advocated this

premise. In conjunction with Ryan (2006), the public open spaces in the City Center should be flexible to hold numerous activities including planned and spontaneous ones; they should have the capacity of transformability to welcome more uses, while reviving their context. The findings revealed that arousal of the sense of curiosity, possessing symbolic elements and historical significance, and distinctiveness are the important factors that contribute to the success of the selected public open spaces in the City Center. Whyte (2001) and Gehl (2011) elaborated that the success of a public open space must go beyond its mere appearance; therefore, it should be repository of routine encounters and shared experiences. This is why a successful public open space should consist of access, comfort and image, uses and activities, and sociability (Project for Public Space, 2001).

The findings, as Giles-Corti et al. (2005) and Nasution and Zahrah (2012) stated, stressed that a successful public open space should enhance people's psychological comfort and safety. Safety is an urban concern that attracts more people to public open spaces (Burton & Mitchell, 2006; Holland et al., 2007; Shaftoe, 2008; Rahely Namin et al., 2013). In fact, the management of Dataran Merdeka and the public open spaces in front of Masjid India and along Jalan Hang Kasturi should impose more control over the places to assure the users of psychological comfort and safety. In Malaysia, people do not easily communicate with the strangers; therefore, applying effective management methods increases social interactions among groups. As Rad and Ngah (2013) declared, a socially successful public open space boosts up daily dynamic interactions and exchange of ideas and experience among different groups.

From physical conviviality, the findings concurred with CABE and DETR (2001); Project for Public Space (2001); Gehl (2002) in that a successful public open space should be clean, easy to access, and include well-connected movement systems. In addition, a successful public open space should possess high-quality architecture (Carr et al., 1992), natural settings, and elements that offer comfort, relaxation, and soothing experiences. In fact, bringing comfort into a public open space is partially achievable through planting trees near paths and sitting places (Kaplan & Kaplan, 1982; Carr et al., 1992; Gehl, 2002). Similarly, physical quality, appearance, and attractiveness are the factors that substantially enhance the success of a public open space (Sugiyama et al., 2009; Rad & Ngah, 2013). Moreover, the findings demonstrated that location of a public open space, which refers to its accessibility, is another important factor in making it physically successful. Accessibility plays a significant role in attracting people as well as augmenting social interactions in public open spaces (Rad & Ngah, 2013). To be accessible, public open spaces should welcome everybody where differences are touched (Duffy, 2003; Kohn, 2004; Marcuse, 2006; Holland et al., 2007; Stauskis & Eckardt, 2011).

5.8 Conclusion

Providing places for sitting, eating, shopping, doing activities and playing sports, and sufficient washrooms are the basic factors that attract people to the public open spaces of the City Center of Kuala Lumpur. Social interactions with others, sharing ideas, learning from others, practicing religious thoughts, enjoying free time, enhancing the quality of life, and benefiting from emotional wellbeing are the hidden opportunities that contribute to physical, social, and psychological comfort in a public open space. The priority of needs varies from age group to age group in public open spaces. Young people need to explore

public open spaces, form their territories and colonies, and do activities. This uncontrollable group mingles with both their age-mates and other age groups. In contrast, old people due to physical problems prefer passive activities in public open spaces. They mostly talk to their friends, share experience with their age-mates, and watch people. This group needs to benefit from a regular walk without the presence of young people who might endanger their socio-psychological comfort. In fact, young people come to public open spaces to strengthen their social support, while old people use such spaces to increase their quality of life as well as life expectancy.

One of the most important issues in relation to people's use of public open spaces is the social interaction among different groups. Physical and psychological privacy, giving the equal right to groups, safety and security, enforcing the rules that exclude offensive groups, attractiveness, cleanliness, public art, location, visual and physical accessibility, and providing numerous socio-cultural activities and events are the urban factors that significantly influence social relationships among groups in the public open spaces of the City Center of Kuala Lumpur. A successful open space is the most comfortable place where people easily access, create social relationships with others, engage themselves in events and activities, enjoy an attractive design and architecture, and feel a sense of belonging and attachment.

CHAPTER 6

IMPLICATIONS, CONCLUSIONS, AND RECOMMENDATIONS

6.1 Introduction

This chapter summarizes the major findings of the research and their implications. It aims to fill up the urban gaps in the development of public open spaces by giving design-centric suggestions that assist designers in creating socially successful public open spaces where diverse groups of people comfortably use. In addition, this chapter discusses the limitations of the findings and recommends a few studies that investigate different aspects and dimensions of public open spaces. Lastly, it elaborates on how the findings of the research contribute to the future development of successful public open spaces in the City Center of Kuala Lumpur or any other similar contexts.

6.2 The Reasons for which People Use the Public Open Spaces

Public open spaces as vital components of cities provide diverse benefits, such as social, environmental, psychological, and physical facilities and opportunities for the urbanites. The physical facilities and opportunities that public open spaces provide attract people the most. These facilities include providing places to rest, read, eat, smoke, play, do various social activities, hold gatherings, and even watch people walking or doing different activities. The public open spaces benefit the users with the psychological and emotional comfort. The public open spaces in the heart of City Centers should include green areas, areas suitable for playing and exercising, water features, and attractive elements that

psychologically refresh people. This issue is more critical for old people, inasmuch as the regular use of public open spaces significantly enhances their quality of life and increases their life expectancy. Although people come to the public open spaces to use a wide range of facilities and opportunities provided, they strengthen their social support. This creates social bonds among the people who might not know each other. Confluence of different cultures is more critical in a multicultural society like Malaysia. Cultural discrepancies might separate groups from each other; hence, the public open spaces are the best gathering places where there are no cultural borders among ethnic groups. This implies that designers should not only focus on the physical aspects of public open spaces, but also incorporate the cultural values of all ethnic groups into the design elements to ensure socio-cultural interactions. This social inclusiveness animates the public open spaces in the City Center, while no culture is predominant. The public open spaces should be welcoming to all groups, while some strict rules exclude offensive groups who derange the users' socio-psychological privacy. Designers should provide a variety of contact choices for the users of public open spaces, i.e. people easily interact with whomever they want and shun the groups who they do not like. In other words, the design of a public open space should provide people with personal comfort and privacy.

6.3 People's Needs in the Public Open Spaces

Identifying people's needs according to their age groups due to the complexity of human nature is a critical urban issue. All age groups are concerned about their physical and environmental needs in the public open spaces. Nevertheless, middle-aged and old people consider their physical needs more than young people, especially teenagers. In turn, teenagers showed to be attentive to their social needs more than other age groups. They

prefer to make strong relations with both their peers and other groups to foster their identical characteristics as they shift to next stage of their life. Old people mainly come to the public open spaces for a regular walk and promoting their quality of life. Although social interaction is a vital component of life cycle of each age group, middle-aged and old people showed less enthusiasm for social interaction with other groups. This denotes that these groups are less adventuresome to explore the public open spaces and mingle with other age groups. It might be due to their physical conditions and the change in their perceptions of the places. In contrast, young people due to their adventurous nature are eager to explore the public open spaces for doing activities and social interactions with a wider range of people. In some occasions, young people turn into uncontrollable groups that vandalize the public open spaces and endanger other groups' comfort zones.

6.3.1 The Role of People's Needs in the Design of Public Open Spaces

Confrontation of people of different age groups in the public open spaces makes various conflicts among them. Old people mostly have problem with young people's presence in the public open spaces, which this signifies the importance of social and personal privacy for old groups. Therefore, the designers should consider places separately for each age group in order to lessen the conflicts among young and old groups. The public open spaces of the City Center should have places commensurate with age groups needs that are physically separate and visually connected. In this condition, the public open spaces are full of transparent places with the maximum level of privacy for each age group. As another advantage of such a design, young people freely use the places without the physical interference of old groups. In turn, old groups benefit from various aspects of public open spaces without the presence of young people who are mostly considered a nuisance. Apart

from that, the public open spaces should have communal spaces where social activities, such as cultural shows, festivals, street performances, and outdoor film shows, happen. The common places should be accessible to the main pedestrian networks as well as the edge areas to ensure the animation of public open spaces. Conservatively, pedestrian walkways of public open spaces should act like the blood veins of a body, while jeopardize the levels of privacy for social interactions within the groups the least. Greenery and natural elements, such as water features placed near sitting opportunities, make more restorative environments that drastically enhance people's correspondence with both others and the public open spaces. Responding to climate issues is one the significant issues that make the public open spaces more comfortable. Specifically due to Malaysia's hot and humid weather, most of the pedestrian walkways should be shaded to assure the users of the maximum physical and environmental comfort.

6.4 Social Interactions in the Public Open Spaces

Social interaction is an essential need in human beings' life. Social interactions in the public open spaces might be a short discussion between two persons who do not know each other, informal and formal gatherings, participating in social activities and events such as street performances and cultural shows, and even only people watching. This demonstrates that social interaction is so perplexing in nature to the extent that there are numerous factors that affect it. With reference to the context of research, social interaction plays a significant role in enlivening the communities in Malaysia where Malay, Chinese, and Indian cultures exist. The physical features of a public open space, such as its architecture and outlook, have the least significant impact on the quality of social interactions in the public open spaces of the City Center of Kuala Lumpur. Easy access and attractiveness are the

influential factors in attracting people to such spaces that increase social inclusiveness, while do not directly affect the quality of social interactions. Safety, enforcing the rules that create sense of security, personal privacy, and cleanliness are the factors that significantly contribute to enhancing social interactions in the City Center. Of a higher impact, the personal factors, such as gender, age, culture, and social class, create borders and discrepancies among groups that affect their social interactions. Given this, the personal factors influence the way people perceive and use the public open spaces, which this shapes different ranges of social interactions. People of lower social classes like workers often feel less confident in participating in the social events. Unplanned social activities as well as optional events might be the best response to this social barrier. Of the highest significance, inclusiveness that is the concomitant of improving relationships among the users and providing social activities strongly animates the public open spaces. There is a strong correspondence between management and inclusiveness, inasmuch as the management of public open spaces should give an equal access right to all people, while enforcing some strict rules that inhibit offensive groups from disturbing the users.

6.4.1 The Role of Social Interactions in the Design of Public Open Spaces

This research demonstrated that improving the relationships among ethnic groups significantly increases social interactions in the public open spaces of the City Center of Kuala Lumpur. The findings of this research imbed the design implications that assist the designers in creating inclusive public open spaces in the context of the City Center of Kuala Lumpur. The following statements include the implications that present the designers with some practical design suggestions for the future design and development of the public open spaces of the City Center of Kuala Lumpur.

- 1) The design of public open spaces should include a mix of cultural elements of ethnic groups. Therefore, this architectural integration should assist the designers in creating public arts that portray the thoughts of all the prominent cultures of the society.
- 2) The public open spaces should provide a wide range of social opportunities for their users. Such spaces should include the secure places that protect people's personal privacy. In addition to that, the design of public open spaces should offer various types of sitting opportunities suitable for formal and informal assemblies, cultural shows, performances, and social activities. More importantly, the edges of public open spaces should be well accessible to the surrounding areas to increase the social inclusiveness.
- 3) The public open spaces should be equipped with monitoring systems, such as CCTVs, patrols, and security guards, to give physical and psychological comfort and security to their users.
- 4) All the places of a public open space should be transparent and visually accessible to the extent that there are no cozy places for committing a crime.
- 5) The designers should create separate privacy zones for young and old people to let each group freely benefit from the opportunities provided.
- 6) The design of such spaces should include sufficient focal points that make human flow more smoothly happen in response to the contextual boundaries of public open spaces.
- 7) The design of public open spaces should be distinctive that arouses the users' sense of belonging to the place

6.5 Successful Public Open Spaces

A successful public open space is the place where people feel comfortable, easily participate in activities, and mingle with other groups. The length of the time people spend in the public open spaces specifies the degree of their comfort and success. The social success, which refers to social interactions among different groups, inclusiveness of all groups, creating social relations among groups, and physical and psychological privacy, is the most influential urban factor in making a public open space successful. Moreover, the factors that address different aspects of the physical conditions of a public open space affect its success the least compared to design features, activities, and meanings attached. Overall, people use the public open spaces either passively or actively. Given this, providing the facilities that make people comfortably use such places and participate in various social events and activities contributes to the successful public open spaces.

The design of a public open space plays a major role in its success and comfort. Designing places for shopping and eating, considering different focal and gathering places, optimum size, various sitting spaces including formal, informal, and movable, sufficient washrooms, and designing suitable outdoor furniture and informative signs are the design features that contribute to the success of a public open space. In addition, high-quality architecture, historical symbolic elements, attractive views and elements, green spaces and water elements, well-connected elements, and giving sufficient moving opportunities are influential in making a successful public open space in the City Center of Kuala Lumpur.

6.5.1 The Design Considerations in the Successful Public Open Spaces

The findings of the research proved that the incorporation of symbolic elements into the design of public open spaces assists the designers in creating socially convivial public open spaces. In Malaysia, the design of public open spaces should include the elements, motives, and intricacy of Malay, Chinese, and Indian Architectures. As such, diverse groups of people of different sectarians of the society enthusiastically utilize the public open spaces and feel a strong sense of belonging and attachment to such spaces. Besides that, the use of elements with cultural values that arise from different beliefs and thoughts creates distinctive and memorable public open spaces in the City Center of Kuala Lumpur. The findings also imply that utilizing historically significant elements that reminisce about the memories of national triumphs, jubilation, and heroes is influential in enlivening successful public open spaces in Malaysia.

6.6 The Limitation of Research

The research employing an exploratory approach in the field of urban design mainly focused on determining the characteristics of a socially successful public open space in the City Center of Kuala Lumpur. To achieve this, the research discussed the reasons for which people use the public open spaces, priority of needs according to age groups, and the factors that influence social interactions in such spaces. The research did not focus on the role of cultural values in embodying different socio-cultural needs in the public open spaces. Furthermore, it did not consider the technical issues, such as climatic considerations, concerning the design of public open spaces. Since the needs of physically impaired people are quite different from those of people without disabilities, this research

only stressed the characteristics of a successful public open space that meets the needs of people without any physical disabilities. The research did not determine the role of economic and managerial factors in designing successful public open spaces in the City Center. In addition, the objectives of the research did not focus on the role of the policies complied by the City Hall Kuala Lumpur in developing the future public open spaces. Lastly, the research did not identify the role of the existing public open spaces in the environmental and economic development of the City Center of Kuala Lumpur.

6.7 Contribution of the Findings

The findings of the research contribute to the development of socially sustainable community spaces in the City Center of Kuala Lumpur. This research contributes to enhancing the design of successful public open spaces that play a major role in augmenting the quality of public life in the City Centers. From a broader sense, the implications of the findings imbed practical considerations that assist the designers in deeply understanding different groups' perceptions of multifarious aspects of the built environment. In addition, the findings contributed to understanding and developing the theories concerning social interactions and the features of a successful public open space. Lastly, this research through identifying the dichotomies between the needs of old and young people highlighted the intergenerational conflicts that challenge the urban designers and decision makers to ameliorate the design and management of future public open spaces.

6.8 The Recommended Future Studies

In order to link the research to the current trend of urban design, the research recommends that the following future studies explore different issues concerning people's presence in the public open spaces:

- 1) The research recommends that a comprehensive study identify the role of religion and culture in prioritizing the needs in the public open spaces.
- 2) A future study should identify the technical considerations in the design of successful public open spaces in the City Center of Kuala Lumpur.
- 3) The research recommends that a comprehensive study identify the role of the principles of universal design in forming people's needs in the public open spaces of the City Center of Kuala Lumpur.
- 4) In addition, the future studies should identify how gender-based considerations affect the design of a convivial public open space.
- 5) Since the disabled's requirements in the public open spaces differ from those of people without physical disabilities, the research recommends that a study comprehensively identify the needs of people with physical impairment in the public open spaces.
- 6) As stressed by Perovic and Folic (2012), public open spaces are visual repositories that play a determining role in forming the cities' image. Therefore, the research recommends that a study examine the role of the public open spaces in improving the urban image of the City Center of Kuala Lumpur.

6.9 Conclusion

Public open spaces are the social arenas where people of different backgrounds and ethnicities gather for benefitting from various opportunities provided. Social inclusiveness is an urban factor that most contributes to the success of a public open space that meets people's needs and provides them with physical, emotional, and psychological comfort. A socially inclusive public open space is the civic place where diverse socio-cultural activities take place. Historical significance and symbolic elements are influential factors that make distinctive public open spaces, strengthening the sense of belonging and attachment to the place. Malaysia is a melting pot of three major cultures of Indian, Chinese, and Malay; therefore, the findings of this research offer the pragmatic suggestions for the development of inclusive public open spaces that augment the dynamism and quality of public life in the City Centers of tropical Southeast Asian countries. In fact, the findings through presenting the factors that contribute to the conviviality of public open spaces assist the urban designers and planners in creating livable, healthy, and socially sustainable communities.

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APPENDIX A: QUESTIONNAIRE SURVEY (ENGLISH)



Public survey on successful public open spaces

Dear participants;

I am a PhD student at the Faculty of the Built Environment, University Malaya. I am currently carrying out a study on successful public open spaces in the City Center of Kuala Lumpur, inasmuch as there is scant information about the discourse. In general, successful open spaces are arenas for achieving the needs of all age groups. The results will contribute to the enhancement of public life in City Centers.

Undoubtedly, results of the study are derived from the rough information gathered in the questionnaires; hence, your answers are highly appreciated by the researcher and his supervisor (s). The questionnaire contains questions on demographic particulars, length of time spent in a public open space, the reasons for lingering in a public open space, needs in a public open space, components of a successful public open space, and the factors that influence social interactions in a public open space.

Objectives:

- A) To identify the reasons that attract the public to the public open spaces of the City Center of Kuala Lumpur
- B) To determine the role of users' backgrounds, such as gender, ethnicity, and age, in their needs in the public open spaces of the City Center of Kuala Lumpur
- C) To identify the factors that affect people's social interactions in the public open spaces of the City Center of Kuala Lumpur
- D) To determine the urban factors that contribute to successful public open spaces in the City Center of Kuala Lumpur

Confidentiality:

It is worth stressing that your participation in this survey is voluntary. The researcher will keep your identity and information confidential. The survey will take 20 minutes of your time. Please feel free to answer all the questions. Should you have any further inquiries, please contact me at (017-3741631).

Yours truly,

Amir Hossein Askari,
Researcher,
Faculty of the Built Environment,

University of Malaya
Reference Number:

THE TITLE OF THE SURVEY: Successful public open spaces date: / / Participant's Number:

Part A: Demographic Particulars

This part is about you and will be used only for categorization. (Please Circle)

A) Your ethnicity is: a) Malay b) Chinese c) Indian d) Others

B) Your age group is: a) 13-20 Your age is:.....
b) 21-30
c) 31-40
d) 41-50
e) 51 and above

C) Your Gender is: a) Male b) Female

PART B: TIME SPENT IN A PUBLIC OPEN SPACE

How long do you usually spend in public open spaces in the City Center? (Please circle)

- a) Less than 30 minutes
- b) 30 minutes to 1 hour
- c) More than 1 hour

PART C: REASONS FOR LINGERING IN A PUBLIC OPEN SPACE

The following statements describe the reasons that make people come and stay in a public open space. Please choose the scale to indicate the degree of your agreement with each statement.

(1) strongly disagree (2) somehow disagree (3) neither agree nor disagree (4) agree (5) strongly agree

You come to a public open space to benefit from:

	1	2	3	4	5
c1) various facilities for sitting and eating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c2) various facilities for buying and selling goods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

c3) various facilities for doing different activities such as playing sports, going on a picnic, etc	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c4) events such as festivals, concerts, outdoor film shows, etc	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c5) interacting and socializing with other groups, races, and ethnicities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c6) knowing other cultures or expressing our cultures to others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c7) close social connection and relation with others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c8) sharing experiences with other groups to extend our general knowledge and learn from one another	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c9) enhancing the sense of competition among people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c10) improving our capacities to better interact with others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c11) practicing religious thoughts and beliefs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c12) an arena for democracy and freedom of speech	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c13) enjoying free time to be away from work and daily chores	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c14) enhancing the quality of life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c15) emotional health and wellbeing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C1) Please feel free to list down other reasons that attract people into a public open space.

.....

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PART D: PEOPLE'S NEEDS IN A PUBLIC OPEN SPACE

The following statements describe needs in a public open space. Please choose the scale to indicate the degree of your agreement with each statement.

1) strongly disagree 2) somehow disagree 3) neither agree nor disagree 4) agree 5) strongly agree

In a public open space, you need:

	1	2	3	4	5
d1) well-connected movement paths that help you easily walk around the place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d2) natural elements such as trees, greenery, and water features	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d3) playing sports and doing activities such as reading, and playing chess	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d4) shelter to be protected from wind, sun, etc	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d5) places for eating, drinking, and smoking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d6) seating opportunities to sit and take a break	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d7) places for skateboarding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d8) lighting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d9) wash room	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d10) weather comfort either natural or artificial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

d11) ease, relaxation, and being away from stress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d12) protection from offensive groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d13) safety and security	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d14) sense of belonging to the place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d15) experimenting and exploring the environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d16) meeting and socializing with others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d17) privacy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d18) sense of support and comfort by others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

D1) Please feel free to list down other needs that are important in public open spaces.

.....

PART E: THE COMPONENTS OF A SUCCESSFUL PUBLIC OPEN SPACE
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The following statements describe the components of a successful public open space. Please choose the scale to indicate the degree of your agreement with each statement.

1) *strongly disagree* 2) *somehow disagree* 3) *neither agree nor disagree* 4) *agree* 5) *strongly agree*

	1	2	3	4	5
e1) A public open space should make people stay with relief and peace of mind	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e2) A public open space should be safe and secure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e3) A public open space should have public art	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e4) A public open space should be sunlit and clear of trash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e5) A public open space should be in a good location, mainly in dense locations and City Centers to be easily found and accessed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e6) A public open space should be commensurate with human scale	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e7) A public open space should be connected to its context	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e8) A public open space should arouse people's sense of curiosity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e9) A public open space should present symbolic and cultural elements that strengthen different cultures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e10) A public open space should make people feel sense of belonging to the place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e11) A public open space should make people feel hospitable to others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e12) A public open space should have historical significance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e13) A public open space should be memorable and distinctive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e14) A public open space should provide different activities such as sports for different people at different times	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e15) A public open space should facilitate people to watch people, fountains, public art, performances, etc	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

e16) A public open space should make people directly involved in activities and events held by different groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e17) A public open space should include events such as band concert, fairs, festivals, anniversaries, etc	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e18) A public open space should have daily interaction and animation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e19) A public open space should provide access for all groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e20) A public open space should give people privacy by feeling boundaries between themselves and others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e21) A public open space should give people opportunities to accomplish their desires and goals among other people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e22) A public open space should have places for shopping and eating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e23) A public open space should have different focal and gathering places	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e24) A public open space should be neither so small nor so big	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e25) A public open space should have various seating facilities such as formal, informal, and movable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e26) A public open space should have sufficient washrooms and hard landscaping such as suitable outdoor furniture and informative signs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e27) A public open space should be high quality in architecture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e28) A public open space should have attractive views and elements, and soft landscaping such as green spaces and water elements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e29) A public open space should include well-connected elements and give sufficient moving opportunities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

PART F: SOCIAL INTERACTION IN A PUBLIC OPEN SPACE

The following statements describe the meaning of social interaction in a public open space. Please choose the scale to indicate the degree of your agreement with the statement.

1) strongly disagree 2) somehow disagree 3) neither agree nor disagree 4) agree 5) strongly agree

	1	2	3	4	5
f1) Socialization in public open spaces might be watching others, a quick conversation, sharing information, and participating in social activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f2) Socialization is the ultimate outcome of mingling with other groups that results in multicultural encounters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

PART G: FACTORS THAT AFFECT SOCIAL INTERACTIONS IN A PUBLIC OPEN SPACE

The following statements describe the factors that influence social interactions in a public open space. Please choose the scale to indicate the degree of your agreement with each statement.

1) strongly disagree 2) somehow disagree 3) neither agree nor disagree 4) agree 5) strongly agree

	1	2	3	4	5
g1) Age	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g2) Ethnicity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g3) Culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g4) Gender	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g5) Social class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g6) Education level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g7) Religion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g8) Diversity of physical forms, elements, and furniture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g9) Existence of physical obstacles and uneven surfaces	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g10) Arrangement of the elements that construct the place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g11) Presentation of public art	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g12) Enough pedestrian paths that allow easy movements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g13) Historical reputation of the place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g14) Architecture and physical outlook of the place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g15) Location of the place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g16) Ease in finding the place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g17) Easy access to the place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g18) Rules that people should follow in a public open space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g19) The way a public open space is ruled, controlled, and managed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g20) Cleanliness of the place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g21) Safety and security of the place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g22) Relationships between people in their groups and with other groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
gf23) Equal right given to all groups in using a public open space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g24) People presence that animates the place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g25) Event such as lunch-time concerts, art exhibitions, festivals, annual events, and unusual events	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g26) Various types of activities such as playing sports, and formal and informal gatherings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

G1) Please feel free to list down other factors that you think influence social interactions in public open spaces.

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APPENDIX B: QUESTIONNAIRE SURVEY (MALAY)



Kajiselidik awam terhadap kawasan awam terbuka

Dear participants;

I am a PhD student at the Faculty of the Built Environment, University Malaya. I am currently carrying out a study on successful public open spaces in the City Center of Kuala Lumpur, inasmuch as there is scant information about the discourse. In general, successful open spaces are arenas for achieving the needs of all age groups. The results will contribute to the enhancement of public life in City Centers.

Undoubtedly, results of the study are derived from the rough information gathered in the questionnaires; hence, your answers are highly appreciated by the researcher and his supervisor (s). The questionnaire contains questions on demographic particulars, length of time spent in a public open space, the reasons for lingering in a public open space, needs in a public open space, components of a successful public open space, and the factors that influence social interactions in a public open space.

Objectives:

- A) To identify the reasons that attract the public to the public open spaces of the City Center of Kuala Lumpur
- B) To determine the role of users' backgrounds, such as gender, ethnicity, and age, in their needs in the public open spaces of the City Center of Kuala Lumpur
- C) To identify the factors that affect people's social interactions in the public open spaces of the City Center of Kuala Lumpur
- D) To determine the urban factors that contribute to successful public open spaces in the City Center of Kuala Lumpur

Confidentiality:

It is worth stressing that your participation in this survey is voluntary. The researcher will keep your identity and information confidential. The survey will take 20 minutes of your time. Please feel free to answer all the questions. Should you have any further inquiries, please contact me at (017-3741631).

Yours truly,

Amir Hossein Askari,
Researcher,
Faculty of the Built Environment,
University of Malaya

Nombor Rujukan:

TAJUK KAJIAN: Ruang lapangan awam yang berjaya tarikh : / / Nombor peserta :

Bahagian A: Butiran Demografi

Bahagian ini adalah mengenai anda dan akan hanya digunakan untuk pengkategorian. (Sila Bulatkan)

A) **Bangsa anda:** a) Malay b) Cina c) India d) Lain - lain

B) **Kumpulan umur anda:** a) 13-20 **Umur anda:**.....
b) 21-30
c) 31-40
d) 41-50
e) 51 dan keatas

C) **Jantina anda:** a) Lelaki b) Perempuan

BAHAGIAN B: MASA YANG DILUANGKAN DALAM RUANG LAPANGAN AWAM

Berapa lama anda biasa gunakan di dalam ruang awam terbuka di pusat bandar? (Sila bulatkan)

- a) Kurang daripada 30 minit
- b) 30 minit hingga 1 jam
- c) lebih daripada 1 jam

BAHAGIAN C: SEBAB UNTUK MERAYAU DI RUANG LAPANGAN AWAM.

Pernyataan di bawah menerangkan sebab-sebab yang membuat orang datang dan tinggal di kawasan lapang awam. Sila pilih skala untuk menunjukkan tahap persetujuan anda dengan setiap kenyataan.

1) sangat tidak setuju 2) tidak begitu bersetuju 3) sama ada bersetuju atau tidak bersetuju 4) setuju 5) sangat setuju

Anda datang ke ruang lapangan ramai untuk menikmati:

	1	2	3	4	5
c1) pelbagai kemudahan untuk bersantap dan makan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c2) pelbagai kemudahan untuk membeli dan menjual barangan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c3) pelbagai kemudahan untuk membuat aktiviti lain seperti	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

bermain sukan, berkelah dan lain – lain					
c4) acara seperti pesta, konsert, tayangan filem dan lain-lain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c5) berinteraksi dan bersocial dengan kumpulan lain kaum dan bangsa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c6) mengetahui budaya lain atau menerangkan budaya kita kepada orang lain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c7) tutup penyambungan social dan hubungan dengan orang lain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c8) berkongsi pengalaman dengan kumpulan-kumpulan lain untuk melanjutkan kami pengetahuan am dan belajar daripada satu sama lain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c9) meningkatkan rasa persaingan dikalangan orang	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c10) meningkatkan keupayaan kita untuk berinteraksi dengan orang lain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c11) mengamalkan pemikiran agama dan kepercayaan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c12) satu arena untuk demokrasi dan kebebasan bersuara	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c13) menikmati masa lapang untuk mengelak dari kerja – kerja lain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c14) meningkatkan kualiti hidup	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c15) Emosi kesihatan dan kesejahteraan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C1) Sila senaraikan sebab-sebab lain yang menarik orang ramai ke dalam ruang lapangan awam.

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BAHAGIAN D: KEPERLUAN ORANG RAMAI DALAM RUANG LAPANGAN AWAM
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Pernyataan di bawah menerangkan keperluan dalam kawasan lapang awam. Sila pilih skala untuk menunjukkan tahap persetujuan anda dengan setiap kenyataan.

1) sangat tidak setuju 2) tidak begitu bersetuju 3) sama ada bersetuju atau tidak bersetuju 4) setuju 5) sangat setuju

Dalam ruang lapang awam, anda memerlukan:

	1	2	3	4	5
d1) laluan pergerakan berhubung baik yang membantu anda mudah berjalan kaki di sekitar tempat itu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d2) unsur alam semulajadi seperti pokok-pokok, tumbuh-tumbuhan, dan ciri-ciri air	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d3) bermain sukan dan aktiviti-aktiviti seperti membaca lakuan, dan bermain catur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d4) perlindungan untuk dilindungi daripada angin, matahari, dan lain-lain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d5) tempat untuk makan, minum, dan merokok	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d6) peluang untuk duduk dan berehat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d7) tempat untuk bermain papan gelongsor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

d8) lampu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d9) tandas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d10) keselesaan cuaca sama ada semula jadi atau buatan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d11) keselesaan, bersantai, dan jauh dari tekanan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d12) perlindungan daripada kumpulan serangan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d13) keselamatan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d14) perasaan kepunyaan tempat itu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d15) mencuba dan meneroka alam sekitar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d16) bertemu dan bersosial dengan orang lain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d17) peribadi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d18) rasa sokongan dan keselesaan oleh orang lain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

D1) Sila senaraikan keperluan lain yang penting di kawasan lapang awam.

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BAHAGIAN E: KOMPONEN RUANG LAPANGAN AWAM YANG BERJAYA
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Pernyataan di bawah menerangkan komponen tanah lapang awam yang berjaya. Sila pilih skala untuk menunjukkan tahap persetujuan anda dengan setiap kenyataan.

1) sangat tidak setuju 2) tidak begitu bersetuju 3) sama ada bersetuju atau tidak bersetuju 4) setuju 5) sangat setuju

	1	2	3	4	5
e1) Suatu ruang lapangan awam perlu membuat orang ramai bertenang dan melegakan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e2) Ruang lapangan awam perlu selamat dan terjamin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e3) Ruang lapang awam perlu mempunyai seni awam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e4) Ruang lapangan awam perlu diterangi matahari dan bersih	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e5) Ruang lapangan awam perlu berada di lokasi yang baik, terutamanya dalam lokasi padat dan pusat-pusat bandar untuk mudah didapati dan diakses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e6) Ruang lapangan awam hendaklah sepadan dengan skala manusia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e7) Ruang lapang awam perlu berkaitan kepada konteksnya	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e8) Ruang lapangan awam perlu membangkitkan keinginan manusia kepada rasa ingin tahu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e9) Ruang lapangan awam hendaklah mengemukakan simbolik dan budaya elemen yang mengukuhkan budaya yang berbeza	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e10) Ruang lapangan awam perlu membuat orang merasa milik di tempat itu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e11) Ruang lapangan awam perlu membuat orang merasa mesra dengan orang lain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e12) Ruang lapangan awam perlu mempunyai kepentingan sejarah	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

e13) Ruang lapangan awam perlu menjadi kenangan dan tersendiri	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e14) Ruang lapangan awam perlu menyediakan aktiviti yang berbeza seperti sukan untuk orang yang berbeza pada masa yang berlainan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e15) Ruang lapangan awam perlu memudahkan rakyat untuk menonton orang, air pancut, seni awam, persembahan dan lain-lain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e16) Ruang lapangan awam perlu membuat orang secara langsung yang terlibat dalam aktiviti-aktiviti dan acara yang diadakan oleh kumpulan-kumpulan yang berbeza	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e17) Ruang lapangan awam hendaklah termasuk acara-acara seperti konsert hiburan, pesta, perayaan, ulang tahun, dan lain-lain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e18) Ruang lapangan awam perlu mempunyai interaksi harian dan animasi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e19) Ruang lapangan awam perlu menyediakan untuk semua kumpulan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e20) Ruang lapangan awam perlu memberi orang bersendirian oleh perasaan sempadan antara diri mereka dan lain-lain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21) Ruang lapangan awam perlu memberi orang peluang untuk mencapai keinginan dan matlamat mereka di kalangan orang lain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e22) Ruang lapangan awam perlu mempunyai tempat untuk membeli-belah dan makan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e23) Ruang lapangan awam perlu mempunyai fokus yang berbeza dalam mengumpul tempat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e24) Ruang lapangan awam harus tidak begitu kecil dan tidak begitu besar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e25) Ruang lapangan awam perlu mempunyai kemudahan tempat duduk pelbagai seperti formal, tidak formal, dan harta alih	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e26) Ruang lapangan awam perlu mempunyai tandas yang mencukupi dan landskap keras seperti perabot luar yang sesuai dan tanda-tanda bermaklumat.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e27) Ruang lapangan awam perlu berkualiti tinggi dalam seni bina	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e28) Ruang lapangan awam perlu mempunyai pemandangan yang menarik dan unsur-unsur, dan landskap lembut seperti kawasan hijau dan unsur-unsur air	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e29) Ruang lapangan awam harus merangkumi elemen-elemen yang berkaitan dan memberi peluang bergerak yang mencukupi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

BAHAGIAN F: INTERAKSI SOSIAL DALAM RUANG LAPANGAN AWAM

Pernyataan di bawah menerangkan pengertian interaksi sosial dalam kawasan lapang awam. Sila pilih skala untuk menunjukkan tahap persetujuan anda dengan kenyataan itu.

1) sangat tidak setuju 2) tidak begitu bersetuju 3) sama ada bersetuju atau tidak bersetuju 4) setuju 5) sangat setuju

	1	2	3	4	5
f1) Sosialisasi di ruang lapangan awam mungkin memerhati orang lain, perbualan yang cepat, berkongsi maklumat, dan mengambil bahagian dalam aktiviti-aktiviti sosial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f2) Sosialisasi adalah keputusan muktamad bermesra dengan lain-lain kumpulan yang menghasilkan pertemuan pelbagai budaya	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

BAHAGIAN G: FAKTOR – FAKTOR YANG MEMBERI KESAN INTERAKSI SOSIAL DALAM RUANG LAPANGAN AWAM
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Pernyataan di bawah menerangkan faktor-faktor yang mempengaruhi interaksi sosial dalam ruang lapangan awam. Sila pilih skala untuk menunjukkan tahap persetujuan anda dengan setiap kenyataan.

1) sangat tidak setuju 2) tidak begitu bersetuju 3) sama ada bersetuju atau tidak bersetuju 4) setuju 5) sangat setuju

	1	2	3	4	5
g1) Umur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g2) Bangsa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g3) Budaya	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g4) Jnatina	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g5) Kelas sosial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g6) Tahap pendidikan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g7) Agama	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g8) Kepelbagaian bentuk fizikal, unsur, dan perabot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g9) Kewujudan halangan fizikal dan permukaan yang tidak rata	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g10) Penyusunan unsur-unsur yang membina tempat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g11) Persembahan seni awam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g12) Laluan pejalan kaki cukup yang membolehkan pergerakan mudah	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g13) Reputasi sejarah herhadap tempat tersebut	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g14) Seni Bina dan pandangan fizikal terhadap tempat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g15) Lokasi tempat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g16) Kemudahan dalam mencari tempat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g17) Akses mudah ke tempat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g18) Peraturan yang orang harus mengikuti di ruang lapangan awam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g19) Cara ruang lapangan awam diperintah, terkawal, dan diuruskan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g20) Kebersihan tempat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g21) Keselamatan dan keselamatan di tempat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g22) Hubungan antara orang-orang dalam kumpulan mereka dan dengan kumpulan-kumpulan lain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
gf23) Hak kesamaan diberi kepada semua kumpulan dalam menggunakan ruang lapangan awam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g24) Kehadiran orang ramai yang menghidupkan tempat itu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g25) Acara seperti konsert pada waktu makan tengah hari, pameran-pameran seni, pesta, acara tahunan dan acara-acara yang luar biasa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g26) Pelbagai jenis aktiviti seperti bermain sukan, dan perhimpunan rasmi dan tidak rasmi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

G1) Sila berasa bebas untuk senaraikan faktor-faktor lain yang anda fikir pengaruh interaksi sosial di ruang lapang awam.

TERIMA KASIH ATAS KERJASAMA ANDA

UNTUK MAKLUMAT LANJUT

SILA HUBUNGI AMIR SYAKIRIN ASKARI PADA 0173741631

APPENDIX C: THE STRUCTURED INTERVIEW



The Structured Interview on Successful Public Open Spaces

Dear participants;

I am a PhD student at the Faculty of the Built Environment, University Malaya. I am currently carrying out a study on successful public open spaces in the City Center of Kuala Lumpur, inasmuch as there is scant information about the discourse. In general, successful open spaces are the arenas where the needs of all age, gender and ethnical groups are met. The contribution of the results is directed to the enhancement of people's quality of life in the City Centers.

The sequence of the design questions have been derived from the extracted results of a public survey. Hence, the results of this interview both complement and validate the results of the public survey and explore experts' opinions on successful public open spaces that eventually validates the results of the study to be used as suggestions for the future developments of public open spaces in the City Center of Kuala Lumpur.

Undoubtedly, your answers are highly appreciated by the researcher and his supervisor (s). Given this, the interview encompasses a series of questions that cover diverse aspects of successful public open spaces. For your information, the following sentences are the research objectives.

Objectives:

- A) To identify the reasons that attract the public to the public open spaces of the City Center of Kuala Lumpur
- B) To determine the role of users' backgrounds, such as gender, ethnicity, and age, in their needs in the public open spaces of the City Center of Kuala Lumpur
- C) To identify the factors that affect people's social interactions in the public open spaces of the City Center of Kuala Lumpur
- D) To determine the urban factors that contribute to successful public open spaces in the City Center of Kuala Lumpur

Confidentiality:

It is worth stressing that your participation in this interview is voluntary while the researcher extremely needs you to answer the questions for you have been considered as an expert in the field of urban design. The researcher will vehemently keep your identity and information confidential. Please try to answer all the questions and if you want any further information, please contact the researcher at (017-3741631).

Yours truly,

Amir Hossein Askari,
Researcher,
Faculty of the Built Environment,
University of Malaya

Reference Number:

Date: / /

Interviewee's Number:

Part A: Demographic Particulars

This part is about you and will be used only for categorization. (Please Circle)

A) Your ethnicity is: a) Malay b) Chinese c) Indian d) Others

B) Your age is:

C) Your Gender is: a) Male b) Female D) Your expertise is:

Part B: Interview Questions

Please give your opinion on the following questions.

- 1) Public open spaces offer opportunities such as facility-based, social, and health-promoting benefits for the people who use them. The results of public survey show that out of all opportunities, facility-based benefits have the strongest role in attracting people to such spaces and making them stay longer. On the other hand, social and health-promoting benefits are of a lower importance. Please give your opinion about this.

- 2) The results show that people of different age groups have significantly different opinions about the length of the time they stay in public open spaces. In addition to that, males and females possess different opinions about this issue. In contrast, people according to their ethnicity have the same opinion about the time they spend in such spaces. Do you agree with that? Please give your opinion on this.

- 3) The results demonstrate that people's needs in public open space are physical, environmental, and social. Do you think that gender and ethnicity affect people's opinions about their needs in public open spaces?

- 4) The results of the survey demonstrate that when people get older they are less inclined to explore public open spaces and do social interaction with other group ages. In contrast, they are so concerned about their environmental and physical needs. Younger people are willing to explore public open spaces; therefore, they are so enthusiastic in mingling with both their peers and others. What do you think about this?

- 5) It is indicated that social interaction among different groups in a public open space is influenced by personal, such as background, managerial, physical, and social factors. It has been demonstrated that social factors are the most influential in improving the quality of social interaction in public open spaces. Please give your opinion.

- 6) It was shown that the five factors of physical, meaning, activity, social, and design success are essential in making a successful public open space. In this line, the results show that social success plays the most significant, in contrast, physical success the lowest role in making a successful public open space. Please give your opinion.

APPENDIX D: INTERVIEWEES' BACKGROUND AND QUALIFICATION

Name	Academic Qualification	Affiliation	Expertise
Dr. Mohd Johari Mohd Yusof	PhD in Geographical Information System, University of Edinburgh, UK	Universiti Putra Malaysia	Geographical Information System, Urban Green Space, and Landscape Design and Architecture
Transcript	<p>1) It is due to the public's perception of the public open spaces. Since we got our dependence from the British in 1957, people have been narrowly acknowledging the open spaces in cities due to the cultural perceptions. People only consider parks, gardens, and recreational areas open spaces. Largely in Malaysia, people use public open spaces for benefiting from the facilities such spaces provide. Sitting places, places for eating and shopping, washrooms, chess tables, etc. are observable. It is because of the awareness towards the opportunities of public open spaces. Nevertheless, social opportunities and wellbeing indirectly benefit the users.</p> <p>2) It goes back to the physical capacity of age groups. Young people feel have more energy compared to the elderly; therefore, stay longer in such spaces. Facilities are mostly tailored to the needs of younger people than those of older people. Females due to their physical capacity have less energy level compared to males; hence, might spend less time in such spaces. They are scared of the threats might encounter in exposure to other groups. Culturally based, we got used to Malaysian culture regardless of different ethnicities or races. They [people] look for the facilities provided. I suppose that different ethnicities have the same period of time as well as energy to spend in such places.</p> <p>3) People do not perceive public open spaces according to their gender and ethnicity. They see the outdoor facilities as their needs; in contrast with fashion, that ethnicity and gender affect the way it is perceived.</p> <p>4) I agree. Through my observation, the elderly fill most of public open spaces in Malaysia. It goes back to the culture in Malaysia; the elderly do not easily communicate with younger people. Culturally, for ice breaking, the younger should first greet the elderly. This might be the start of mingling between these two groups.</p> <p>5) Yes I agree. Social interaction relates to the success of the design of a public open space. If the design is encouraging, we will have better social interaction among groups. Seating facilities play an important role in social interaction. In some parks, the designers only provide two-seater places, one seat for two people, which this design attitude influences the enhancement of relationship among groups.</p> <p>6) I agree. Culturally accepted, we got used to multi-cultural values in Malaysia. Different activities should be taken into consideration. In fact, the more activities, the more people come to the public open spaces. This directly influences the social success of a public open space as the ultimate goal.</p>		

Name	Academic Qualification	Affiliation	Expertise
Asst. Prof. Dr. Nor Zalina Harun	PhD in Architecture, UTM	International Islamic University Malaysia	Environmental Psychology, especially in Urban Public Spaces in Malaysia
Transcript	<p>1) Yes, I would agree with the findings as long as the study areas are well specified in terms of function. The places selected are far from residential areas and majority of the users are the tourist or people who use them as a threshold before they reach their destinations. This suggests that facilities, such as sitting, eating, and meeting people/friends, could be the most important activities conducted/seen/observed.</p> <p>2) Yes, this is largely because of the nature and location of the areas inasmuch as none of them is meant for recreational purposes; therefore, I believe that majority of the users only use the public open spaces as a threshold, but Dataran Merdeka.</p> <p>3) Based on the findings of my studies conducted on ten public open spaces in Malaysia, it was revealed that ethnicity does not influence people's opinions about their needs in the public open spaces. Nevertheless, in Malaysia males use the public open spaces more than females. This causes them to have different opinions about their needs as long as they have different expectations from and perceptions of such spaces. For instance, females are concerned about the security and safety of public open spaces more than males.</p> <p>4) The elderly are the frequent users. Yes, I strongly agree as some of them are engaged with the places almost every day and for those who have retired, chatting with friends, sitting, and looking at people are among their preferred activities. These activities require less move/ physical energy. In contrast, young people normally go to the public open spaces for recreational purposes, playing games, etc. They are energetic and uncontrollable. Now they are here, later you observe them somewhere else doing some activities or mingling with their friends in their colonies.</p> <p>5) I derived from my previous findings that personal background does not influence social interaction in the public open spaces whereas such a factor influences the selection of the type of public open spaces. Public open spaces offer more public eyes; thus, provide security. Yes, I would agree that social factors are the most influential in improving the quality of social interaction in the public open spaces as frequent uses generate more interactions among people. These interactions may create place attachment as well as place belonging. Both are important components in places based on the studies that proved that contemporary public open spaces could bind people together.</p> <p>6) We need to enhance the relationships among ethnic groups in Malaysia; make people comfortably use and mingle with each other in such spaces. Privacy, security, providing different activities tailored to ethnic groups are the important social factors that play a significant role in making successful public open spaces. In between, although the physical look and architecture of a place are important, they are of a secondary priority. People should feel comfortable staying, mingling with others, and being actively engaged in the socio-cultural activities. In Malaysia, we do not have any public open spaces that have the features of a specific architecture; therefore, the physical factors might be less significant in making successful public open spaces.</p>		

Name	Academic Qualification	Affiliation	Expertise
Khairulizah Binti Jamaludin	Degree in Urban & Regional Planning, UTM	City Hall Kuala Lumpur	Town Planner, City Center Zone, Land Use & Intensity
Transcript	<p>1) We usually know what the public open spaces have in terms of facilities. People easily face many choices of facilities provided. Overall, facilities of public open spaces are observable and affect some other factors, such as the way people use these spaces, how they interact with each other, and the purpose of coming for taking fresh air and promoting wellbeing. In addition, other factors, such as maintenance, design, accessibility, and providing enough parking lots, play a major role in attracting people to the public open spaces in the City Center of Kuala Lumpur.</p> <p>2) Young people are active groups and have a lot of time for coming to the public open spaces. We usually see them in groups exploring such spaces. They freely chitchat with each other, chill out, and do active involvement in such spaces. In contrast, old people prefer passive activities such as talking, relaxing, and people watching; hence, they may spend less time compared to the young groups. In general, different groups have their own purpose of coming to the public open spaces that this causes them to spend a specific amount of time there. Safety concern and the purpose of use are the important factors that influence the time people of different gender might spend. Females in Malaysia usually come with their friends, spouses, and relatives, while males come on their own and may spend more time there. In Malaysia, I suppose that people regardless of the differences in ethnic issues come to the public open spaces in order to take advantage of whatever facilities and opportunities exist.</p> <p>3) Well, whether male or female, people should not have different opinions about their needs in the public open spaces. What happens in the contemporary contexts of Malaysia is that whatever facilities such spaces have we share and use. In the public open spaces in Malaysia, there is not activity that is only bound to either males or females. Males and females have the same needs and do the same activities too. People of different ethnic groups use the public open spaces equally. In Malaysia, the public open spaces do not have specific facilities for different ethnic groups. For instance, Malays also do Taichi (a kind of Chinese exercise) and Indians and Chinese might be involved in kite playing too.</p> <p>4) It is a natural attitude that aging people do not have energy to do active activities. It is the time for them to relax. Their age refers to their physical condition to the extent that they like passive involvement in the public open spaces. In contrast, young people are energetic and go around exploring such places and mingling with others. You may find it different in the parks in Malaysia. In Bukit Kerinchi Recreational Park, you see old people also doing jungle trekking and are engaged with the environment the same as the young. You might see them around the waterfalls and overall, both young and old people do activities there.</p> <p>5) The way we do social interaction depends on the situation of public open spaces. We usually do not go to such places alone. I will go to the public open spaces; for instance, Jalan Hang Kasturi, if the design is welcoming enough. If the place gives me a sense of relaxation and I am able to make a good relationship with strangers across different ethnic groups, then I will be enthusiastic to visit such places. It shows why the social factors are the things that make our ultimate desire of having a good time in such places.</p> <p>6) For me, activities play an important role in making successful public open spaces, but the activities done in the public open spaces affect its social success. Such spaces should provide various activities and options to the users. We might have carnivals ongoing; some people might be interested in jogging; some others just see people doing activities. To me, the meanings attached play a less important role in the success of such spaces than the physical factors. I think that people in Malaysia do not care about meanings, inasmuch as they do not understand, but they easily touch the physical factors. Again, the social success is the eventual ring that we look for in the public open spaces, since we live in a multicultural society and need to have strong social bonds with others.</p>		

Name	Academic Qualification	Affiliation	Expertise
Norwahidah Binti Abdul Wahid	Degree in Urban & Regional Planning, UTM	City Hall Kuala Lumpur	Town Planner, Open Space & Public Facilities
Transcript	<p>1) Facilities like benches and gazebos are the main factors that benefit people. The reason is that facilities affect social and health-promoting opportunities. Facilities are tangible, but social and health-promoting benefits not. We rarely see people of different ethnic groups sitting together in Dataran Merdeka, along Jalan Hang Kasturi, and in front of Majid India.</p> <p>2) Age groups have different interests. In addition, the preferred activities differ across age groups. Adults have less time to go around and mingle in the public open spaces compared to teenagers. Young people easily meet their friends and play games, etc. Males feel more comfortable sitting in the public open spaces than females. For instance, females are so concerned about the privacy, safety, and security in such spaces. We share everything together. We just use whatever our government provides regardless of our race or ethnicity. In Malaysia, there is not a public open space specifically designed for a certain ethnic group.</p> <p>3) We, Malaysians use the public open spaces for the same purposes. We go there to exercise, sit, take fresh air, meet friends, etc. We do not have different perceptions of needs according to our gender or ethnicity.</p> <p>4) Old people sit and talk to each other in their own groups. Some of them may go around based on their physical abilities. Mostly, they are involved in passive activities that require not that much energy. Public open spaces in Malaysia are planned to meet young people's needs more than those of the elderly. Hence, young people go around and mingle easily with their peers or other groups. One another important issue relating to our public open spaces is that the disabled's needs are not considered in most of such places. We have only two city parks that value the needs of the disabled, one Metropolitan Kepong Park and the other one Titiwangsa Park.</p> <p>5) Social factors make good relationships among groups, give them privacy, and provide them with social comfort. This is what we look for in our multicultural communities in Malaysia. These factors are influenced by all other factors such as, background, physical condition, and management; therefore, social factors are the main target in improving the quality of social interactions in the public open spaces.</p> <p>6) Malaysians are attracted to the public open spaces by the physical factors as well as the facilities provided in the first place. Social factors are again the main target as long as help to establish good relationships among different ethnic groups, have personal privacy in getting involved in the public open spaces, and get the social support of others. This is important in making successful public open spaces in Malaysia.</p>		

Name	Academic Qualification	Affiliation	Expertise
Jasasikin Ab Sani	Master in City Planning, UKM	International Islamic University Malaysia Jasa Reka Ent.	Landscape Architect and Academician in the Department of Landscape Architecture
Transcript	<p>1) Yes, it is due to the knowledge and awareness of the benefits of public open spaces. Facility-based benefits of public open spaces present tangible physical elements that offer activities to the users. In contrast, social and health-promoting benefits normally refer to the attributes of public open spaces that are not visually observable.</p> <p>2) Teenagers may have more time to spend in the public open spaces compared to adults. In Malaysia, adults mostly work; hence, might have less time to spend. People of different age groups spend different length of time because of the nature of activities differs from group to group. For instance, old people prefer to do activities that do not need so much energy such as sitting, watching people, talking to their friends, and reading newspapers. Younger people due to their energy level are actively involved in the activities. Age groups possess different abilities to do activities, which might be the reason why they spend different periods. Cultural aspect, safety, and perception contribute to the differences in gender-based opinions on activities done in the public open spaces. In contrast, in my opinion, people of different ethnic groups should not have different opinions on the type of activities they do in such spaces.</p> <p>3) In Malaysia, males and females may have different needs in the public open spaces as they have different physical abilities and interests in doing activities. Ethnicity should not affect the opinions on needs in the public open spaces as long as activities happening in such spaces do not violate their culture and beliefs.</p> <p>4) The physical ability and perception of doing activities are different among age groups. Older people prefer passive activities such as sitting, eating, reading, taking, and watching people, while the younger people prefer active involvement; they go around, explore, and mingle with other groups.</p> <p>5) In my opinion, the design of public open spaces strongly influences social interactions among different groups in such spaces. The public open spaces that promote the needs of local communities will improve the social interactions. Social factors enhance the social interactions among ethnic groups and promote more activities.</p> <p>6) I think, since in Malaysia the public open spaces are normally meant for social activities; therefore, social factors that are influenced by other factors, such as the physical condition, meaning, activities, and design, will play a major role in the success of such spaces.</p>		