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Factors Influencing Use of Urban Mosque Open Spaces in Kuala Lumpur, Malaysia

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2017

DECLARATION

I hereby declare that:

- (a) the contents presented in this thesis are my own autonomous work, and have not been previously submitted for the award of any other degree or professional qualification;
- (b) the work reported on in this thesis was carried out by myself, except where due acknowledgement is clearly indicated in the text;
- (c) to the best of my knowledge and belief, this thesis contains no material previously published by any other person except where due acknowledgement has been made.



NORHANIS DIYANA NIZARUDIN

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ABSTRACT

Mosques are established as physical manifestations of Islam and its cultural identity in every settlement in Malaysia, including in urban areas. The original concept of the mosque suggests that its use as a community place should be all-encompassing, not only for Muslims, but also to inspire the involvement of other community members. In spite of far-reaching studies conducted on the importance of mosque architecture, historical background and functions, very little attention has been paid to the utilisation, functions and importance of mosque open spaces to the multicultural community. This study aims to explore the spatial and sociocultural factors of urban mosque open spaces in order to determine the extent to which intercultural space exists within them. The study focuses on three urban mosques at the national, district and sub-district levels in Kuala Lumpur, Malaysia. Guided by theory of place and the concepts of affordance and social affordance, this study employs a mixed method strategy with a cross-sectional design. It comprises both quantitative – systematic observation with behaviour mapping at selected urban mosques – and qualitative – focus group discussions with mosque managers and multicultural users – methods, as well as findings with regard to the use of mosque open spaces that were derived from social media sources such as Facebook and blogs. The findings show that more multicultural users utilise the National Mosque open spaces in comparison to those at district and sub-district mosques. Patterns were identified in the spatial occupancies based on gender, age group, ethnicity and activities at all of the urban mosque open spaces studied. People's identification of their favourite open spaces and preference for outdoor activities, as well as the current condition and design of the mosque open spaces, influences the utilisation of urban mosque open spaces by multicultural users. Both opportunities and challenges may arise in relation to multicultural use in the form of public friendliness, accessibility, community sensitivity and mosque etiquette. This study highlights several factors that encourage better intercultural interaction at mosque open spaces: good social activities; the good design,

facilities and accessibility of mosque open spaces; proper promotion, publicity and education; and social acceptance among community members.

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LIST OF ABBREVIATIONS

FDTCP	Federal Department of Town and Country Planning
GIS	Geographical Information System
HOHO	Hop-on Hop-off
KLCC	Kuala Lumpur Convention Centre
KTMB	Keretapi Tanah Melayu Berhad
PBUH	Peace Be Upon Him

CHAPTER 1

INTRODUCTION

1.1 Background of the study

Religious institutions feature among the remarkable places within urban areas that function as fundamental platforms for communal activities and social organisation (Ramsay, 1998; Mohyuddin and Lamit, 2008). In cities, institutions such as mosques, chapels, churches, synagogues and temples are the most obvious physical manifestation of religious and cultural identity (Cisneros, 1996, Shipps, 2013). In Muslim communities, the significant religious place that represents the community is the mosque. In Arabic, the mosque is known as the *masjid*; this word is derived from the Arabic verb *sajada* which means to prostrate, while the *masjid* itself means a place in which people can prostrate. Therefore, the literal definition of the *masjid* or mosque could be said to be ‘a house of worship’. In the context of this study, the word mosque will be used throughout this thesis to designate this religious place. Mohamad Rasdi (2010) describes the mosque as a central and sacred place of worship that has physical, spiritual and communal responsibilities in Islam. The original concept of the mosque was that it would not only serve as a religious and spiritual institution for Muslims, but also contribute to community togetherness by functioning as a public space for education, discussion, social interaction, recreation, community services and other activities (Omer, 2013). This view is shared by Maroofi et al. (2014), who further point out that the social and cultural aspects of the mosque could enhance social cohesion and enrich people’s sense of belonging.

This view is supported by Moudon (1991), who further claims that public spaces should encourage publicness, diversity and participation. In other words, users from all backgrounds should have the freedom and opportunity to use public spaces, without one group dominating over others. Moreover, users should be encouraged to participate in order to foster their social development and cultural growth. Based on this notion, the use

of mosques as community places should be all-encompassing; in order to promote social integration and development, these spaces should not be restricted to the Muslim community, they should also allow other members of the community to engage with the activities (Ismail, 2002, Najafi and Mohd Shariff, 2011a).

In recent years, a considerable amount of research had been conducted into the importance, functions and roles of the mosque as a community place. A variety of scopes of research have featured in these studies, such as the implications of the architectural design of mosques for the community (Mohamad Rasdi, 2010), place attachment and users' experiences of the mosque (Mohyuddin and Lamit, 2008, Najafi and Mohd Shariff, 2011a), the spiritual meanings of the mosque spaces for the community (Dewiyanti and Kusuma, 2012) and the mosque as an urban identity and a problem-solving element in urban planning (Saeli Aleamin, Shamaei, and Bahmani, 2014). Nevertheless, Salmani, Rahimi and Khakzand (2016) recently conducted an analysis and a historical interpretation with regard to the importance, priority and originality of mosque open spaces in a global context. Their research outlines several significant layout patterns of mosques around the world which are very informative in encouraging more research on mosque open spaces. There are four patterns of layout for mosque open spaces: (i) a mosque building surrounded by open space; (ii) a mosque building with a semi-open space; (iii) a mosque building adjacent to an open space; and (iv) a mosque with a courtyard (further details in Chapter Two, Section 2.3.2). In spite of the far-reaching studies emphasising the importance of the architectural designs of mosques, the historical context of the mosque and discourse on the functions of the mosque (Saeli Aleamin et al., 2014 and Ismail et al., 2010), very little attention has been paid to the importance of the mosque's open spaces to the community, the functions of those spaces and how they are used, particularly in the Malaysian context. The literature review revealed a study of mosque open spaces on Malaysian campuses by Ismail et al. (2010), but since the central focus of that study was on the function of those spaces in the context of educational institutions, little is known about the open spaces of Malaysian mosques in urban settings.

In light of the points mentioned above, this study will focus explicitly on the key issues connected with the urban mosque open spaces in Malaysia, a multicultural country with a population of 30 million people of various religions and ethnicities (population estimate for the period between 2012 and 2015, based on the adjusted Population and Housing Census of Malaysia 2010). Using mosque-based research, the study will attempt to identify differing viewpoints, in addition to filling the gap in the literature by attempting to answer the question put forward by Sirat and Abdullah (2007) of how the provision of open spaces in mosques may achieve the goal of providing intercultural spaces that meet the needs of a multicultural society.

1.2 Issues

These days, it would unfortunately appear that most mosques, particularly those in cities, have lost their social characteristics (Maqbool Farhat, as cited by Khalit, 2011). As a result, those mosques are merely used as a place of worship for Muslims, rather than as places for use by the whole community. With regard to the current situation in Malaysia, previous studies by Khalit (2011) and Tamuri et al. (2012) indicated that the majority of mosques are only used extensively during congregational prayers which take place five times a day: *Fajr* (morning prayer), *Zuhr* (midday prayer), *Asr* (late afternoon prayer), *Maghrib* (early evening prayer) and *Isha* (late evening prayer). This also includes the congregational Friday midday prayer which is compulsory for Muslim men. Consequently, the mosques have limited functions outside prayer times; this supports the views of Maqsood (2005) and Mohamed Kamal Ismail (2010), who claim that globalisation has resulted in mosques losing their identity. They state that, in place of the active and dynamic roles that they have played in the community since the time of the Prophet Muhammad and the era of the Caliphates, mosques have now become limited to religious and worship ritual uses only.

It is apparent that, in Malaysia, the original concept of the mosque as a public and community space has declined in importance over time. In addition, Rasdi (1998) asserts that the decline in the roles and functions of mosques has been caused by a lack of

appreciation for the historical and contemporary contexts of the mosque itself. The Prophet Muhammad's concept of the mosque is fundamental, as it exemplified the ideal way of using a place to shape and reunite society during the historical Islamic period. Thus, Chapter Two will consider this fundamental concept in further detail.

In addition to the issue of the diminishing role of the mosque, further consideration should be given to the design of mosques. Rather than creating inclusive spaces, the design of mosques seems to have generated more exclusive spaces which allow for limited usage by certain groups of people (Sirat and Abdullah, 2007). Failure to incorporate important spaces such as courtyards into the design of mosques also leads to a decline in the roles of the open spaces surrounding the mosque. Historically, mosques were designed to include open spaces such as courtyards, which existed not only as a symbol of remembrance to God, but also served as communal spaces for the emergent community at that particular time (Aazam, 2005; Sirat and Abdullah, 2007). The courtyards adjoining mosques were primarily used as communal spaces in which social and civic activities were conducted by all sectors of the local community. In his study, Benli (2013) concurred that mosque courtyards were regularly used as meeting places during the Ottoman period.

This view is in line with the thoughts of Salmani, Rahimi and Khakzand (2016), who agree that mosque open spaces function not only to enhance the architectural quality of the mosques themselves, but also operate as significant spaces for the community. They mention that 'neglecting this importance has led to gradually reducing or even eliminating the open space in the mosques' (Salmani, Rahimi and Khakzand, 2016, p.48). As such, it can be presumed that, without those elements, the mosque itself could not possibly function as a communal and intercultural space for the local community. Nevertheless, it is evident that, particularly in the Kuala Lumpur area, even those mosques without courtyards in Malaysia have retained some of the qualities and characteristics of communal spaces (Sirat and Abdullah, 2007). These findings demonstrate that, in Malaysia, a variety of communal spaces are associated with the mosque; these spaces are not necessarily courtyards and may include other open spaces

around the mosque, neighbouring spaces adjacent to the mosque and other influential spaces that may not formally be part of the mosque.

In connection with the above-mentioned issue, Rasdi (2010) draws our attention to the fact that the open spaces of mosques in Malaysia are frequently designed to include sculptures, decorative gardens and car parks. In other words, some attempts have been made to transform the mosque open spaces into attractive and valuable public open spaces that encourage interactions within the community. Instead of merely being beautified for aesthetic reasons, the mosque open spaces should be acknowledged and appreciated for their distinctive environmental and societal functions. In their study on the open spaces of campus mosques, Ismail et al. (2010) concluded that:

(...) the mosque open spaces are not fully utilized by the mosque occupants for communal activities as the area sits on a palatial site, is located on higher ground or stands as a distinct entity far away from campus facilities. (Ismail et al., 2010, p.1)

Several factors influenced the occupancy of the mosque open spaces, such as the location and setting of the mosque and the proximity of the mosque to the existing facilities. This view offers an important insight into the extent to which the existing open spaces in mosques meet the needs of users. Sirat and Abdullah (2007) mention that the provision of such spaces should meet the needs of multi-ethnic societies, as there is no evidence of legislation that forbids the multicultural, or even the non-Muslim, community from playing a part in social activities in the compounds or open spaces around the mosque.

1.3 Aim and objectives

Following on from the issues presented in the previous section, the primary aim of this study is to explore the spatial and sociocultural factors of urban mosque open spaces in order to ascertain the extent to which intercultural space exists within those areas. This study offers insight into the potential value of urban mosque open spaces as a significant means of improving cultural and social integration within the community. In addition,

this study revitalises the historical concept of the mosque and generates new knowledge and evidence on the extent to which urban mosque open spaces can produce successful intercultural spaces for the multicultural community. With these aims in mind, the following research objectives were developed:

- i) to investigate the extent to which urban mosque open spaces are used as intercultural spaces;
- ii) to examine spatial occupancy and activity patterns, and also users' preferences, regarding the use of urban mosque open spaces;
- iii) to examine the views of mosque managers, Muslim and non-Muslim communities regarding activities and interactions within urban mosque open spaces;
- iv) to examine the non-Muslim community's perceptions, experiences and feelings towards urban mosques open spaces, and to find out how the spaces are perceived by other users;
- v) to make recommendations about how urban mosque open spaces should ideally be designed in order to make them suitable for the multicultural community.

1.4 Research questions

The main research question addressed in this study is: 'How do urban mosque open spaces encourage intercultural activities and interaction?' To address this main question more fully, the study aims to answer the following five sub-questions:

- i) Do urban mosque open spaces encourage multicultural use?
- ii) How are the urban mosque open spaces being used by the community?
- iii) What leads multicultural users to use the urban mosque open spaces?

- iv) Does the use of the urban mosque open spaces by multicultural users present any possible opportunities or challenges?
- v) What aspects of design support intercultural use and interaction at the urban mosque open spaces?

By answering the above-mentioned questions and meeting the research objectives outlined in the previous section, it is hoped that the findings of this study will be valuable and will lead to a series of recommendations that will be useful for improving the design and functions of the urban mosque open spaces in the future.

1.5 Research process

For the purpose of this study, an exploratory research approach was chosen. This involved the use of case studies in peninsular Malaysia (see Figure 1.1), concentrating on urban mosques in the Federal Territory of Kuala Lumpur, Malaysia.



Figure 1.1: Map of Malaysia – Malaysia is comprised of two parts; Peninsular and Borneo Island. The micro setting for this study is Federal Territory of Kuala Lumpur (blue dashed line) located in the central region of Peninsular Malaysia (source: Google Images).

Kuala Lumpur was chosen as a location because, as the capital city, it was more likely to have a higher population of diverse users from different ethnic and religious backgrounds (refer to Chapter Two, Section 2.5). Furthermore, many urban mosques have been built

within this territory. Hence, three urban mosques in Kuala Lumpur were selected for the case studies, representing different levels of geography that they serve, from national to sub-district: The National Mosque, the Abu Ubaidah Al-Jarah Mosque and the Al-Ghufran Mosque (see details in Chapter Four).

In the context of this study, several key terms will be used throughout this thesis:

- i) Urban mosque open spaces – can be characterised as the formal courtyards of the mosque, open spaces adjacent to or adjoining the mosques and the significant neighbouring open spaces that might not be formally part of the mosque.
- ii) Multicultural users or community – can be defined as members of the community from various ethnic and religious backgrounds. These can be grouped according to ethnicity (Malay, Indian, Chinese and others) and religion (Muslims and non-Muslims). The users from ‘other ethnic background’ are regarded as foreign or international users (e.g Caucasian/Black/White). In this study, gender (male and female) and age (children, teenagers, adults and the elderly) are also considered as relevant variables in understanding multicultural and community use.
- iii) Intercultural spaces – can be defined as the public or ‘people’ spaces that allow or encourage different cultural interactions, in addition to facilitating social activities and interactions between multicultural users (further explanation in Chapter Two, Section 2.5).

Two research methods were chosen for this study, on the basis that these were the most appropriate for the research approach and the formulated research objectives and questions presented earlier. In conjunction with the case studies, systematic observations with behaviour mapping and focus group discussions (see Chapter Four) were used to collect primary data during two phases. The first phase involved the collection of spatial occupancy data at the above-mentioned urban mosques; this was achieved using

systematic observation with behaviour mapping. This was then followed by the second phase –collection of qualitative data through focus group discussions with three different groups of people: mosque managers, the Muslim community and the non-Muslim community. Besides these two methods, supporting qualitative data with regard to the occupancies of the studied mosque open spaces (particularly the National Mosque open spaces) were obtained from social media sources. These data from social media provided added value to the research by supporting the data obtained through the other, above-mentioned methods. In addition to this, the literature review was used to gather information on the background and theoretical underpinnings of the mosque and its open spaces. This study is underpinned by Canter's (1977) 'theory of place' and Gibson's (1979) concept of affordance (refer to Chapter Three). Allport's (1954) 'contact theory' has also been used as a theoretical basis for this study. This theory has been used in a variety of research studies conducting investigation into different groups and societies; it encompasses not only a variety of ethnic groups, but also people from diverse sociocultural backgrounds, age groups as well as physical and mental health backgrounds (Pettigrew and Tropp, 2006). After completion of the fieldwork, behaviour mapping data were transferred and analysed using Geographical Information System software, while qualitative data from the focus group discussions were transcribed and analysed using the qualitative analysis tool Quirkos (see Chapter Four). The quantitative and qualitative findings were subsequently triangulated and interpreted in the context of the relevant theoretical evidence and the previous literature, prior to being converted into meaningful discussion and recommendations in order to satisfy the overall aims of the study. The flowchart below provides an overview of the research methodology process (see

Figure 1.2)

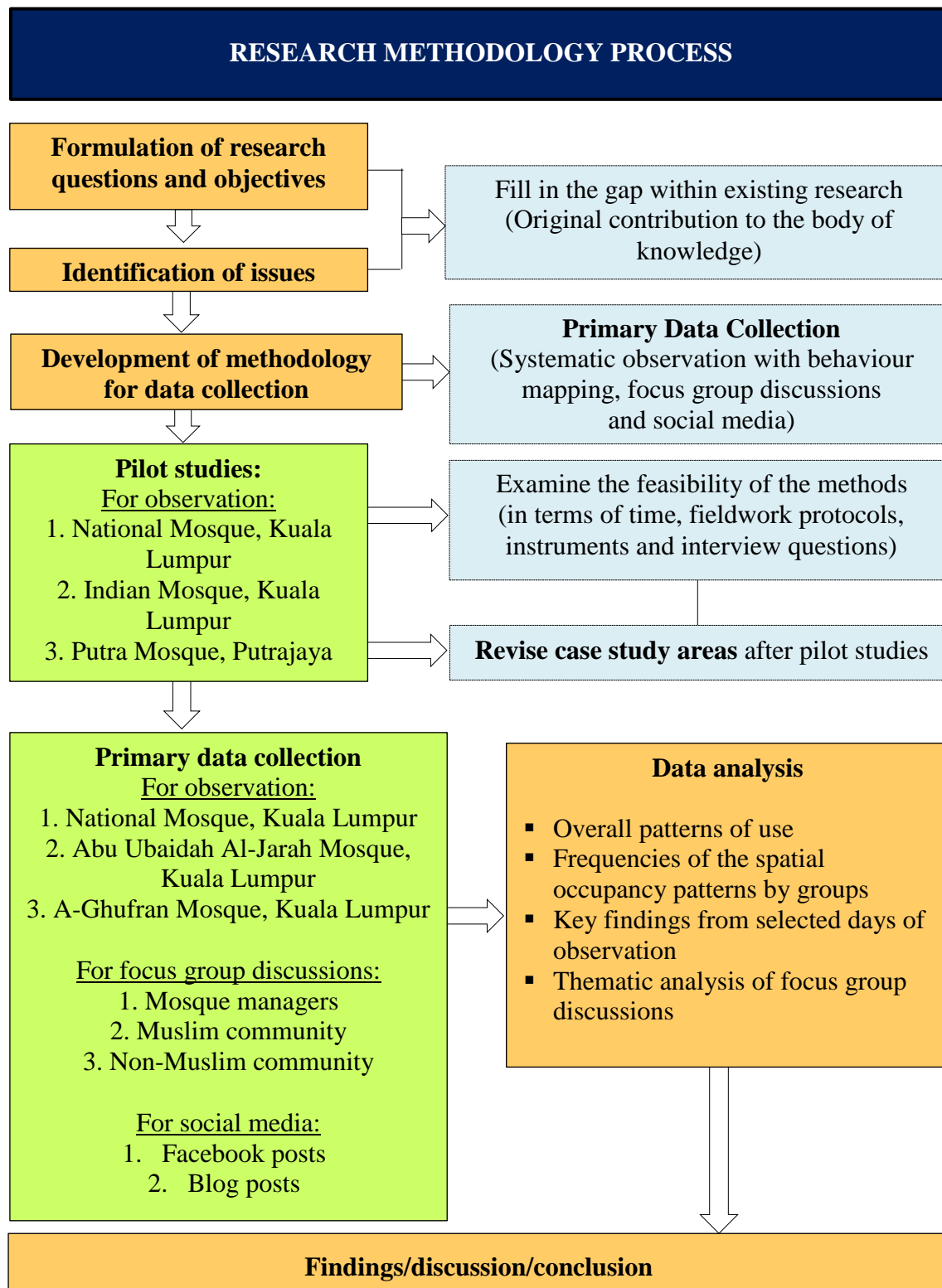


Figure 1.2: Research methodology process

1.6 Thesis structure

This thesis is composed of seven chapters. An outline of each chapter is provided below (Figure 1.3):

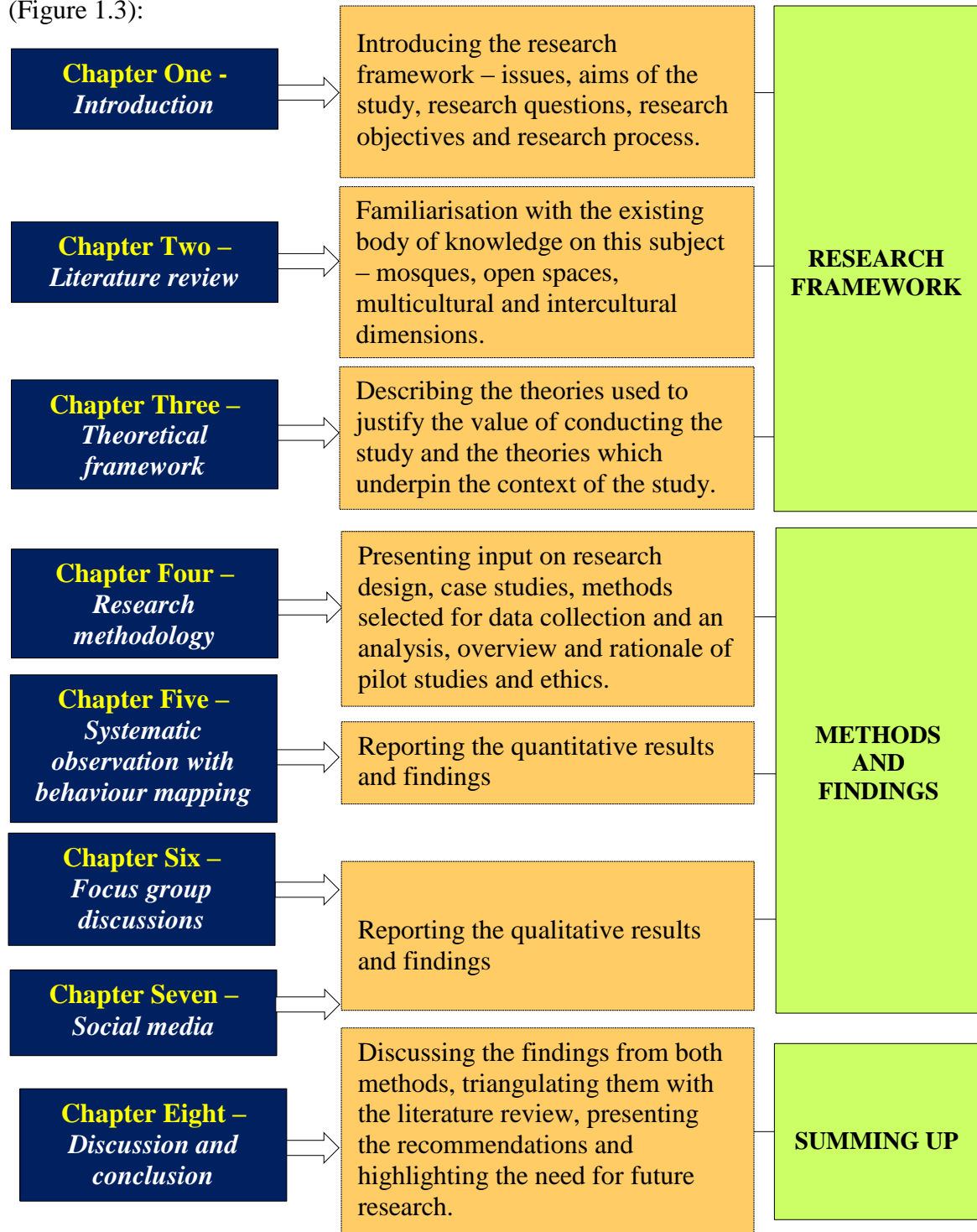


Figure 1.3: Thesis structure

1.7 Significance of the study and original contribution to knowledge

This study aims to generate new understandings, evidence and knowledge pertaining to the presence of intercultural spaces within urban mosque open spaces in Malaysia, based on the spatial and sociocultural context of urban mosque open spaces, particularly in the Malaysian context. With these aims in mind, the study investigates several key aspects, such as the presence of an intercultural element to the usage of urban mosque open spaces, users' behaviour and activity patterns and their preferences in using mosque open spaces, factors that influence users' behaviours and experiences when accessing urban mosque open spaces and the potential challenges and conflicts that may arise should urban mosque open spaces become more communal and intercultural spaces. Moreover, this study makes recommendations, particularly on the design of ideal open spaces in urban mosques for use by the multicultural community, derived from the perspectives of users themselves and which can later be referred to by designers as a guide for the future improvement or design of urban mosque open spaces in Malaysia.

1.8 Summary

Previous studies on mosques have shown the implications of the architectural design of mosques, place attachment to mosques and users' experiences, discourses on the historical background as well as areas including the functions of a mosque taken from diverse perspectives. This evidence helped the researcher to identify the gap and issues in the literature that are yet to be explored; hence, the study on mosque open spaces for the multicultural community, focusing particularly on the urban area of Kuala Lumpur, Malaysia, was conducted. This chapter outlines the foundation of the study including its aim, objectives and questions. It is hoped that the findings obtained fill the gap in the literature and add to understanding regarding urban mosque open spaces in Malaysia. In order to delve further into the scope of the study, the next chapter will provide a review and discussion of the literature more closely related to the subject matter.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

As presented in the introductory chapter, mosques and their open spaces are two vital types of people places that have the potential to improve and enliven community life, particularly in urban areas. This chapter contains a literature review, which is divided into several key research themes: (1) mosque and community; (2) open spaces and community; and (3) multicultural and intercultural dimensions. Different subthemes are explored under each key research theme, as follows:

Mosque and community

- Revisiting the origins of the mosque within the history of Islam
- The establishment and distribution of the principal urban mosques in global cities
- Mosques in Malaysia
- Traditional and contemporary functions of the mosque for the community

Open spaces and community

- Open spaces in the Malaysian context
- The nexus between open spaces and the mosque
- Urban mosque open spaces in Malaysia through the lens of social media

Multicultural and intercultural dimensions

- Conceptions of multicultural and intercultural communities

An exploration of the evidence presented in the literature, based on the above-mentioned themes, is important for building a better understanding of the impact of mosques open spaces on the community, predominantly the multicultural community. Prior to exploring the literature related to the role(s) played by mosque open spaces for the multicultural community in the Malaysian context, it is necessary to

acknowledge the background of the multicultural community in Malaysia in the next subsection, in order to provide a better understanding of the context of this study.

2.1.1 Multicultural community in Malaysia

Malaysia as a multicultural country comprises a wonderful combination of cultures, languages, beliefs, faiths and customs (Zahari, 2013). Based on current population estimates (2014–2016), the country's total population has increased by one million, from 30.7 million in 2014, to 31.7 million in 2016 (Department of Statistics Malaysia, 2016). Of the current total population, it is estimated that 89.7% are Malaysian citizens, and the rest are non-citizens. Breaking these down into ethnic composition (refer to Figure 2.1), Malays are the dominant ethnic group, at 68.6%. This is followed by Chinese at 23.4% and Indians at 7%. These are the three main ethnic groups in Malaysia. Each ethnic group has its own unique identity and culture. According to Zahari (2013), 'the cultural dimensions of the three major ethnic groups reveal the different traits of the major ethnic origins in Malaysia' (Zahari, 2013, p.19). The cultural differences of each ethnic groups have actually made Malaysia a unique nation, which is in line with Malaysia's tourism tagline – Malaysia Truly Asia. On the other hand, there are 1.1 million more males than females in Malaysia (refer to Figure 2.2).

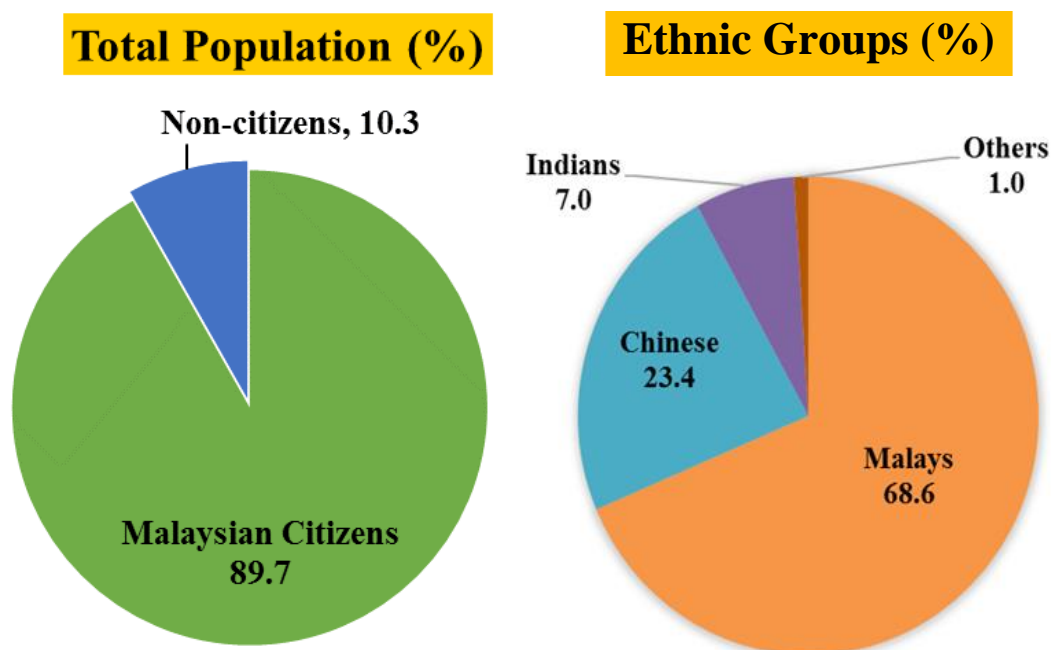


Figure 2.1: Total population distribution and ethnic composition in Malaysia (Department of Statistics Malaysia, 2016)

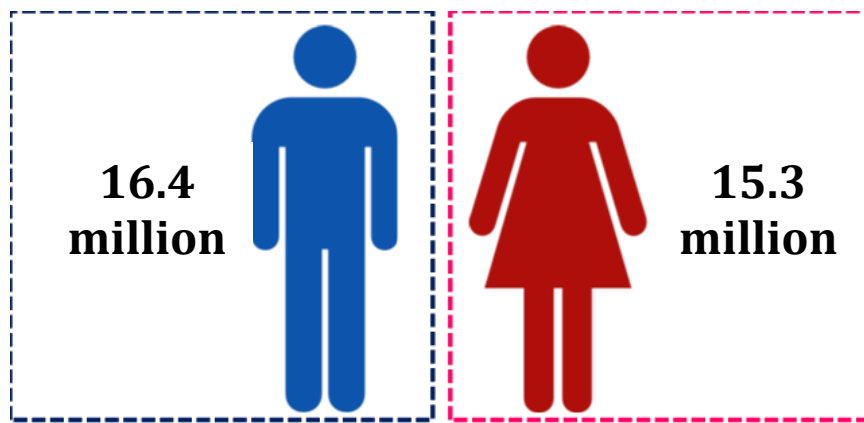


Figure 2.2: Population of Malaysia by gender (Department of Statistics Malaysia, 2016)

In terms of population distribution by religion (refer to Figure 2.3), Islam is the most common, with 61.3% of the total population professing to be members of the Islamic faith. The second-most common religion is Buddhism (19.8%), followed by Christianity (9.2%) and Hinduism (6.3%). In addition to these four major religions, there are other smaller sections of society that embrace traditional Chinese religion and who profess atheism.

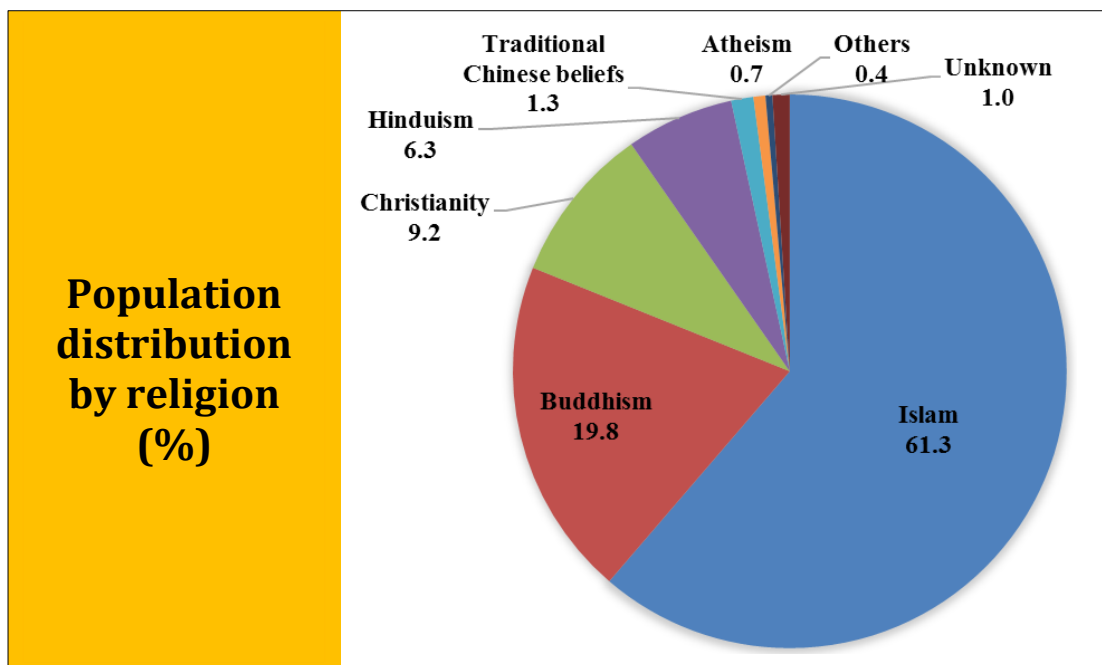


Figure 2.3: Population distribution by religion (Department of Statistics Malaysia, 2015)

In the context of this study, Malaysia's capital city of Kuala Lumpur was selected as the location for the case study areas. Figure 2.4 shows the total population

distribution of Kuala Lumpur based on an estimation provided by the Department of Statistics Malaysia. The population of Kuala Lumpur is estimated at 1.79 million, comprising 0.92 million males and 0.87 million females. Of the total 1.79 million people, most are Malays (44.2%) and Chinese (43.2%). There are also relatively smaller Indian and other communities in Kuala Lumpur. According to the Kuala Lumpur Structure Plan 2020, the city's population is expected to increase to 2.2 million by the year 2020 (Dewan Bandaraya Kuala Lumpur, 2014).

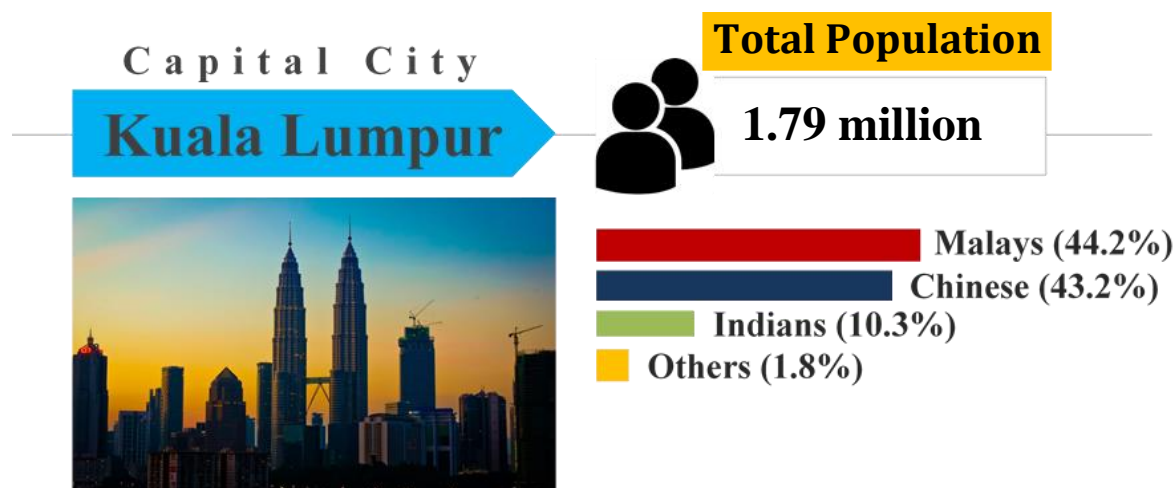


Figure 2.4: Total population of Kuala Lumpur – the capital city of Malaysia (Department of Statistics Malaysia, 2016)

Overall, the demographic data for Malaysia and Kuala Lumpur presented in this section show that Malaysia has achieved its post-independence goal of establishing ‘(...) a successful multicultural society composed of three traditionally isolated and mutually distrustful ethnic/cultural groups, the Malays, the Chinese, and the Indians’ (Gudeman, 2002, p.139). Progressing towards the aim of becoming a better multicultural nation, the Prime Minister of Malaysia has introduced a national aspiration called ‘One Malaysia’. Mohamad Salleh, in Zahari (2013), explains that the purpose of the One Malaysia aspiration is to foster a spirit of unity among members of the country's multicultural society, whilst at the same time building relationships regardless of people's ethnic, cultural, social and religious backgrounds. Having discussed what constitutes the multicultural community in Malaysia, the following section reviews the literature under the theme of mosque and community.

2.2 Mosque and community

The term mosque is widely used in this study as the primary subject matter for the whole research. The mosque is symbolic of the key components of Islamic architecture and built environment (Mohamad Tajuddin, 2010). Morteza, as cited by Maroofi et al. (2014), reveals that the word mosque itself is mentioned 28 times in the holy *Al-Qur'an* (Muslims' holy scripture). As mentioned in Chapter One, mosque, or '*masjid*' in Arabic, refers to a place where people prostrate to God (Md Sharif and Hazumi, 2004; Al-Qaradhawiy, 2014). In a global context, Ahmad Zakaria (2011) writes that the term '*masjid*', or mosque, has a connotation similar to that of the Spanish word '*mezquita*' (Spain was the first Islamic territory in the European continent which was ruled by the great Umayyad empire). Likewise, mosque in French is '*mosquée*', in German it is '*moschee*' and in Italian the word for mosque is '*moschea*'.

The mosque represents the establishment of the Muslim community; it is the focal point of life that shapes the characteristics of Muslim society. The mosque has held a very significant position for the Muslim community since the historical Islamic era. Traditionally, the mosque was seen as the ultimate centre for the Muslim community, where religious belief, social activities and community integration all took place under one roof (Omer, 2013; Tamuri et al., 2012). Correspondingly, Mohyuddin (2008) writes that the mosque has become the 'nucleus' of the Muslim community, acting not only as a platform for '*ibadah*' (religious practice) but also for various social activities since the epoch of the first prophet, Prophet Adam, and continued to play multifaceted roles within society until the period of Prophet Muhammad.

In a similar vein, several authors (Musytari and Jasmi, 2008; Fukami and Sato, 2012) note that the mosque is viewed as an important public community place in urban settings. Linked to these authors' ideas, a community place can be defined as a dedicated public space within a neighbourhood, which may also be known as a community centre. This dedicated public space offers the community a place for relaxation and enjoyment in a wide range of social activities, and most importantly, is a place designed for people to walk around in and play, sit, etc. (Ward Thompson,

2002). From that notion, apart from serving Muslims as a place of religious practice, the mosque and its complex may be seen as an ideal public or community place where people from different social backgrounds can gather to enjoy and appreciate the place while also engaging in various activities. This is very much interconnected with the aspiration of this study – to explore the utilisation of mosque open spaces by users from multicultural backgrounds. Vasilevska (2012) offers her view on the significance of public space in enhancing social development and creating a change in the community:

Public space stands as a reflection of a city's spatial and social organization and thus also constitutes a tool for social reproduction and social change. (Vasilevska, 2012, p.2)

Commenting on Vasilevska's view, public space appears to be one of the essential urban elements that could enrich community development and integration, of which it seems the mosque could be a part. This view is complemented by Nash (2006) in his discussion on public space, the Muslim community and the urban mosque in Newark, New Jersey, in which he quoted a view by an American Muslim intellectual who points out that a public space is not merely a gathering space outside the house, but should be a space that characterises the actual image of the community in a neighbourhood. Given this pivotal role of the mosque as a community place, it is important to establish an understanding of the causal relationship between a mosque's design and how it is subsequently utilised.

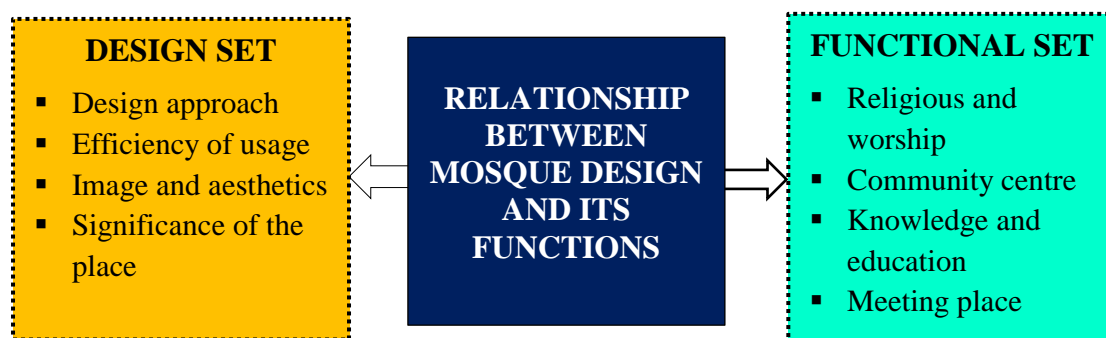


Figure 2.5: Relationship between mosque design and its functions (Mohamed Kamal Ismail, 2010).

To identify the relationship between the mosque as an architectural element and its social functions to the community, Mohamed Kamal Ismail (2010) developed a main set of criteria which encompasses two subsets, namely a design aspect set and

a functional aspect set (Figure 2.5). It can be seen from this relationship set that the design and functional aspects of a mosque have a congruent relationship. The way the mosque is designed will influence the way it is utilised by potential users. Ideally, this relationship set should serve to establish a base understanding and parameters in terms of how a mosque should be practically designed to meet the requirements of a multifunctional place.

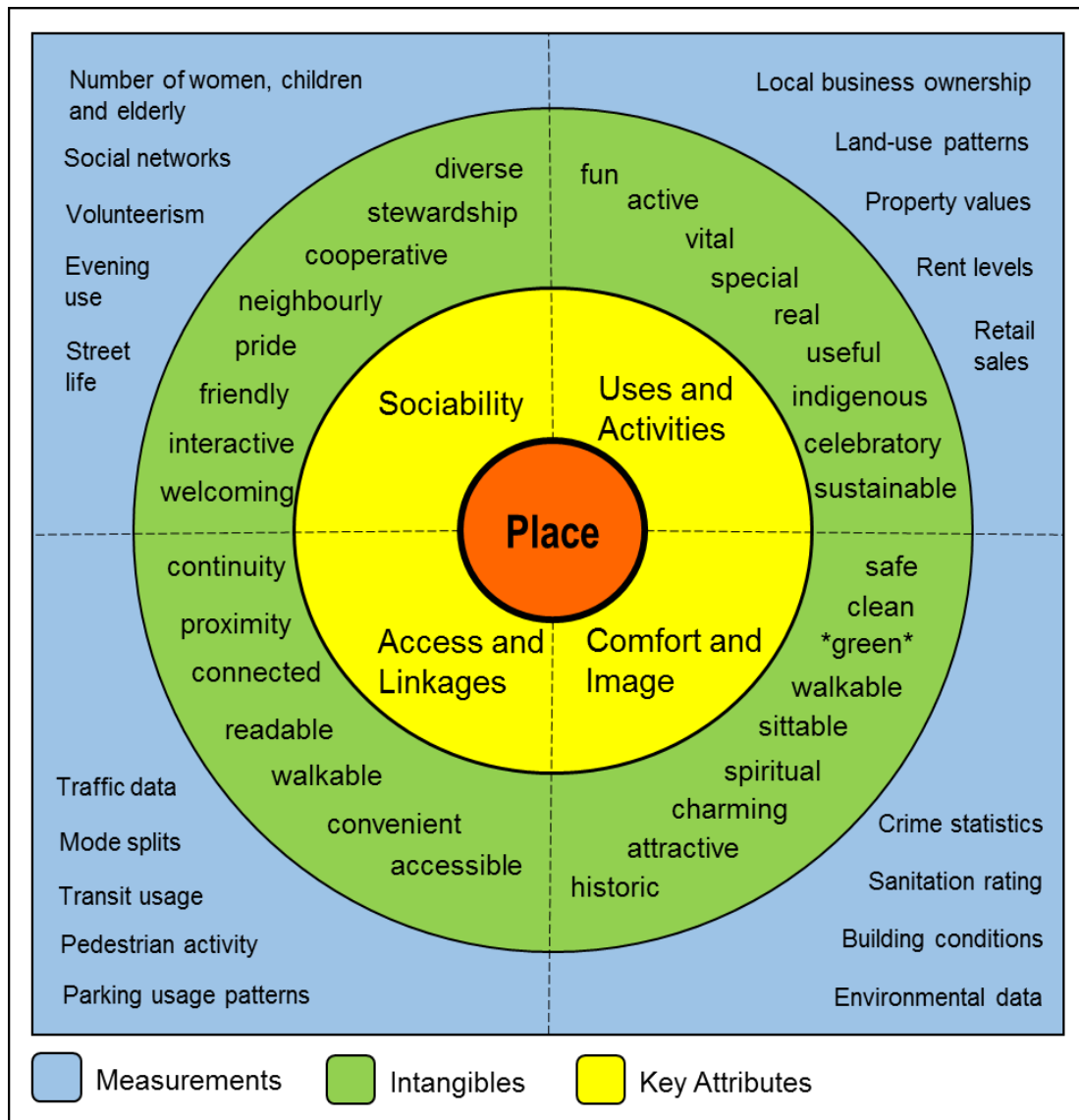


Figure 2.6: 'The Place Diagram' (reproduced from the Project for Public Spaces, 2012)

Moreover, 'The Place Diagram' concept (as shown above in Figure 2.6) developed by the Project for Public Spaces (2012) offers a similar perspective, in which a successful community place should possess four key attributes: (1) a place with great accessibility for vehicles and pedestrians; (2) a place that inspires good

community engagement and a variety of activities; (3) a place that is comfortable and aesthetically appealing; and finally, (4) a place that is community-friendly and sociable. Beneath each key attribute, there are intangibles (as displayed in the green area in Fig. 2.6) that characterise the environment of the place. Subsequently, the success of the place is measured using perceptible indicators (contained within the blue box in Fig. 2.6) based on its utilisation, reflecting people's feelings, perceptions and preferences about it. The whole idea of 'The Place Diagram' reflects the 'Theory of Place' by David Canter, which emphasises those fundamental elements that enrich a place (further explanation in Chapter Three). 'The Place Diagram' also complements the core idea of the relationship between mosque design and its functions, as previously described in Figure 2.5.

Vasilevska (2012) also describes how a good 'people place' also emphasises several supporting criteria, such as those contained within Table 2.1 below:

Table 2.1: Criteria of a good people place (Vasilevska, 2012).

Criteria	Description
1. Equity	Evenly distributed for the use of all society
2. Vitality	Challenge to explore, develop and improve social interest
3. Identity	Challenge to accentuate specific place character
4. Safety	A safe and peaceful place for the community
5. Diversity	Open to users from various backgrounds
6. Sense of belonging	Challenge to retain the originality of the place

In an attempt to design a mosque and its surrounding spaces, or in evaluating its success as a good people or community place, these criteria could potentially be considered as guidelines and key indicators that can be applied by built environment professionals including landscape architects, architects, designers and planners. Deriving an example of the mosque during the formative years of Islam, the mosque was designed to serve various functions for the community such as a place for

religious, learning and charitable activities, a place for medical treatment and nursing, a place for business and leisure activities, as well as a place for detention and rehabilitation (Omer, 2009). In relation to its function as a place for detention and rehabilitation, Omer (2014) further explains that detention here refers to a prison for detainees or prisoners of war as well as criminals. There was a designated space within the mosque complex for this purpose. The rationale of having a detention centre was not only to detain offenders and act as a place for them to serve their sentences, but also to rehabilitate and educate detainees to be better people once they were released from the centre. On the other hand, it is good that the planning and design of mosques is keeping pace with the current times and needs, especially in terms of accommodating societal needs. Some of the functions of the mosque during the formative years of Islam remain relevant today, but others are not, i.e. as a detention and rehabilitation centre (see Section 2.2.4 for details of traditional and contemporary functions of the mosque). This may be due to the fact that aspects of planning and development change from time to time, thereby encouraging more developments incorporating a mixed and/or specific niche in certain places. For example, it is common nowadays for prison and detention centres to be built in their own complexes, with medical treatment conducted at hospitals and clinics. These types of activities are no longer integrated in the mosque complex. Nevertheless, the primary functions of the mosque should be preserved in line with a consideration by built environment experts of other relevant contemporary functions as part of their designs for community-friendly mosques.

A combination of religious, educational, social and commercial functions can be achieved through the functional, efficient and serviceable design of the whole mosque complex, comprising both the mosque buildings and surrounding spaces, which are connected to both the macro and micro adjoining contexts (Abou El-Ela, 2003). The idea of multifunctional land use was first developed in the historic Egyptian city of Cairo, and one such example was the planning of the central mosque. The central mosque was surrounded by interconnected *souqs* (an Arabic term for markets). In addition to functioning well as people places, the interconnection of such sites also offered a opportunities for fostering greater community engagement. As such, it is a challenge nowadays for built environment professionals to recreate the

essence of a multifunctional mosque complex within urban settings. Orum and Chen, as cited in Mazloom et al. (2012), mention that, apart from nurturing a 'sense of individual identity', it is important that a place possesses an ability to develop a 'sense of community' among users. This notion is supported by Sopher, as cited by Mazloom et al. (2012), who concurs that:

In this regard, mosques can also be considered as perfect examples of religious places which are at the same time primarily regarded as places of assembly. (Sopher as cited by Mazloom et al., 2012, p. 14)

Based on this, it can be seen that the mosque is regarded as a community place by various researchers and scholars. Based on previous research and studies, different issues with regard to the mosque's importance to the community were revealed, which subsequently led to practical implications in terms of enhancing the functions, roles and design of mosques for the sake of community development and integration. This section has explained the background pertaining to the mosque and its association with the community. The following subsection moves on to consider revisiting the origins of the mosque within the history of Islam in order to build an understanding of the early development of the mosque itself.

2.2.1 Revisiting the origins of the mosque within the history of Islam

The mosque during the historic Islamic era functioned as an important institution for the Muslim community within the city. According to Omer (2009), it was the first urban element that Prophet Muhammad introduced to the city of Madinah, Saudi Arabia. Some of the earliest mosques built during that period were Quba' Mosque (Figure 2.7) and Nabawi Mosque (Figure 2.8). Quba' Mosque, located in Quba' (a suburb of Madinah), was the first mosque built in the history of Islam by Prophet Muhammad and his companions during their migration from Makkah to Madinah. Omer (2009) further narrates that upon the arrival of Prophet Muhammad in the city of Madinah, 'one of the first concrete things that the Prophet (Peace Be Upon Him) undertook was the marking out and building of his mosque – the principle mosque of the city' (Omer, 2009, p.39).



Figure 2.7: Quba' Mosque was the first mosque built by Prophet Muhammad on his migration from Mecca to Madinah, Saudi Arabia. (Left) an old photo of Quba' Mosque; (right) a current image of Quba' Mosque (source: Islamic Landmarks, n.d.).



Figure 2.8: Nabawi Mosque, also known as The Prophet Mosque. (Left) an old photo of Nabawi Mosque; (right) a current image of Nabawi Mosque (source: Google Images)

Reda (2004) and Khalit (2011) mention that early mosques built in the historic Islamic time served not only as places for Muslim prayer and religious rituals, but also as centres for a multitude of activities on behalf of the community. These early mosques were also used as a 'parliament' in which the community conducted its political discourse in conjunction with state administrators, as a court for legal judgements as well as functioning as a meeting place for families and friends. Imamuddin, Hassan and Sarkar (1985) also offer a similar view:

In the very early days, the Prophet himself had used mosques to address his followers and to give sermons on spiritual uplift and socio-political aspects of life. (Imamuddin, Hassan and Sarkar, 1985, p.60)

Apart from Nabawi Mosque in the city of Madinah, Saudi Arabia, there are another two prominent grand holy mosques in the Islamic world, notably in the Arabian heartland: (1) the Grand Mosque of Makkah, also known as Al-Haram

Mosque, located in the city of Makkah, Saudi Arabia (see Figure 2.9 below); and (2) Al-Aqsa Mosque in the old city of Jerusalem (see Figures 2.10 and 2.11 on the next page). These two holy mosques are very prominent in the Islamic world due to their significant function as '*qiblah*' (an Arabic word to indicate the direction that Muslims should face when performing their '*solah*' or daily prayers). *Qiblah* carries significant meaning for Muslims, in which the very act of facing *qiblah* is one of the requisites when performing daily prayers. Furthermore, it also renders a spiritual value which is closely related to the concept of unity and identity in a religion and the Muslim community (Salahi et al., 2014).

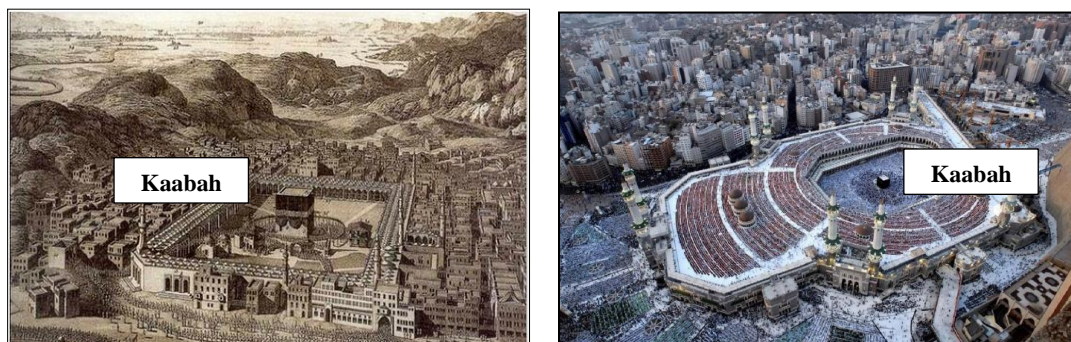


Figure 2.9: (Left) an old image of Al-Haram Mosque; (right) a current image of Al-Haram Mosque. (Source: Mangerre, 2015, Rul, 2016). Al-Haram Mosque is the grand holy mosque for Muslims, and is where Ka'bah is located. Kaabah is a sacred cubic structure which acts as the '*qiblah*' (the direction in which Muslims face during prayers).

In the middle of the Al-Haram Mosque, there is a cubic structure known as Ka'bah, as shown in Figure 2.5. According to a verse in the holy *Al-Qur'an* in Surah Ali 'Imran (3: 96), as cited by Salahi et al. (2014), it is mentioned that the Ka'bah was the first house of prayer and worship built on Earth for mankind. The Ka'bah has functioned as the *qiblah* for Muslims ever since the sixteen-month migration of Prophet Muhammad and his companions from the city of Makkah to Madinah. Prior to this, Muslims were commanded to face Al-Aqsa Mosque in the old city of Jerusalem (refer to the figures below), thus making it the first *qiblah* in the history of the Islamic world. Thus, the mutual history of these two holy mosques plays a significant role in the lives of Muslims; spiritually, individually and collectively.

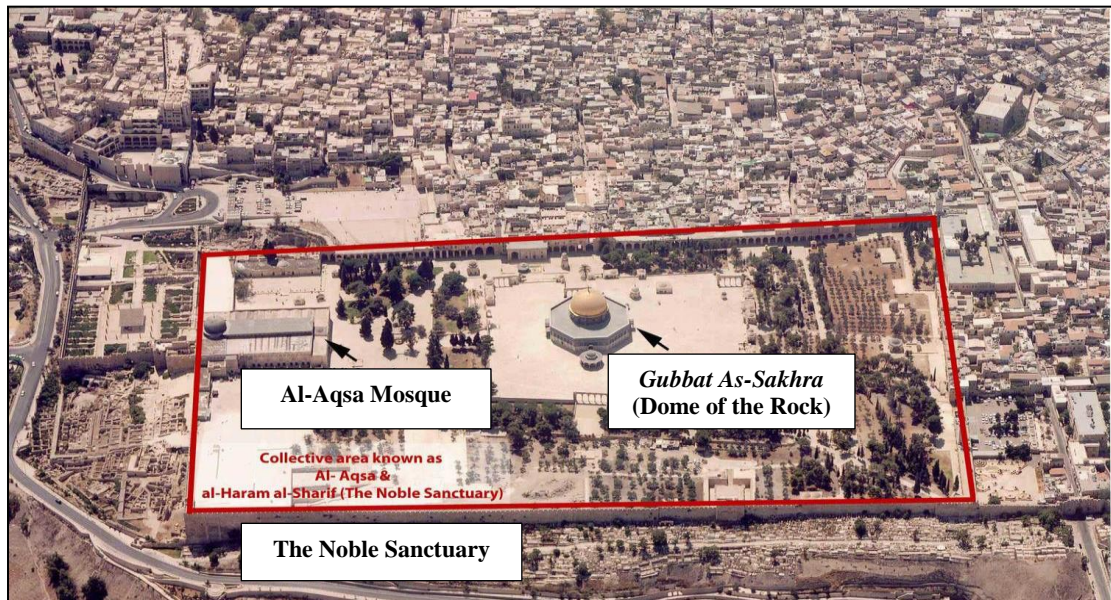


Figure 2.10: Aerial view of the Al-Aqsa Mosque complex (red line boundary) in the old city of Jerusalem; including the Dome of Rock and *Al-Haram As-Sharif* (The Noble Sanctuary) (Source: Masjid Al-Aqsa, 2015).



Figure 2.11: (Left) photo of Al-Aqsa Mosque; (right) photo of the Dome of the Rock (Source: Masjid Al-Aqsa, 2015).

In addition, based on the layout of these earliest and greatest mosques in the photos presented, it can be seen that these mosques have become core urban elements within their respective cities of Makkah, Madinah and Jerusalem. They are centrally located and surrounded by settlements and other forms of land use, as elaborated by Amirahmadi and El-Shakhs (1993):

(...) these institutions also produced specific spatial complexes using culturally specific symbolic representations that, in turn, informed the community's experience of urbanity. Among the most visible spatial formations, one can point to the court complex, the mosque-school complex, autonomous neighbourhoods, the bazaar, semi-private spaces and introverted houses. (Amirahmadi and El-Shakhs, 1993, p.2)

Based on the above statement, the mosque appears as an institution that interweaves a societal function with that of other complexes or institutions in urban settings. For example, when Amirahmadi and El-Shakhs (1993) mention ‘the mosque-school complex’, it can be seen that the function of mosques can be expanded beyond that of a mere place of worship if they are developed and attached to an educational complex. Khan, as cited by Mohyuddin (2008) in her publication ‘Masjid Goers’ Place Experience of a Contemporary Masjid as a Community Place’, refers to the mosque as a symbolic institution in Islamic architecture in which it is more noteworthy as a social rather than a sacred place.

Omer (2009) describes the Prophet’s mosque as an example compatible with Khan’s thought, in which it progressed positively from being a community centre to becoming a more multifunctional and robust place. Beginning with the earliest mosques built in the historical Islamic period, more and more mosques later appeared, with their usage as multifunctional community institutions also continuing to grow. In order to gain a deeper understanding of the establishment of the mosque in the global context, the next subsection will outline the distribution of the principal urban mosques in various cities across different regions.

2.2.2 The establishment and distribution of the principal urban mosques in global cities

Islam as a religion has spread and grown all around the globe for centuries. As physical manifestations of Islam, Ayhan and Mert Cubukcu (2010) mention that mosques have always been one of the primary urban elements and are constructed in cities and towns in which a Muslim population grows and resides. Frishman and Khan (2002) provide a distribution map of the principal mosques across nine different regions in their book ‘The Mosque: History, Architectural Development and Regional Diversity’ (see Figure 2.12). The regions include South East Asia; China; the Indian subcontinent; Iran and central Asia; the Arabian heartland; Anatolia; Europe; Spain and North Africa; Sub-Saharan West Africa; and East Africa.

By referring to the spatial distribution depicted on this map, it can be seen that these principal mosques are distinctively located in major city centres or urban settlements. Practically, these urban mosques have become dominant landmarks that

are powerful in enhancing the ‘imageability’ of these important cities. As defined by Lynch (1960), imageability is a physical quality of a feature that could evoke a strong image within the physical environment. In another sense, imageability may be seen as the images and values perceived by multicultural communities in relation to the manifestation of urban mosques. This is described by Kahera, Abdulmalik and Anz (2009) in their publication ‘Design for Mosques and Islamic Centers: Art, Architecture and Worship’:

Diaspora community, yet within the intrinsic belief system, that which is essential remains in memory; the urban mosque spans a range of cultural nuances, traditional styles, modern schemes or even hybrid appearance, which can have power over the essential or substantial image of the edifice. (Kahera, Abdulmalik and Anz, 2009, p.1)

In another work by Kahera, as reviewed by Nash (2006), the author mentions that urban mosques depict not merely the establishment of religious edifices, they also project a ‘particular image of urban design, spatial diversity, and the use of public space’ (Nash, 2006, p.133). Maroofi et al. (2014b) also add that the mosque is a place where the residents of neighbourhoods in cities can embrace their social life, which may lead to positive interconnections among themselves. Commenting on the views of these scholars, the essence from their studies reflects on those tangible values that have emerged from the establishment of urban mosques in those cities:

- The adaptation of urban mosques as public spaces in urban settings;
- The significance of aesthetics in relation to the image and use of urban mosques;
- The importance of cultural expressions pertaining to community beliefs, practice and attitudes.

In addition to discussing the distribution of the principal mosques in a worldwide context, Frishman and Khan also describe the basic categories of general mosque design in those different regions (see illustrations in Figure 2.13 on the next two pages). The categories of general mosque design are listed as follows (Table 2.2):

Table 2.2: Basic categories of general mosque design in different regions by Frishman and Khan (2002).

Region	Category
Sub-Saharan West Africa	A hypostyle hall using a mud-brick, rammed-earth construction
Iran and central Asian	The bi-axial four- <i>iwan</i> type
Anatolia	Use of a massive central dome and open courtyard
China	Detached pavilions within a walled garden enclosure
The Indian subcontinent	Triple domes with an extensive courtyard
The Arabian heartland, Spain and North Africa	The hypostyle and open courtyard
South East Asia	Central pyramidal roof construction

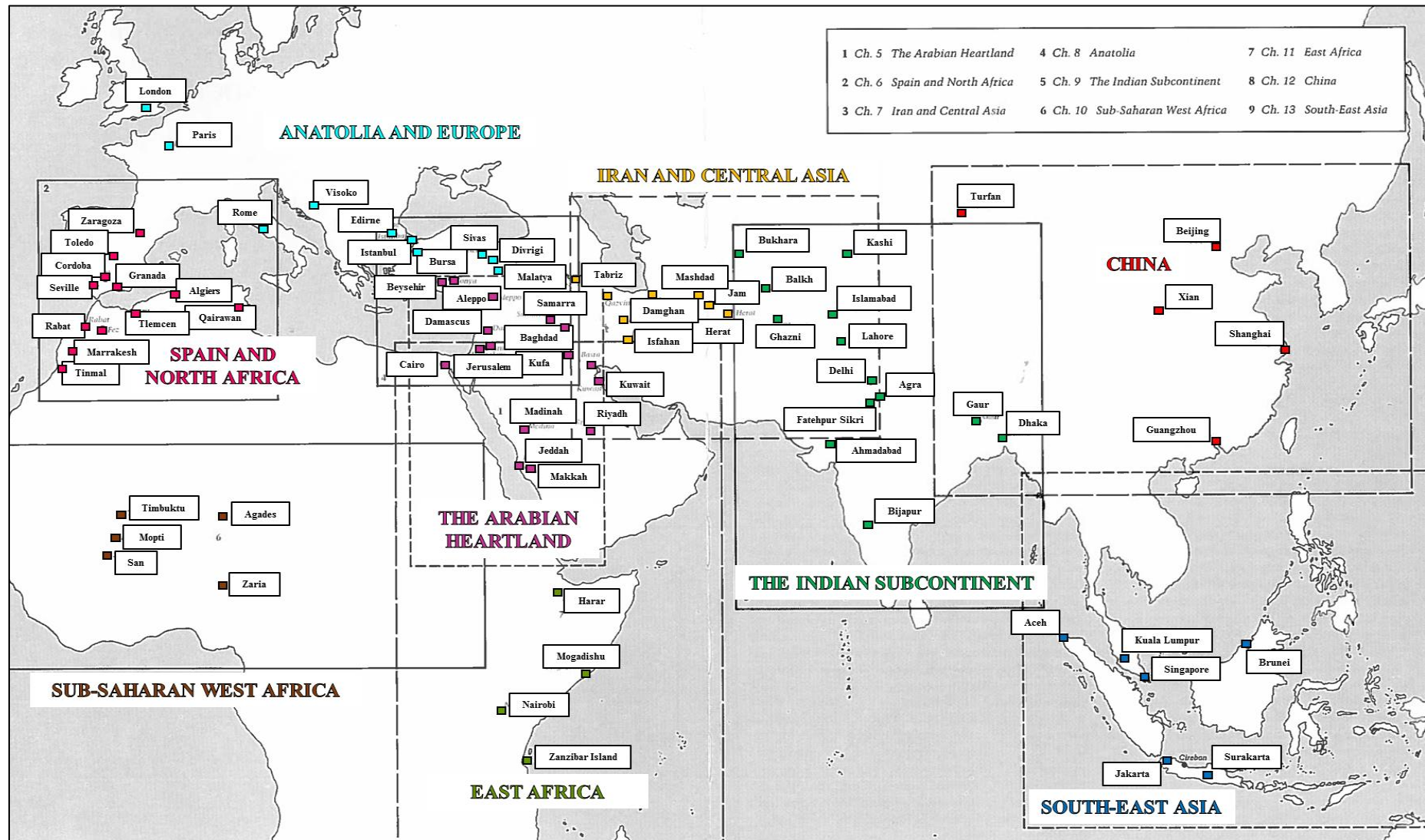


Figure 2.12: The sites of the principal mosques across all regions. Reproduced from Frishman and Khan (2002). The red dotted box shows the location of one of the selected mosques for this study – The National Mosque, Kuala Lumpur.

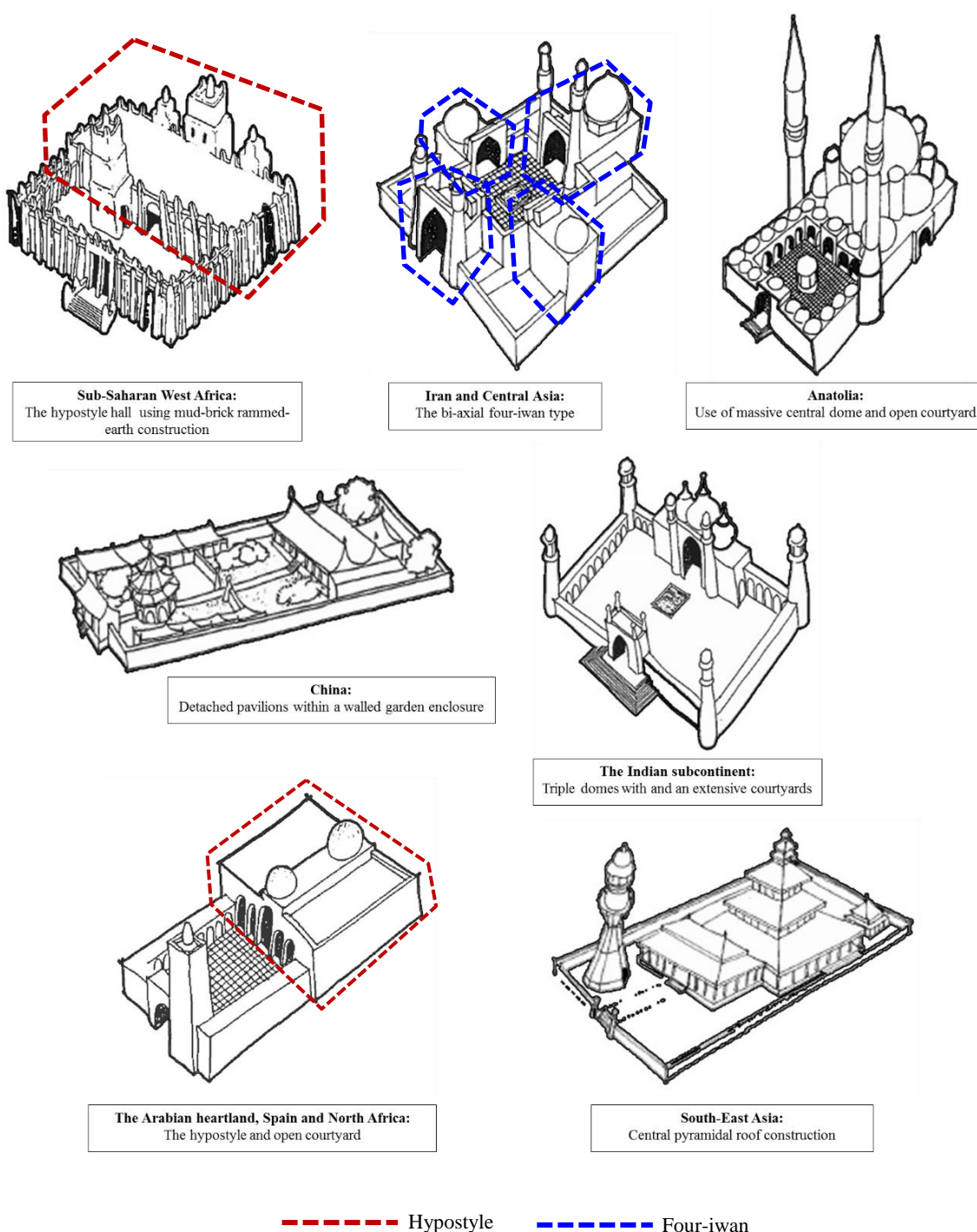


Figure 2.13: Illustrations of basic categories of general mosque design in different regional styles (Frishman and Khan, 2002).

Based on the illustrations above, it can be seen that there are various architectural styles according to the different regions. Hypostyle means a hall with a roof supported by columns (as indicated by the red dashed lines). On the other hand, the term *iwan* is a Persian word meaning a rectangular hall or space that is usually

vaulted, with three sides enclosed and a fourth side that is entirely open. Thus, the bi-axial four-*iwan* type mosques in Iran and central Asia have four similar vaulted spaces within two axes (as indicated by the blue dashed line). Viewing these categories of general mosque design from another angle, the designs of open spaces in the form of open courtyards and walled gardens are also incorporated in the mosque design. This suggests that mosque open spaces are among the important physical spaces that serve specific purposes for both mosque users and the community. Nevertheless, the patterns of mosque open spaces are not only confined to open courtyards and walled gardens. There are further categories that include a variety of open spaces around the mosque building, i.e. semi-open spaces and open spaces adjacent to the mosque building, which will be discussed later in Section 2.3.2.

Having discussed the establishment of the mosque in the global context, the next subsection focuses on the typologies, hierarchy and functions of mosques in Malaysia, the macro setting of this study.

2.2.3 Mosques in Malaysia

With regard to the context of this study, it was necessary to understand the fundamentals of the mosques available in Malaysia prior to selecting the most feasible case study areas for the purpose of conducting fieldwork. According to the planning guidelines developed by the Department of Urban and Rural Planning Peninsular Malaysia, there are several types of places of worship for Muslims in Malaysia. Essentially, the mosque is a term used to denote larger Muslim places of worship in Malaysia. However, additional terms such as *surau*, *madrasah* and *musolla* are also used to denote smaller or mini versions of the mosque. Table 2.3 below outlines these different typologies, levels of development, settlements hierarchy and general functions of a mosque and their variations in Malaysia.

Table 2.3: Planning guidelines for Muslim places of worship (Department of Urban and Rural Planning Malaysia, 2002, Department of Urban and Rural Planning Peninsular Malaysia, 2011)

Typology	Level	Settlements hierarchy	Functions
National mosque	National	<ul style="list-style-type: none"> City centre Capital city 	Muslim house of worship and social integration centre
State mosque	State	<ul style="list-style-type: none"> National federal territory State federal territory 	
District mosque	District	Main local district	
Sub-district mosque	Sub-district	Neighbourhood area	Muslim house of worship and social integration centre
Rural mosque	Rural areas	<ul style="list-style-type: none"> Rural development area Villages 	
<ul style="list-style-type: none"> <i>Surau</i> <i>Madrasah</i> <i>Musolla</i> 	<ul style="list-style-type: none"> Small neighbourhood Village Housing areas Commercial areas Government offices Airports Bus hub 	<ul style="list-style-type: none"> Villages Small neighbourhood Commercial areas 	<p><i>Surau</i>: A small-sized place of worship and religious education centre.</p> <p><i>Madrasah</i>: A religious education centre with student accommodation. Also known as a 'monastic mosque'.</p> <p><i>Musolla</i>: A mini-sized place of worship only.</p>
Prayer room	Individual housing	-	Praying space for family

Based on the previous table, it can be seen that different types of Muslim places of worship serve different functions at different levels of development and settlement hierarchy. From the national to the rural level, the functions of the mosque are more comprehensive – as a house of worship and also a community centre. A

mosque can usually cater for more users at a time in comparison to a *surau*, *madrasah* or *musolla* due to their greater scale and size. Despite their smaller scale, *surau*, *madrasah* and *musolla* all play specific roles as houses of worship and religious education in accommodating residents in villages and small neighbourhood areas. More than that, *surau* and *musolla* are among the fundamental spaces included in the building of any commercial complexes including, among others, offices, shopping malls, airports and bus stations. This is essential to cater to the needs of those members of the Muslim community who happen to be at these places at the times at which they must perform their daily prayers or Islamic religious practice. In addition, a prayer room is normally designed for use by individuals. In terms of mosque design criteria and capacity, the Department of Urban and Rural Planning Peninsular Malaysia also outlines specific guidelines, as presented in Table 2.4 below:

Table 2.4: Guidelines on design criteria and capacity for mosques in Malaysia (Department of Urban and Rural Planning Malaysia, 2002, Department of Urban and Rural Planning Peninsular Malaysia, 2011)

Typology	Design criteria and capacity
National Mosque	Should be located on ten hectares of land so that it can accommodate large numbers of users for multiple activities.
State mosque	Should be located on three to five hectares of land – the role of the state mosque is smaller than that of the National Mosque.
District mosque	Should be located on 1.5 to three hectares of land, and accommodate 2000 users.
<ul style="list-style-type: none"> ▪ Sub-district ▪ Rural mosque 	<ul style="list-style-type: none"> ▪ A rural mosque should be located on a minimum 0.25 hectares of land and accommodate between 41 and 200 users. ▪ A suburban neighbourhood mosque should be located on a minimum of 0.5 hectares of land and accommodate up to 1000 users. ▪ A neighbourhood mosque within an area of higher population density should be located on a minimum of one hectare of land and accommodate 1000 to 1500 users, or more than 5000 Muslim residents.

The total area of land allocated and the scale of the mosque are important aspects of the development of a mosque at any particular settlement hierarchy. This is to ensure that the mosque is able to accommodate the Muslim community in performing their religious activities and special festivals. There are a few fundamental components of mosque spaces described by the Department of Urban and Rural Planning Peninsular Malaysia (2011) and these are shown through a space-related diagram in Figure 2.14. The components include the mosque edifice itself, a dedicated space for basic facilities, a designated space for a food court and trading area as well as open spaces for parking and social activities. Parenthetically, it is believed that, in general, open spaces play a significant role in mosque design. The Department of Urban and Rural Planning Peninsular Malaysia has also produced general design guidelines and considerations for mosque open spaces in Malaysia, which are described in Section 2.3.2.

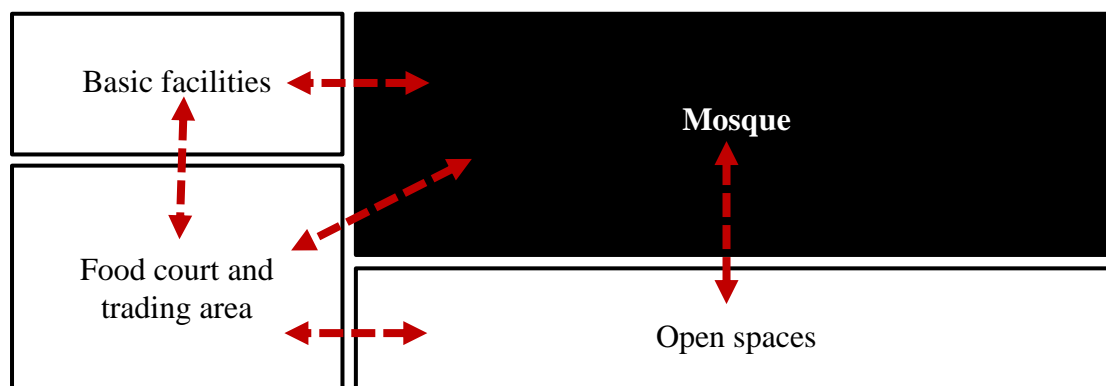


Figure 2.14: Space-related diagram on the fundamental components of mosque design in Malaysia. The red dashed arrows indicate the access from one space to another. Reproduced from the planning guidelines for mosque and *surau* (Department of Urban and Rural Planning Peninsular Malaysia, 2011).

Based on the categorisation of mosques given in the previous pages, the case study areas for this study were selected. As mentioned in Chapter One, three mosques in Kuala Lumpur were selected – the national-level mosque, a district mosque and a sub-district mosque. Considering the aspect of location and settings, these mosques were chosen as the case study areas because they are strategically located in urban areas of Kuala Lumpur and are surrounded by mixed land uses that accommodate different layers and groups of the community as well as local and foreign tourists. Further justification on the selection of the case study areas will be presented in Chapter Four. After acknowledging the types of mosque in both the global and

Malaysian contexts, the next section will delve into the functions of the mosque for the community in both traditional and contemporary times as well as in the Malaysian context.

2.2.4 Traditional and contemporary functions of the mosque for the community

Historically, the main prayer hall and courtyard were the most important elements of a mosque's architectural design. Sirat and Abdullah (2007) describe how the prayer hall functioned primarily as a space for prayers, while the courtyard was utilised for social activities which were typically conducted and attended by all sectors of the local community. For example, the courtyard was traditionally used as a venue for debates and political discourse between administrators and members of the community. In comparing the present with the past, Mujahid (2006) argues that 'there was a dynamism and activity that today is absent from many of the mosques of the Muslim world' (Mujahid, 2006, p.11). As such, as a place that was actively used by members of the community, it is claimed that the contemporary mosque nowadays seems lacking in certain aspects – vitality, liveliness and functions. Omer (2009) elaborates on the original functions of the mosque during Prophet Muhammad's time in his book entitled 'The Prophet Muhammad (PBUH) and Urbanization of Madinah'. Entwinning his ideas with the contemporary scenario, it can be postulated that similarities and differences have emerged between the traditional and contemporary functions of a mosque, as presented in Table 2.5 below:

Table 2.5: Traditional and contemporary functions of a mosque

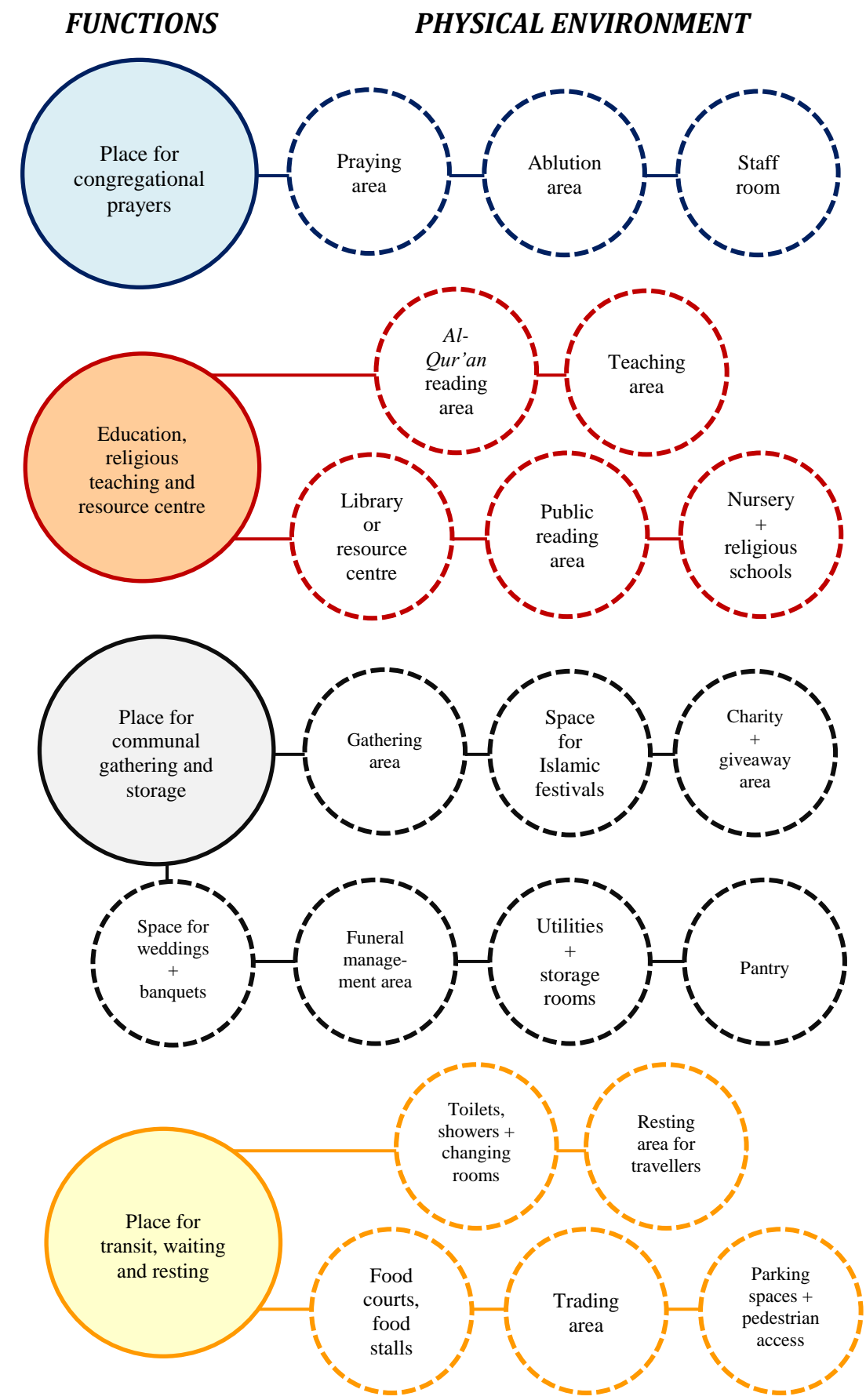
Functions of a mosque	Traditional	Contemporary
1. Place for congregational prayers (five times daily prayers, Friday prayer, special prayers)	●	●
2. School/learning centre/place for sermon delivery/resource centre	●	●
3. Courthouse	●	
4. Military camp (space for weapons storage and treasury)	●	
5. Hospital	●	
6. Shelter for the homeless	●	

7. Place for holding celebrations or events (solemnisation, fasting in Ramadhan, Eid celebrations, Hijri new year, etc.)	●	●
8. Daily businesses, administrative and financial centre	●	
9. Place for charity and giveaway	●	●

Based on the above table, it can be seen how in historical times mosques were comprehensively utilised as community development centres. They were not used merely as places in which to conduct Muslim rituals, prayer and worship activities, but also functioned as educational centres, military camps, as venues for delivering judgements and holding debates, for festive celebrations, as economic and trading centres, as well as places for delivering charity to the needy. It can be seen that there are four functions of the mosque in traditional times that remain relevant in today's contemporary mosques, including those in Malaysia. It may also be stated, however, that it is uncommon in present-day mosques to have a courthouse, military camp, hospital and homeless shelter as well as a centre for businesses, administration and finance.

The changing roles and functions of the mosque in the contemporary context can probably be explained with reference to various factors. Serageldin (1990) highlights that this phenomenon might have been influenced by 'the evolution of the functions of the mosque as a building and as a social element' (Serageldin, 1990). Reflecting on the first factor, a changing urban fabric has led to some of the traditional functions of a mosque being absent from most mosques today. Due to ongoing urban development, more and more buildings and spaces have been developed, and the social functions of the mosque – commercial, administration, health service, security, etc. – have been shifted into these new buildings. The holistic function of a single mosque complex in older times has gradually changed, with the separate uses becoming disseminated to other different sectors within a mixed-use development. Having discussed these views and now linking them to the context of this study, the Department of Urban and Rural Planning Peninsular Malaysia (2011) developed a general proposal on the functions and physical environment for mosques

in Malaysia. These proposed functions and physical environment are presented in Figure 2.15.



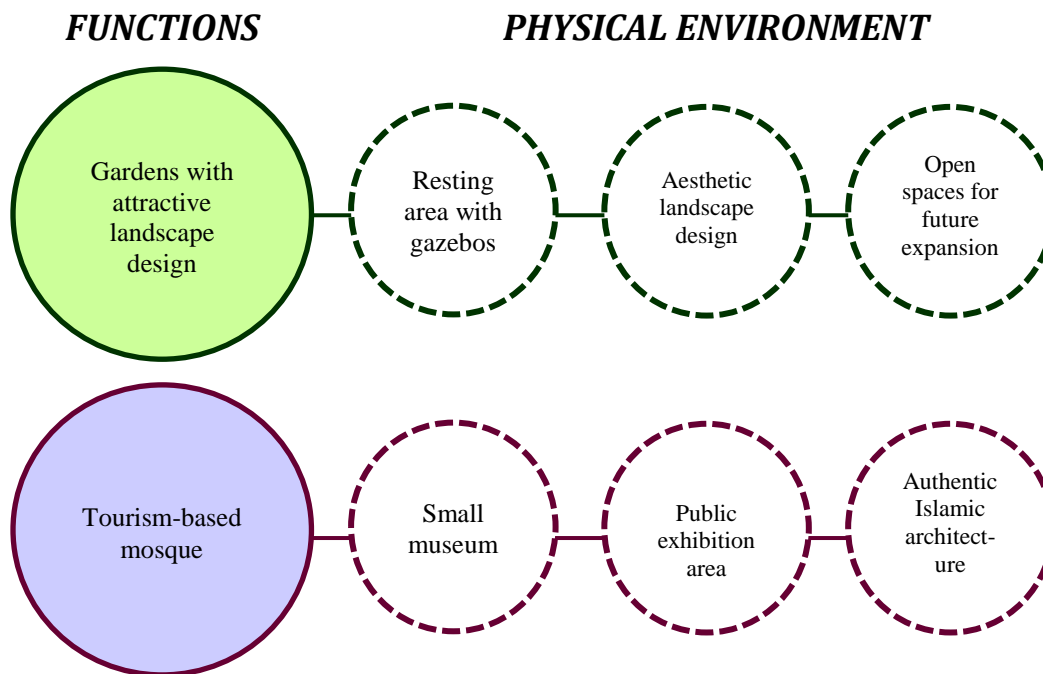


Figure 2.15: Functions and related physical environments of mosques in Malaysia as suggested by the (Department of Urban and Rural Planning Peninsular Malaysia, 2011)

Based on the previous proposal, it can be seen that several traditional mosque functions continue to remain important, with the addition of some extra functions. The proposal emphasises not only the design and function of the mosque as an edifice, but also accentuates the need to revive the use of its open spaces. Since Malaysia is a multicultural country, it is important that proper planning is undertaken prior to a mosque being designed in order to accommodate the community's needs. Tan Kiok Hiang, as cited by Mohyuddin (2008), claims that creativity is important when it comes to mosque design in a multicultural society. The whole design of the mosque should present fewer barriers to the community, while at the same time seeking to sustain the identity of and respect towards the Muslim community. This view is in line with the recommendations made by the Mosques and Imams National Advisory Boards (2011) with regard to the importance of understanding the role of mosques in relation to local communities. This organisation conducted a project called 'The Mosque in Community' in which they outlined a set of recommendations for the revival of the role of the mosque in the local community. These include:

- i) The mosque should encourage engagement with other faith communities to ensure diversity of activities and engagement;

- ii) The mosque should promote classes and training, such as health and well-being and sports and fitness classes, as part of a programme of healthy social activities;
- iii) The mosque should be connected to the wider non-Muslim community through: inclusive interaction and inviting followers of other religions to visit the mosque; taking mosque users and committee members to visit other places of worship; welcoming local non-Muslims to the mosque to join in with events or celebrations;
- iv) The mosque should organise social action days for local areas, which can help support relations with their wider communities. This might include social action days or charity sessions, aimed at helping the homeless as just one example.

It is understandable that the mosque is widely known as a Muslim house of worship. However, based on the above recommendations, it can also be seen that the mosque should be a place that promotes respectable (i.e. sensitive to Muslim etiquette) engagement amongst community members, be they Muslims or non-Muslims. Thus, in order to inculcate the understanding and respect of the whole community towards the mosque as an Islamic institution, members of the community should be aware of the mosque's code of conduct and etiquette. There are certain rules that mosque users and visitors are required to respect and follow. This is to protect the sacredness of the mosque as well as to maintain respect for its predominant users, the Muslim community. There are general rules and etiquette that should be adhered to by both users and visitors alike. Omer (2013) recommends a code of conduct for using mosques. This includes several aspects such as:

- i) Cleanliness and tidiness – the management of the mosque must make sure that users or visitors keep the mosque and its compound clean. This is to protect the environment of the mosque as a sacred place as well as to provide comfort for its users;
- ii) Proper and modest dress code – it is advisable that users and visitors dress modestly. They must cover up (i.e. short trousers are not

permissible for either men or women). Women are advised to cover their hair using a headcover such as a shawl. Nowadays, most mosques, particularly those frequented by tourists, provide robes with hoods for visitors.

- iii) Voices and noises – anyone who comes to the mosque should respect the sanctity of the place by not purposely using loud voices and making noise. In the case of any permitted events held at the mosque or even in its compound, it is permissible for there to be social interactions among users but these should be conducted in a respectful manner in the sense that they should not disturb anyone performing prayers inside the mosque.
- iv) The mosque belongs to everybody – the Prophet Muhammad (PBUH) mentioned that the mosque should welcome everyone regardless of their status and background. Reserving use of the mosque only for certain people is not acceptable.

Besides this code of conduct, Omer (2013) also expressed his ideas on the planning and design concept for the mosque development:

- i) Strategic location for a better use – it is suggested that the mosque should be built in a centralised location, whether this is in a neighbourhood, town or rural area. One of the important requirements for a mosque is that it is highly accessible and provides a sense of welcome.
- ii) Good facilities and activities for the community – the mosque should have good and adequate facilities and amenities in order to function as a lively community place. Also, it is essential to have interesting activities capable of attracting users from various backgrounds to visit or even use the mosque and its spaces.
- iii) Issue of mosque accessibility and security – it is recommended that the mosque is accessible for a majority of the time. This means that it should not be locked by its management. However, if there is any issue with

regard to the security and safety of the mosque itself, and also that of its users (i.e. a risk of theft or pickpockets), it is advisable that the mosque be locked at certain times, especially at night, to avoid any such unnecessary risks. On the other hand, the putting in place of proper safeguards and precautions by management and security guards is also recommended in the event of such risks.

- iv) Sustainability of the mosque – the mosque should be designed to be sustainable. This centres around not only the physical design of the mosque itself (e.g. as an energy-efficient mosque), but also in the aspect of preserving its existing values and resources.
- v) Suitable for use by elderly and physically disabled people – proper consideration needs to be given to catering to these groups within the community.
- vi) Youth and child-friendly – planners, designers and architects should be encouraged to use their creativity to ensure that the mosque is a fascinating place for children and youth, provided this does not impact upon the mosque's fundamental roles and functions.
- vii) Non-Muslim friendly – generally, non-Muslims are allowed to enter the mosque and its surrounding spaces, but with some general conditions or etiquette (as previously mentioned). They should understand the need to respect it as a religious institution.

In terms of having a non-Muslim-friendly mosque in the Malaysian context, Hee et al. (2015), in their article 'Non-Muslims in Mosques: Expected Etiquettes and Participation with the Underlying Reasons', discuss several rules that could be followed by non-Muslim visitors. Table 2.6 elaborates further on this aspect, with several supporting images:

Table 2.6: Rules and regulations for non-Muslims in Malaysian mosques (Hee et al., 2015)

Rules	Descriptions	Photos
Respecting prayer times	It is a standard regulation in Malaysia that the mosque is closed to non-Muslim visitors during prayer times.	 <p>Visiting times for non-Muslims at the National Mosque, Kuala Lumpur, Malaysia (source: researcher).</p>
No shoes are allowed inside the mosque	This is to protect the sacredness, purity and hygiene of the worshipping space. Thus, visitors (applicable to all) must leave their shoes on secured shelves which are normally provided at the mosque entrance.	 <p>British royal couple Prince William and Kate Middleton took off their shoes as a sign of respect during their visit to As Syakirin Mosque, Kuala Lumpur (source: Daily Mail UK).</p>
Proper dress code	Similar to that mentioned earlier by Omer (2013). Visitors are required to dress modestly. Generally, most mosques nowadays provide robes for visitors.	 <p>Robe collection counter at the National Mosque, Kuala Lumpur (source: researcher).</p>

Rules	Descriptions	Photos
Silence	Visitors must lower their voices to show respect for the mosque and its worshippers.	
Photos and videos	It is permissible for visitors to take photographs of mosque architecture and features. However, visitors are requested not to take photos of worshippers performing their rituals without prior consent.	
Cleanliness and good body odours	Visitors should pay attention to their bodily hygiene and odour prior to entering the mosque.	

In view of everything that has been mentioned thus far in this section, one may suppose that there is an important synergy between the mosque and community. Returning to the historical origin and functions of the mosque during the Prophets' time and the great Islamic reign, besides operating as a place of faith, it can be seen that the mosque was used comprehensively as a community centre with a range of functions that best served the needs of its community. The general functions of the mosque are similar across the world, yet the architectural design may differ from one place to another. This depends on the culture of the places throughout the continents (as presented in Section 2.2.2). This is also the case with mosques in Malaysia, where there are numerous types and design of mosque based on hierarchical order. It is possible to observe changing patterns of the roles and functions of the mosque over time. In this contemporary time, the mosque is designed to suit the needs of people nowadays, and may thus incorporate elements not present in the traditional time. Nowadays there are more aspects to consider, such as culture, sustainability, security, accessibility and inclusiveness. This is where the roles of built environment specialists such as designers and planners come in. Since this study concerns an examination of the mosque in Malaysia, it is essential that the connection between mosque and community is known. This study also looks at the functions of mosque open spaces with regard to the community. Hence, the nexus between open spaces and the community is also an essential area to be explored. The next section reveals more insights on this topic.

2.3 Open spaces and community

A large and growing body of literature comprises studies of open spaces and their importance to the community. There are various definitions and meanings of open spaces that have been coined by numerous scholars and researchers. Koohsari et al. (2015) claim that there is a lack of collective opinion in defining open spaces in the built environment field. This means that definitions may vary from one scholar to another, depending on their understandings and the needs and nature of their research. Stanley et al. (2012) define open spaces as 'any urban ground space, regardless of public accessibility, that is not roofed by an architectural structure' (Stanley et al., 2012, p.1089). They also point out the cultural, political and economic importance of

open spaces to the community from the historical era to the present day. On a different note, the Federal Department of Town and Country Planning Peninsular Malaysia (2005) acknowledges an open space as:

(...) a stage upon which the drama of our communal life unfolds – a gathering place for the community, a playground for children, a protest ground for the unsatisfied, a colony for the migrating birds, a home for plants and the homeless, and a paradise for those in love. (Federal Department of Town and Country Planning Peninsular Malaysia, 2005, p.8)

Based on this notion, it can be seen that an open space has a great impact on the community in which it is located – one may suppose that such an open space could be any open or enclosed area allocated for everybody regardless of their social background, for the purpose of enjoyment and relaxation. This is also in line with the clear definition of open spaces given by Nasution and Zahrah (2014), who mention that open spaces are ‘free places’ that can be utilised by community members for various activities. Ibrahim, Md Dali and Muhammad Yusoff (2014) also have similar views that an ‘open space can be considered as an open area designated for the public to carry out their recreational activities’ (Ibrahim, Md Dali and Muhammad Yusoff, 2014, p.17).

Through an exploration of the various definitions of open spaces, Koohsari et al. (2015) grouped the studies of open spaces within the literature into several categories: (i) open spaces research for active living; (ii) open spaces research for public health; (iii) causal relationships of open spaces and physical activities; and (iv) open spaces research in non-residential contexts. Based on these categories, they argue that open spaces are mainly known as parks and green spaces (with fewer types of open spaces such as public plazas) in category (i), active living research. They point out that:

(...) active living researchers are potentially missing out on opportunities to study different types of public open space required to improve physical activity. While there is a lack of research into the influence different types of public open space have on physical activity, there is some evidence that non-park public open space might be important for physical activity. (Koohsari et al., 2015, p.76)

Referring to the above argument, it seems that the studies and research in category (iii) are important to attest that open spaces go beyond simply being parks and green spaces. This also leads to the importance of conducting more research for category (iv). Koohsari and colleagues also agree that there is a lack of research on public open spaces and activities in other settings such as commercial and educational institutions. Congruently, Stanley et al. (2012) suggest an idea that open spaces around civic and religious institutions are also part of these non-park or non-residential open spaces. In this sense, it can be said that it is worthwhile to discover the opportunities offered to the community by other types of open spaces.

In the context of the typology of open spaces, various typologies have been developed by different researchers in this area of interest. A number of scholarly examples are thus acknowledged in this study for the sake of providing an understanding of the general categories of open spaces. Francis (1991) established a typology of open spaces comprising types of traditional and innovative open spaces. There are five types of traditional open spaces: (i) public parks, (ii) neighbourhood parks, (iii) playgrounds, (iv) pedestrian malls and (v) plazas. There are also ten types of innovative open spaces: (i) community open spaces, (ii) neighbourhood open spaces, (iii) schoolyards, (iv) streets, (v) transit malls, (vi) farmers' markets, (vii) town trails, (viii) undeveloped open spaces, (ix) waterfronts, and finally, (x) found spaces. Francis further mentions that, apart from using the terms 'open' and 'closed' for classifying an open space, the terms 'accessible' and 'inaccessible' open spaces can also be used to distinguish the categories. For instance, the accessibility of public open spaces located within an otherwise private property may be different to that for spaces located entirely in public territory.

On the other hand, Stanley et al. (2012), in their article 'Urban Open Spaces in Historical Perspective: A Transdisciplinary Typology and Analysis', outline seven major types of open spaces within three different scales of development (city, district/neighbourhood and also individual building/residence), as follows: (i) food production areas; (ii) parks and gardens; (iii) recreational space; (iv) plazas; (v) streets; (vi) transport facilities; and (vii) incidental space. In addition to these typologies, they add that it is also useful to reflect on the open spaces attached and

linked to any important buildings such as schools and religious complexes like mosques and churches within any scale of development. This typology is further enhanced by distinguishing between green and grey open spaces. Green space is regarded as a natural open space surrounded with softscape elements such as vegetation, water and natural features, while grey space is man-made and community-oriented space featuring hardscape elements like squares, markets and plazas.

In another perspective, the Federal Department of Town and Country Planning Peninsular Malaysia (2005) lists six types of open spaces. These are (i) civic open spaces and '*padang*' (lawn or field), (ii) lake gardens and city parks, (iii) neighbourhood open spaces, (iv) open spaces in public institutions, (v) incidental spaces and (vi) market halls and pedestrian malls. Collectively based on the above examples, it can be seen that these typologies of open spaces are quite similar from one scholar to another. There may also be some further additions to suit the research and location context of the study. In particular, the typology created by the Federal Department of Town and Country Planning Peninsular Malaysia (2005) focuses on categories of open spaces in Malaysia, which is explicitly relatable to the context of this study. Thus, Malaysia's open spaces will be further elaborated upon in the next subsection (Section 2.3.1).

Considering all of the evidence in this section, open spaces are seen as vital elements in enhancing the physical, social, emotional and also psychological aspects of community life, be it in major cities, smaller districts or even around individual housing units. Different types of open spaces may offer different opportunities to the community depending on their needs and purpose. In the context of Malaysia, Asmawi et al. (2014) mention that serious attention should be given to the provision of urban open spaces in order to improve the environmental and societal qualities of a place. The next subsection contains further information on the establishment and provision of open spaces in Malaysia.

2.3.1 Open spaces in the Malaysian context

According to Ibrahim, Md Dali and Muhammad Yusoff (2014), in a bid to ensure there are sustainable open spaces, the Malaysian government set a target of providing

two hectares' worth of open space per 1000 of the population by 2020. As of 2009, it has been estimated that 1.19 hectares of this open space allocation had been achieved. This aspiration came about due to the issue of deterioration of open spaces resulting from ongoing urban development (Federal Department of Town and Country Planning Peninsular Malaysia, 2005, Asmawi et al., 2014). Looking back at its history, Malaysia was a colony for years prior to achieving its independence from the British in 1957. Therefore, development during the colonial era was typically influenced by the colonial culture. In this sense, the Federal Department of Town and Country Planning Peninsular Malaysia (2005) states that:

Open spaces in Malaysia are the product of cross-culture. Some are an introduction of western culture in the East while others are a product of more complex evolution and experimentation. (Federal Department of Town and Country Planning Peninsular Malaysia, 2005, p.16)

Various studies and research have been conducted based on the typology and categorisation of open spaces developed by the Federal Department of Town and Country Planning (FDTCP) Peninsular Malaysia. Figure 2.16 provides an elaboration of the categories of open spaces and some of the preceding studies and research conducted in the Malaysian context:

<i>CATEGORIES</i>	<i>DESCRIPTIONS</i>	<i>PAST STUDIES</i>
Civic open spaces and the 'padang'	Civic open spaces such as squares, plazas and fields are used for various communal and cultural events, national festivals, mass congregations or gatherings, etc.	Harun, (2008); Abidin et al. (2010); Lai (2010); Harun, Mansor and Said (2013), Harun et al. 2014, Zakariya, Harun and Mansor (2015)
Lake gardens and city parks	Designed for people to enjoy leisure activities and the scenery of the lakes and the parks. Provide natural ambience for public buildings around the lake gardens and city parks.	Abdul Hamid (2011); Jamirsah (2012); Harun, Mansor and Said (2013)
Neighbourhood open spaces	Neighbourhood open spaces are usually designed to cater for the basic recreational needs of the community within residential areas.	Abdul Malek et al. (2008); Marzukhi and Abdul Karim (2011); Karuppannan and Sivam (2012); Ibrahim, Md Dali and Muhammad Yusoff (2014); Hussain and Said (2015)
Open spaces in public institutions	Not only confined to educational institutions, they are also present in religious institutions and public buildings such as mosques, churches, temples, museums and hospitals. They normally function as forecourts, courtyards, lawns or gardens.	<ul style="list-style-type: none"> ▪ <u>Garden in the hospital</u> – Said (2003) ▪ <u>Campus mosque open spaces</u> - Ismail, Megat Abdullah and Ibrahim (2010)
Incidental spaces	Incidental spaces are additional spaces such as road reserves, spaces between buildings as well as river corridors and linkages.	Sreetheran and Adnan (2007); Samadi, Omar and Mohd Yunus (2012)

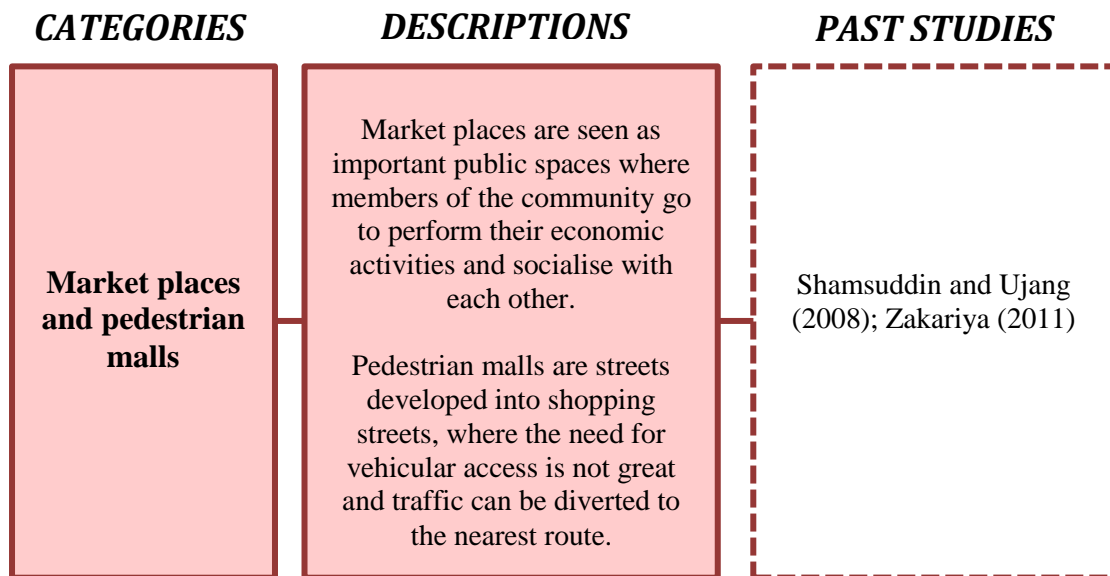


Figure 2.16: Previous studies on open spaces in the Malaysian context based on the categories of open spaces developed by the FDTCP.

Based on Figure 2.16, it can be seen that there has been extensive research conducted with regard to all categories of open spaces in Malaysia. This shows that there is great demand for knowledge of the issues and inputs regarding open spaces in Malaysia. Based on evidence from the literature, the use of both neighbourhood and civic open spaces has also been widely explored. With regard to investigations of urban mosque open spaces, which fall within the fourth category – open spaces in public institutions - there has already been a study on mosque open spaces in higher educational settings. For this reason, the present study concentrates on mosque open spaces in urban settings of Kuala Lumpur, since the mosque and community settings (university students versus multicultural public users) are different. These differences may also be seen in various aspects such as the activities carried out, the way people interact and socialise, the available physical and natural features around the spaces, and many more.

Referring to the importance of open spaces to the community, Fermino et al. (2013) state that, besides encouraging good physical and psychological well-being, open spaces help to strengthen social bonds both among and between community members. Jamirsah, Said and Rasidi (2007) suggest that one of the indicators of social integration in a community is the presence of a multicultural community in its public realms. It is evident that every single person within a multicultural community is

unique and may have different beliefs, perceptions, preferences and also experiences in utilising shared spaces like public open spaces. Thus, this might influence their preferences and perceptions when seeking to become engaged in open spaces. This view corresponds with the view of Rose in Ujang and Zakariya (2015), who states that ‘racial, ethnic or class identity influences sense of attachment to a particular place’ (Ujang and Zakariya, 2015, p.375).

Tang and Khan (2012) found that in the Malaysian context, different ethnic or cultural groups have different preferences for using public open spaces. Correspondingly, they also mention that there are two challenges to building social integration within the multicultural community in this case. The first challenge revolves around the influence of necessary, optional and social activities. According to Gehl in Abdel-Aziz, Abdel-Salam and El-Sayad (2016), necessary activities are defined as daily tasks that need to be carried out regardless of the quality of the physical environment. These include driving or walking to the workplace or school, having breakfast or even sleeping at night. In contrast, optional activities are defined as activities that a user may engage in depending on the amount of time they have available and their preferences, as well as the opportunities a place has to offer. For instance, relaxing in a green area and sitting on a bench at the park are considered optional activities. As for social activities, Gehl defines these as ‘resultant activities’ (a combination of both necessary and optional activities). This type of activity takes place when people meet each other in a particular space. People conversing with each other, children playing together and communal gathering are examples of social activities. Referring back to the first challenge, scholars claim that necessary and optional activities are inclined to create ethnic bias in social integration because ethnic groups are bound to perform activities that are within their comfort zones. Social activities, in contrast, are seen as being more flexible and create less ethnic bias. People from various ethnic groups may prefer to do the same activities at the same place, which may result in their direct interaction with each other. Despite this assertion by Tang and Khan, there will also be certain social activities that are very culturally specific and which are performed only by certain cultural, religious or ethnic groups (e.g. members of the Muslim community eating together after sunset during Ramadan).

As for the second challenge in creating social integration among the multicultural community in Malaysia, Tang and Khan (2012) believe that ethnic groups' religious backgrounds may affect the way they socialise with each other in public open spaces. When engaging with activities and multicultural users in open spaces, one should be aware of the importance of respecting and accepting each other's similarities and differences. In this case, users should make effort to avoid sensitive issues with regard to identity, be it religion or ethnicity. This helps to ensure that all users can enjoy the spaces without having any restrictions or negative feelings and perceptions towards each other. Without this, intercultural use may not happen. Based on previous empirical studies in the context of Malaysia, it appears that the factor of a community's multicultural background and make-up has a significant influence on the utilisation and occupancy of open spaces, as well as the social integration and cohesion of the community. The next subsection attempts to reveal the connection between open spaces and the mosque as a public religious institution, as well as design considerations of mosque open spaces in the context of Malaysia.

2.3.2 The nexus between open spaces and the mosque

Since the emphasis of this study is mosque open spaces, it is important to determine the nexus between open spaces and the mosque itself. Based on the literature review, there has been little research focused specifically on mosque open spaces as a whole. No study has established terminology and parameters in relation to the mosque open space itself. Nevertheless, in their study on Malaysian campus mosque open spaces, Ismail, Megat Abdullah and Ibrahim (2010) suggested that mosque open spaces:

(...) should be similar to landscape park and recreational areas design which combine artistic values and technology so that users not only can appreciate the natural elements in its existing surrounding but also equipped with recreational facilities that can cater for passive and active human behaviours. (Ismail, Megat Abdullah and Ibrahim, 2010, p.3)

Based on the general term coined by Ismail and colleagues, it appears that mosque open spaces should function the same as other types of open spaces such as public parks and squares, that is, as spaces for enjoyment. They also recommend that mosque open spaces should cater for the communal and religious activities of the Muslim community.

Traditionally, particularly in the principal mosques of Islamic countries, open spaces such as '*sahn*' (courtyards) have always been regarded as a vital element in the history of the mosque's architectural design (Salmani, Rahimi and Khakzand, 2016). For example, Devres (1996) mentions that in historical times in Istanbul, Turkey, mosque courtyards and gardens were perceived as public open spaces. Benli (2013) mentions that mosque courtyards were usually used as public gathering and meeting places during the Ottoman period as they provided a serene environment conducive to users. As such, this evidence demonstrates that there was great demand for open spaces at the mosque to serve the needs of the community. In order to distinguish between the types and layouts of mosque open spaces, Salmani, Rahimi and Khakzand (2016) gathered and analysed the layout plans of the principal mosques in major cities in several Islamic countries. Based on their analysis, they developed a set of general patterns of mosque open spaces. Figure 2.17 below shows four distinctive patterns of mosque open spaces based on the global context of the mosque developed by these scholars.

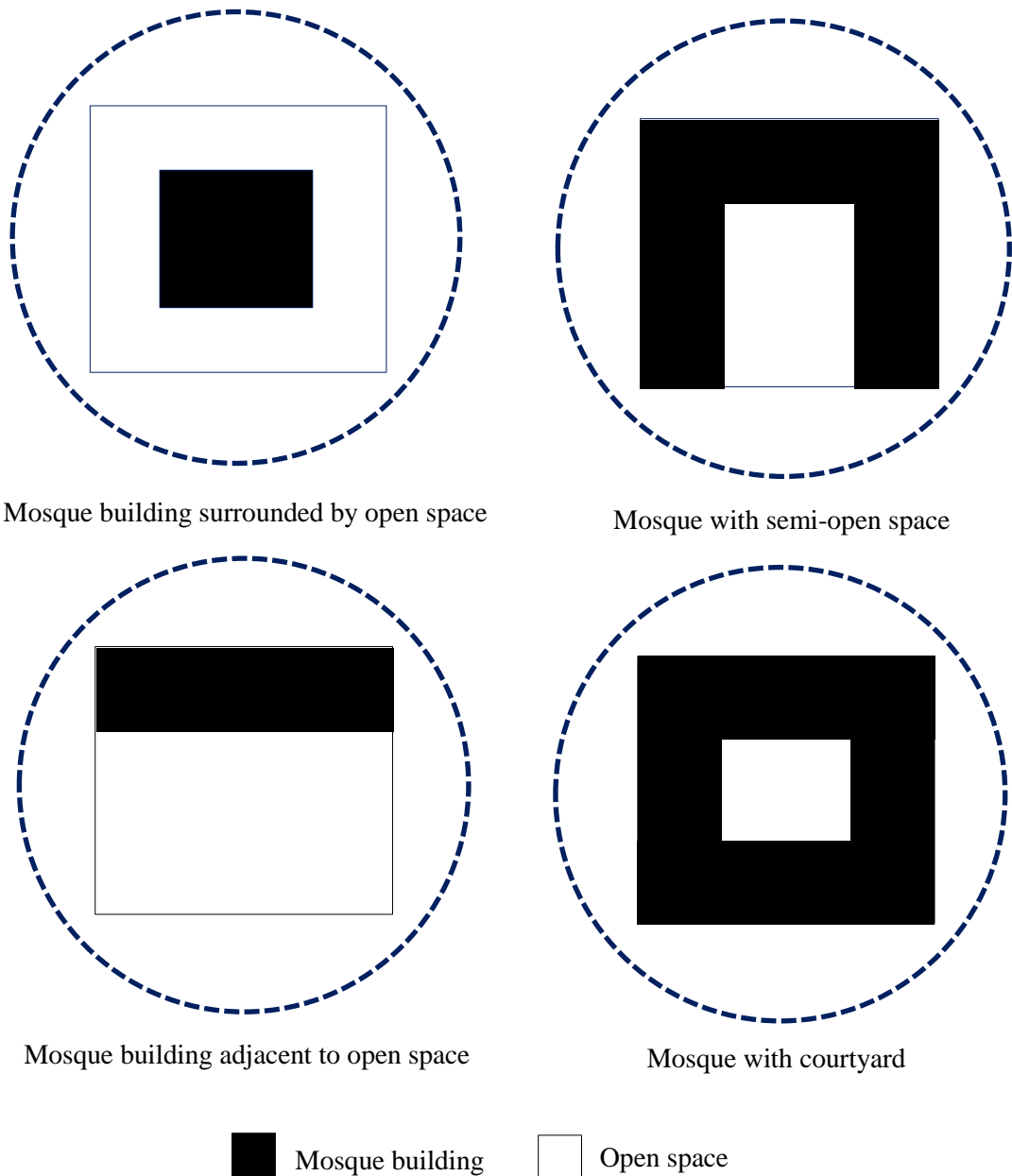


Figure 2.17: General patterns of the mosque open spaces (reproduced from Salmani, Rahimi and Khakzand, 2016).

Based on the patterns of mosque open spaces presented in Figure 2.17, each of these patterns has its own characteristics and design. They may also have different functions and roles in fulfilling the needs of mosque users and the community as a whole. On the other hand, different patterns of mosque open spaces might provide users with different opportunities, feelings, behaviours, perceptions and experiences. As an example, it can be perceived that a mosque with a courtyard offers a greater sense of privacy due to its full enclosure in comparison to a mosque that is fully surrounded by open spaces. This may influence users' preferences for using mosque

open spaces. Relating this idea to the context of the multicultural community, particularly for the non-Muslim community, the layout patterns and designs of mosque open spaces may be a factor that influences their desire to occupy mosque open spaces. They may perceive the spaces differently in terms of whether they view them as an opportunity or a barrier to their use and their suitability as somewhere to socialise.

In addition to this notion, Ismail, Megat Abdullah and Ibrahim (2010) outline three aspects that should be considered by designers in planning and designing mosque open spaces in the context of Malaysian mosques. They mention that it is important to first understand the macro and micro contexts of the place. Secondly, it is essential to consider a site's constraints and its users' needs as well as the role of the mosque itself within that particular location. Thirdly, they also mention the need to comprehend the functions and roles of mosque open spaces. This is to ensure that mosque open spaces will be designed in a sustainable manner and be suited to the needs of their users. On top of this, the Department of Urban and Rural Planning Peninsular Malaysia (2011) developed a set of design considerations for use in designing mosque open spaces according to the typology and hierarchy of the mosque (refer to Table 2.7). Essentially, these guidelines enable designers to understand the basic requirements that should be provided in mosque open spaces.

Table 2.7: Design considerations for mosque open spaces in Malaysia (Department of Urban and Rural Planning Peninsular Malaysia, 2011)

Typology	Settlements hierarchy	Open space considerations
National mosque	City centre Capital city	<ul style="list-style-type: none"> ▪ Good pedestrian and vehicular circulation. ▪ Sufficient parking spaces for users and visitors are needed to avoid traffic congestion. ▪ It is good to have a mosque close to a public transportation hub. By having this, the provision of parking spaces can be minimized and open spaces can be turned into more functional spaces.
State mosque	National federal territory State federal territory	
District mosque	Main local district	
Sub-district Rural mosque	Rural and villages Neighbourhood area	<ul style="list-style-type: none"> ▪ Should cater to the needs of physically disabled people (ramps, railings, etc.) ▪ Landscape development should be carried out from an early stage. Landscape design should be easy to maintain, provide shade and may act as buffer zones for the mosque.

In light of the points mentioned in this section, various aspects need to be considered as part of a successful mosque open space design, in addition to determining how it may benefit the community. It is not solely about the design of the spaces themselves, but also about building a comprehensive understanding with regard to the functions of the spaces and the needs and preferences of their users. Having reviewed the literature and past studies on the mosque and open spaces in relation to its importance to the community, the following section explains the conceptions of multicultural and intercultural communities.

2.4 Conceptions of multicultural and intercultural communities

As mentioned in Chapter One (Section 1.5), two of the three key terms used throughout this thesis are multicultural community and intercultural space. To gain a

deeper understanding of these terminologies, this section presents the meanings and characteristics of multicultural and intercultural communities. According to The United Church of Canada (2011), a multicultural community is a group of people from different social backgrounds ‘who live alongside one another’. An intercultural community, in comparison, can be defined as a multicultural community who live and respect each other with comprehensive mutuality and reciprocity. Figure 2.18 below visually demonstrates these terminologies and their characteristics:

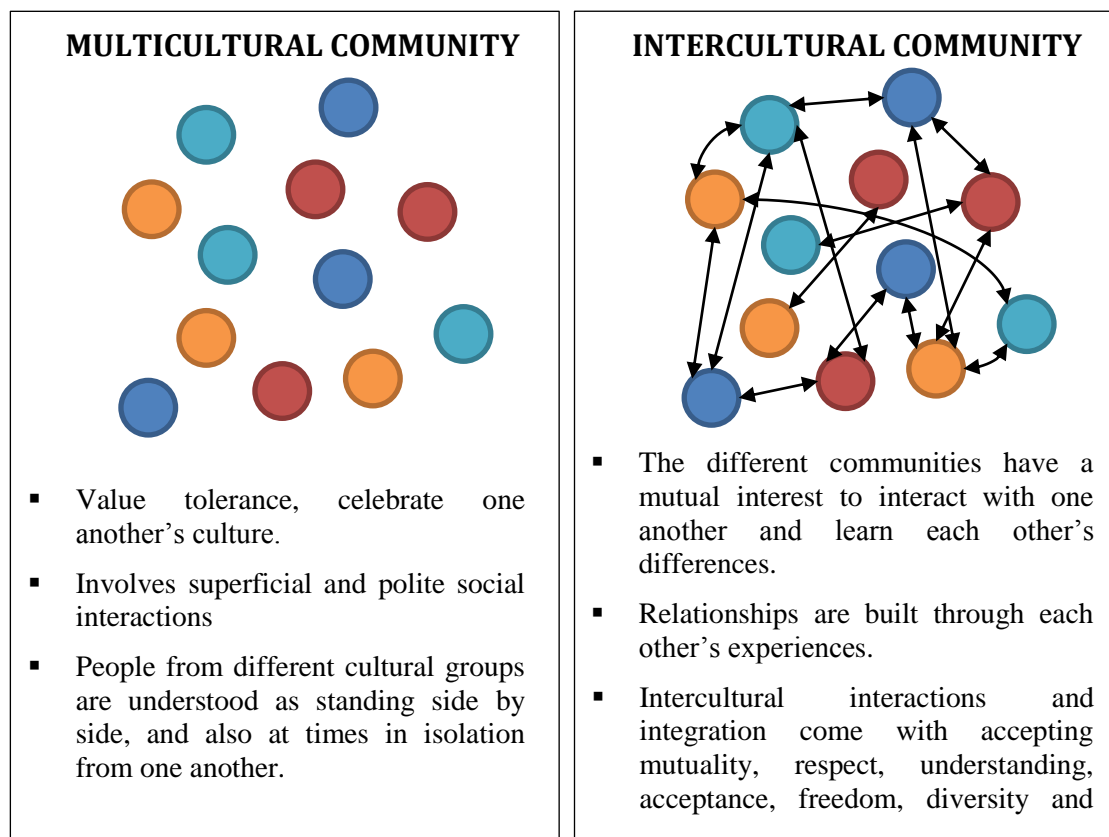


Figure 2.18: Multicultural community versus intercultural community

Based on this diagram, it can be seen that an intercultural community is actually the same multicultural community but with extra values created through stronger social integration. Referring to the context of this study, it is known that Malaysia is a multicultural country with different ethnic populations and religions. By contrast, the terminology of intercultural space is used instead of intercultural community to satisfy the aim of this research – to explore the spatial and sociocultural factors of urban mosque open spaces in order to ascertain the extent to which

intercultural space exists within those areas. Sullivan (2005) states that ‘a more common approach to the intercultural is activity that occurs “between cultures” or “between two worlds”’ (Sullivan, 2005, p.183). In this study, the researcher wishes to know the unknown – whether or not urban mosque open spaces in Kuala Lumpur encourage interaction and activities between cultures within the multicultural community, which will serve to make the urban mosque open spaces intercultural. The context of intercultural here is also similar to that seen in the study conducted by Binyi and Mwanza (2014). The authors’ aim in that study was to investigate social cohesion and integration among the multicultural community in public parks in China, as well as examining how these parks may create opportunities for intercultural interaction. Having discussed the meanings of both multicultural and intercultural terminologies and their application to the context of this study, a summary of the key findings from the literature discussed and reviewed in this chapter is provided in the next section.

2.5 Summary

Throughout this chapter, three significant literature themes have been discussed and reviewed. These are: (i) mosque and community; (ii) open spaces and community; and (iii) multicultural and intercultural dimensions. In the light of understanding the basic notions of mosque development and its importance to the community, a number of subthemes were highlighted for the first theme, including the origin and history of the mosque in Islam; the establishment and distribution of the principal urban mosques in a global context; a review of mosques in the Malaysian context; and the functions and roles of the mosque to the community. From the historical time up to the present day, the mosque has become one of the key components within urban fabric, functioning not solely as a religious institution and house of worship for the Muslim community, but also offering opportunities for other non-religious and communal activities. Even though there are large differences between the traditional and contemporary functions of a mosque, the importance of the mosque to the community remains undeniable. Besides serving the spiritual needs of the community, Stausberg (2011), in his publication ‘Religion and Tourism’, mentions that there are several reasons why people visit a religious site such as a mosque:

- To seek shelter from bad weather;
- For the purpose of relaxation after a long journey or walk;
- The strategic location of the religious site and its proximity to public transportation networks such as a train station or bus hub;
- An interest in the architecture, culture, history and arts of religious places;
- Attractive landscape design, spatial features, meaningful landmarks and scenic beauty;
- For the purpose of touristic photography and snapshots.

Looking at another aspect, since this study explores the idea of mosque open spaces, this chapter has also reviewed general conceptions of open spaces and their connection to the community. Various scholarly definitions, typologies and functions of open spaces are covered in a broader context as well as in the Malaysian context. Apart from promoting healthy living and well-being for the community, it is believed that open spaces play a role in encouraging and fostering social integration among members of the community. Correspondingly, it can be perceived that open spaces may contribute to improving the physical, psychological and social qualities of the community. Delving into the context of the mosque open spaces, the researcher has attempted to find the nexus between open spaces and the mosque. Only a relative few of the previous studies on mosque open spaces in both global and local contexts have provided meaningful inputs from various aspects, including patterns of mosque open spaces as well as general design considerations, to establish a blueprint for a successful mosque open space.

In order to meet the desire of this study to investigate whether or not the urban mosque open space encourages intercultural interactions among members of the multicultural community, this chapter has also examined the dimension of multicultural and intercultural terminologies. There are several characteristics that differentiate both terms, and it is important to make clear how these key terms are used throughout this study. In addition to this, demographic information for Malaysia and Kuala Lumpur has also been presented to provide a clearer picture on the composition of the country's multicultural community in order to more fully establish the context in which the study has been conducted. Having now discussed useful

findings from the literature search related to the context and nature of this study, the next chapter examines another important aspect that supports this study – its theoretical framework.

CHAPTER 3

THEORETICAL FRAMEWORK

3.1 Introduction

The previous chapter reviewed the literature based on several themes related to mosque open spaces as well as their connection to the multicultural community, particularly in Malaysia. This chapter considers how to study these themes through the discussion of a theoretical framework. A theoretical framework is important to demonstrate an understanding of the theories or concepts that underpin the subject matter. Studies on the people-place relationship are crucial in landscape research (Hunziker, Buchecker and Hartig, 2007). Silveirinha de Oliveira (2011) mentions that the people-place relationship is multifaceted. This chimes with the view of Taylor, as cited by Garner and Bhattacharyya (2011), who points out that ‘(...) people affect places and places affect people’ (Garner and Bhattacharyya, 2011). Therefore, to comprehend how this mutual relationship works, there are several relevant conceptions used to support this study (see Figure 3.1).

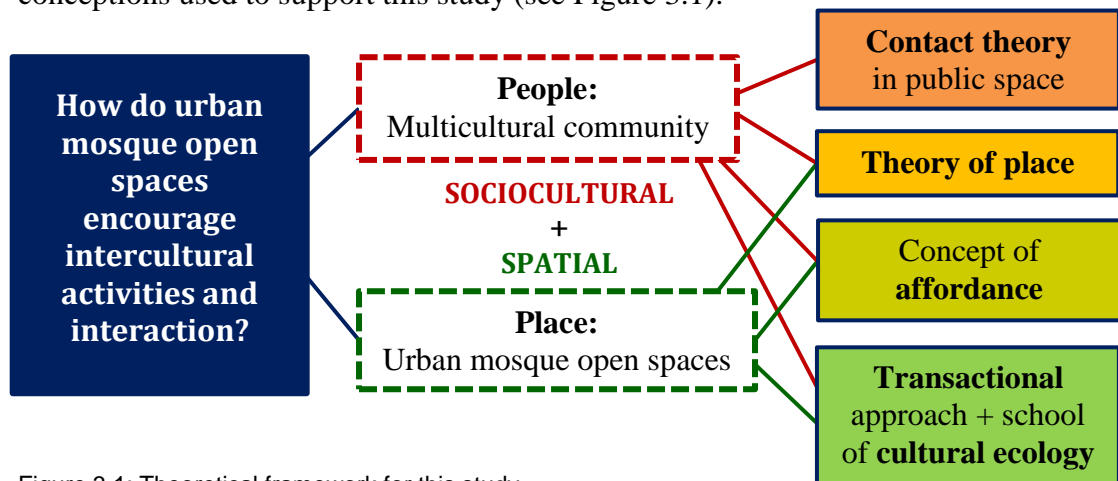


Figure 3.1: Theoretical framework for this study

This study addresses an enquiry on intercultural interactions in urban mosque open spaces in the context of Kuala Lumpur, Malaysia. Based on this enquiry, it can be seen that there is a potential association between place and people that needs to be explored. Thus, the theoretical framework for this study emphasises the connection between place (urban mosque open spaces) and people (multicultural community). Contact theory, as introduced by Allport (1954), is acknowledged in this study as a

foundation or rationale for conducting a study involving people from diverse backgrounds. Canter's (1977) theory of place and Gibson's (1977) concept of affordance are used to support this study in exploring both the spatial and sociocultural factors of urban mosque open spaces.

3.2 Contact theory in relation to intercultural interactions among the multicultural community in urban mosque open spaces

Contact theory has been widely used to support studies on the relationship between people from different groups, conducted in various fields such as psychology and sociology. Gordon Allport, who introduced contact theory in 1954, addresses the importance of interactions between members of different groups in the community in reducing their prejudgement of each other (Dixon, Durrheim and Tredoux, 2005). In addition, Pettigrew and Tropp (2006) outline how a reduction in prejudice may be possible if linked to the following four contact situation factors: 'Equal status between the groups in the situation; common goals; intergroup cooperation; and the support of authorities, law, or custom' (Pettigrew and Tropp, 2006). In an attempt to explore this theory in the context of public space, Shinew, Glover and Parry (2004) conducted a study on 'Leisure spaces as potential sites for interracial interaction: Community gardens in urban areas'. They aimed to examine whether urban community gardens may encourage positive interaction among multi-ethnic people. In addition to the existing theory, Shinew and colleagues further added that intercultural interactions occurring in leisure settings have the potential to be more open compared to those that take place in formal settings. They further mention that:

Leisure settings can be ideal environments for interracial interaction to occur due to qualities of free choice and self-determination. (Shinew, Glover and Parry, 2004, p.336)

Based on their conception, it can be understood that the physical and psychological dimensions of a place are influential in stimulating positive communication and social interaction among members of the multicultural community. Therefore, contact theory provides a solid basis for conducting this study – it may yield empirical findings that determine whether or not the urban mosque open spaces in Kuala Lumpur are perceived as leisure spaces by the multicultural

community and whether this inspires or supports intercultural interaction. The next section discusses the theory of place and its three-component model in order to obtain a deeper understanding of the people-place relationship.

3.3 Theory of place

Various studies on the people-place or human-landscape relationship have used the ‘theory of place’ developed by David Canter in 1977 as their theoretical underpinning. Bergström (2004), in his study on people’s conception of urban places, mentions that ‘how people think of places must be considered in studies of places’ (Bergström, 2004). This shows that it is vital to discover the psychological aspects of a place, along with its physical aspects. Focusing on this theory, Canter (1977), in his book ‘The Psychology of Place’, mentions that there are three major constituents or subsets that shape a place; activities, physical attributes and conceptions (referred to as a three-component model, as shown in Figure 3.2 below). In short, he states that ‘a place is the result of relationships between actions, conceptions and physical attributes’ (Canter, 1977, p.158). Based on this model, he further elaborates that the identification of a place can be comprehended only if these three components are known.

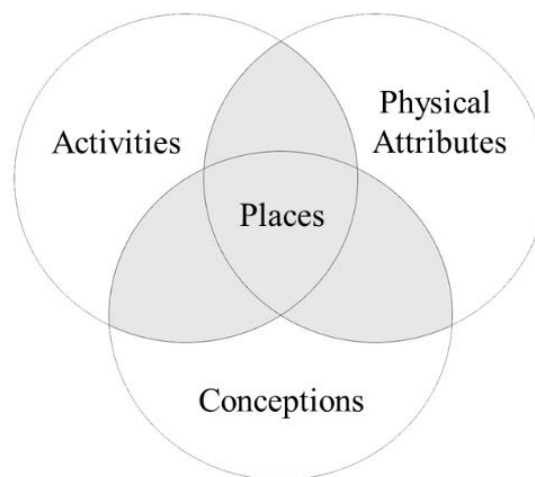


Figure 3.2: Theory of place – a three-component model of places (Canter, 1977).

In addition to this, Canter (1991) went on to expand his three-component model with a general model of place experience. According to this, there are two conceptual systems that help people understand what makes a successful people place.

He says, ‘One system deals with the internal processes by which people come to know what happens where’ and ‘The second conceptual system focuses on behaviour in its social context. How and where people use space. Who actually will be found in what locations’ (Canter, 1991b, p.22). Based on these conceptual systems, it can be noted that utilisation of a place is influenced by both spatial (circumstances relating to the use of the physical environment) and sociocultural (people’s backgrounds, experiences and preferences) factors. This is very much related to the context of this study, which explores the spatial and sociocultural factors that might influence interaction among multicultural users in urban mosque open spaces in Kuala Lumpur. Hence, this theory has become a dependable foundation in supporting the intention of this study.

Reflecting on the application of this theory by other scholars, a study by Mohyuddin and Lamit (2008) revealed that accessibility and wayfinding, uses and activities, and comfort as well as sociability were the physical and cognitive aspects affecting users’ place experience of a contemporary mosque in Singapore. These findings correspond with key attributes of the place diagram as described in Chapter Two. In a similar vein, Najafi and Mohd Shariff (2011b) conducted a study, which also applied the theory of place, into the factors that influence people’s attachment to mosques in Malaysia. Their study revealed the existence of 13 factors that affect public attachment: ‘structure and style, forms, spaces, size, ornaments, colours, lighting, furniture, ventilation, landscape of the courtyard and the view of the outside of the mosque, facilities, maintenance and accessibility of the mosques’ (Najafi and Mohd Shariff, 2011b, p.14). Focusing on ‘landscape of the courtyard and the view of the outside of the mosque’ factor, the study found that good mosque open spaces or courtyard design was one of the factors that attracted people to engage closely with the mosques. People tend to appreciate and value mosque open spaces that are well decorated and that function well as gathering spaces.

Likewise, Mazloomi, Ariffin and Shahminan (2014) conducted an analysis of predictors that influence sense of place in the state mosques of Malaysia. In this study, they referred to Canter’s model and also to a conceptual model for place attachment in religious places by Mazumdar and Mazumdar (2004). In this conceptual model,

Mazumdar and Mazumdar introduce three components – ‘place and physical characteristics and qualities, social development of religious place attachment, as well as individual and collective place attachment’ (Mazumdar and Mazumdar, 2004, p.388; Mazloomi, Ariffin and Shahminan, 2014, p.129). It can be seen that the components of this model correlate with the three components of place developed by Canter in terms of exploring the physical, social, perceptual and affective dimensions of a place. The application of Canter’s theory of place in those past studies provides a rich insight into how this theory can be further applied in this study. The researcher attempted to link Canter’s three-component model and the domains of this study (spatial and sociocultural) as described in the following Figure 3.3:

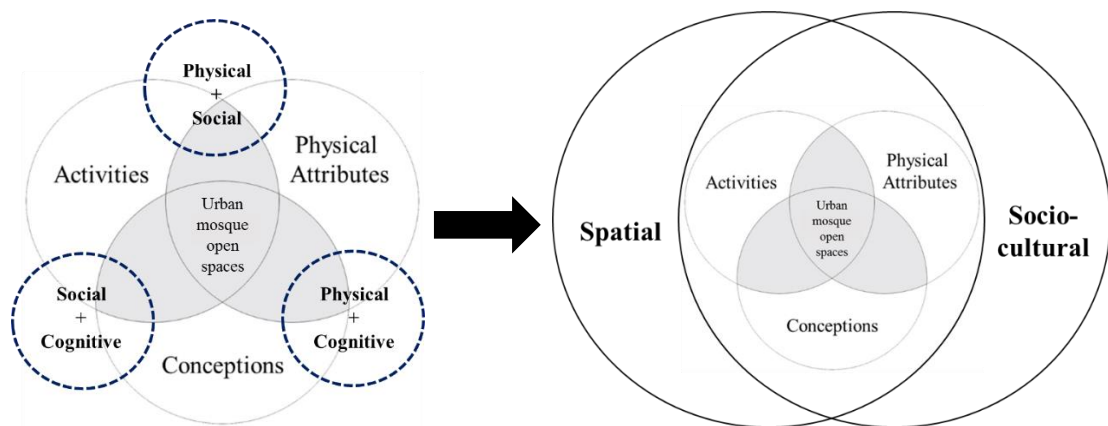


Figure 3.3: The interconnection of theory of place with this study

The Venn diagrams in Figure 3.3 above specify how the theory of place by Canter (1977) is interconnected with the aim of this study. To see whether or not urban mosque open spaces encourage successful use of intercultural space, the researcher first needs to elicit what attracts multicultural users to use the space. In order to uncover what is unknown about the use of the urban mosque open spaces, research needs to identify the physical, social and cognitive aspects of a place or space, which comprise the existing physical attributes around the spaces, the groups who use the space, the types of activities and actions undertaken by these users, as well as the users’ ideas, experiences and perceptions. Identification of all of these components assists in determining the spatial and sociocultural factors that influence multicultural users to utilise the urban mosque open spaces.

In addition to the theory of place, this study is also supported by the concept of affordance. Initially introduced by Gibson in 1977, the concept of affordance has been expanded into the physical, social, cognitive and affective domains by various scholars, in the context of exploring people's interaction in public spaces. The next section will describe the concept of affordance and how it relates to the context of this study.

3.4 Concept of affordance

A review of the literature demonstrates that the concept of affordance has been prominent and used extensively across many disciplines such as landscape architecture, psychology, computer studies, communication and many more. James J. Gibson, who introduced the concept in 1977, stated that: 'The affordances of the environment are what it offers the animal, what it provides or furnishes, either for good or ill' (Gibson, 2014, p.119). Thus the essence of affordance is related to those possibilities for action offered to people by the environment or places (Rietveld and Kiverstein, 2014).

Since Gibson's work, the idea of affordance has been expanded by various scholars. Heft (2010) defines affordances as '(...) perceptible properties of the environment that have functional significance for an individual' (Heft, 2010). In relation to the context of public open spaces, Ward Thompson (2013), in her study on activity, exercise and the design of outdoor spaces, explains that the concept of affordance provides an insight into the nexus between physical properties and people's physical, psychological, perceptual as well as affective characteristics. Loveland (1991) states that the perception of affordances differs from one individual to another due to each one's unique behavioural niche. She also defines three categories of affordances from her own perspective, centred on the physical, social and behavioural dimensions of affordances (see Table 3.1).

Table 3.1: Categories of affordances by Loveland (1991).

Categories	Descriptions
1. Affordances for physical transactions with the environment	These refer to people discovering affordances with the support of physical environmental properties.
2. Culturally determined affordances	These involve preferred actions rather than necessary actions by people who share the same culture or background.
3. Social and communicative affordances	These reflect human activities with other humans, including conversation, writing, facial expressions, body gestures as well as direction of gaze.

Based on the aforementioned notions of affordance, it can be understood that affordances are not only influenced by interactions between the physical features of the spatial environment and individuals. They are also affected by accompanying factors such as the social and cultural backgrounds of the environments and individuals. Paay and Kjeldskov (2007) conducted a study on the physical and social affordances of people's interaction in public spaces. They aimed to examine the relationship between users' interactions in the built environment and users' social roles or rules in public spaces. Based on their analysis of this relationship, they developed a conceptual framework called 'SOPHIA (SOcial PHysical Interaction Analysis)' which was steered by the concept of affordance. SOPHIA was developed into three important domains: (1) knowledge, (2) context and (3) motivation (refer to Table 3.2 for details). According to the authors, SOPHIA is useful in aiding researchers or designers to explore people's contact with physical spaces and the ways in which people interact and socialise with each other through an understanding of the spatial and sociocultural context of the place.

Table 3.2: SOPHIA conceptual framework by (Paay and Kjeldskov, 2007)

Knowledge	Knowledge-in-the-world	Physical affordances	Places to enter	Context	Surroundings	Indexing to surroundings	Index to shared knowledge
			Places for gathering				Index to visible elements
			Landmarks as focal points				Index to events
		Social affordances	Cues for what to do				Index to physical objects
			Cues for where to go				
	History	Physical familiarity	Familiar paths	Motivation	Reflection	Sizing up the situation	Getting an overview
			Familiar places				Pausing before committing
		Social experience	Past experience				Making sense of a place
			Shared experience				Making sense of what's happening
			Recommendations (experience of others)			Seeking information	Different levels of information
			Preferences				Media screens as decoration
							What's new
Context	People	Us and them (Group and others)	Interaction by maintaining group		Extension	Directed movement	Uncertainty (lack of information)
			Interaction by proximity				Transition through spaces
			Interaction by watching				Dynamics of a place
			Discomfort of waiting			Exploring	Wayfinding
							Exploration for the sake of it
	Situation	Setting matters	Others (social)		Negotiation	Making decisions	Wandering and browsing
			Environmental (physical)				Discussing suggestions
			Convenience				Someone takes the lead

Based on the above elaboration of the SOPHIA conceptual framework, the physical affordances of people who utilise and interact in public spaces are influenced by their knowledge and familiarity of the place. Elements that create a place image such as nodes, paths and landmarks, afford people the opportunity to select, go to and enter certain places. Besides, physical factors such as weather, enclosure, etc., prospect and refuge will also influence people psychologically when they make a choice concerning the best place to socialise. Moreover, the functional context, such as existing activities, might also affect other people's activities or actions in that particular place, since the connection between physical and social affordances appears to be mutual. Physical functional properties in public spaces may result in various physical actions by the users, but at the same time the physical features can also afford social interaction between users; namely social affordances.

This is supported by Rietveld, de Haan and Denys (2013) who define social affordances as '(...) possibilities for social interaction offered by the environment' (Rietveld, de Haan and Denys, 2013, p.2). For example, two strangers who sit side by side on the bus can be afforded an initial conversation. Similarly, Said (2012) describes an interesting example related to social affordances in his study on the impact of the affordances of forest and orchard on children's physical and social competency. Through his example, he describes that the features of the orchard may arouse children's interests, which may then inspire social interaction among them. In another study, Paay and Kjeldskov (2007) also found that social affordances are influenced by several aspects, including: other people's activities and behaviour in public spaces; the presence of other individuals and groups and their proximity; personal preference or experience; as well as the level of information provided regarding the place.

With regard to the aim of this study, the concept of affordance discussed above seems useful in helping to guide exploration of the physical/spatial and social possibilities that urban mosque open spaces in Kuala Lumpur can offer to multicultural users. The next section will address the importance of transactional approach and cultural ecology perspective in the context of this study.

3.5 Transactional approach and cultural ecology perspective on people-place research

3.5.1 Transactional approach

Apart from the theory of place and the concept of affordance, this study also recognised transactional approach and cultural ecology perspective as part of the theoretical framework. Similar to the previous theories, transactional approach and cultural ecology have been used widely across various disciplines and most prominently in the field of environmental psychology. According to Sameroff (2009), transaction can be defined as:

Transactions are omnipresent. Everyone in the universe is affecting another or is being affected by another. Everything in the universe is affecting something else or is being affected by something else. Everything is in a relationship, from the most complex society to the most elementary particle. (Sameroff, 2009, p.3)

Based on the above notions, the idea of transactions emerges in every single things and situations in our daily lives – in which there are mutual influence between two or more participating elements (Stokols, Lejano and Hipp, 2013). In the context of people-place research, Stokol and Shumaker as cited by Hauge (2007) explain the meaning of ‘transactional approach of places’ as a symbiosis between people, places (or environment). They also describe that transactional approach is viewed uniquely from Canter’s theory of place. Transactional approach emphasises on the interrelationship of people and places, whereas theory of place comprised of three subsets of places – activities, physical attributes and also conceptions. On the other hand, Pol, Castrechini and Carrus (2017) draw our attention to reciprocal interface between individuals and their settings possess a connection with the elements brought up by theory of place. Pol and colleagues suggest that there are macro and micro factors of places that influence people’s lifestyle:

This vision suggests that the interplay between macro (e.g. street forms and urban density) and micro factors (such as pleasantness of the settings and perceived safety). (Pol, Castrechini and Carrus, 2017, p.27)

In their useful conception of transaction, it can be seen that the macro factors establish a link to physical attributes of the places (spatial), while the micro factors

represent the conceptions and perceptions of human about the places (sociocultural). This view is in line with the view by Fleury-Bahi and Ndobbo (2017) who believe that the application of transactional approach is very important in people-place research as the relationship between human and environment is perceived to work closely with human's spatial and sociocultural attachment to a place. Moreover, Memmott (2013) in his study entitled 'Integrating Transactional People-Environment Studies into Architectural Anthropology: A Case for Useful Theory Building', mentions that transactional approach can be applied in various environmental settings such as '(...) secular and sacred sites, cultural landscapes, shelters and houses, institutional settings, service delivery settings, rural towns or remote settlements, suburbs or town parks' (Memmott, 2013, p.916). This is very much related to the context of this study, which discovers the spatial and sociocultural factors that might inspire interaction among multicultural users at sacred sites namely urban mosque open spaces.

Stokols as cited by Giuliani and Scopelliti (2009) establishes four modes of transaction which are (1) interpretive mode, (2) evaluative mode, (3) operative mode, as well as (4) responsive mode. In relation to this study, the first three modes seem to be the relevant modes to be applied. Interpretive mode involves spatial understanding, wayfinding, conception of the environmental settings, sense of place and place identity. Evaluative mode encompasses the assessment of environmental and aesthetical quality and preferences, while operative mode incorporates the utilisation of the space, people's location choices, and their distance during social interaction. Transactional approach could offer many valuable insights for this study with regard to interactions that people possess with their environmental settings at the physical, social as well as cognitive levels which can be allied together with the practice of theory of place and affordance.

3.5.2 Cultural ecology perspective

Cultural ecology is a theory developed by Steward (1955) which can be defined as "the study of processes by which a society adapts to its environment" (Azmin, 2007, p.144; Mairs, 2007, p.19). Frake (1962) later expands the meaning of cultural ecology as 'the study of the role of culture as a dynamic component of any ecosystem of which man is a part' (Frake, 1962, p.53). Masaud as cited by Azmin (2007) mentions

that based on the School of Cultural Ecology, cultural and social behaviour are both important variables in the process of integrating with nature. On the other perspective, Tyzzer as cited by Sharief (2005) defines cultural ecology as the interaction of human cultures with environment. According to him, the term 'environment' consists of physical and biological attributes, whereas the term 'human' comprises of sociocultural attribute.

Based on those definitions, cultural ecology expands the idea of transactional approach by emphasising that culture possess a vital role in the interrelationship between people and environment. This notion fits with the view by Sharief (2005) who suggests that culture is emerged and established through long-term interface between humans and their environments (physical and social). Lozanovska (2013) also suggests her idea that culture is shaped and inspired by the place where humans dwell, the ritual which they practise as well as the histories which they inherit. In the context of this study, the dimension of culture can be derived from the exploration of the multicultural community and the patterns of their interaction while utilising the urban mosque open spaces in Kuala Lumpur. By referring to the term 'multicultural' itself, it is appreciably understood that the presence of cultural values and insights will be diverse. Tudge, Brown and Freitas (2010) address their understanding of culture and society in their research concerning children in different cultural groups:

Culture and society are clearly not synonymous, and within any society can be found a variety of different cultural groups, given our definition of culture. Different ethnic groups may therefore constitute separate cultural group, and so may members of different social classes. (Tudge, Brown and Freitas, 2010, p.128)

In addition, they also point out that cultural ecology theory offers an important view in which – '(...) different cultural groups have different conceptions (...)'

(Tudge, Brown and Freitas, 2010, p.126). Furthermore, they also make a conclusion from their study that the presence of culture within the place where the activities and interactions happen may affect children's participation in engaging with those activities and interactions. It can be perceived that culture works hand in hand with people's physical, social and perceptual experiences to their places or environments. Triandis as cited by (Azmin, 2007) mentions that '(...) people in different cultures

experience differently the environment in terms of cognitive experience (Azmin, 2007, p.144). Referring to these insights, culture acknowledges values that people from various cultural groups appreciate, in which these values may affect people's preferences and perceptions to engage with the environment. Taken the scope of this study as an example, the multicultural community here encompasses people from diverse sociocultural demographic backgrounds – ethnicity, religious backgrounds and etcetera. Thus, these people must possess their own cultural beliefs and values that can be similar or different with each other. In relating this example to the thought of cultural ecology, the cultural values owned by the multicultural community may inspire (or discourage) them to utilise the urban mosque open spaces in their own way.

3.6 Summary

The theoretical framework presented in this chapter discusses the relationship between place and people. Different theories have been discussed, including Allport's contact theory, Canter's theory of place, Gibson's concept of affordance, the transactional approach as well as the cultural ecology perspective, all of whose ideas have also been expanded by other scholars. Contact theory sheds some light on addressing the rationale of conducting a study related to a multicultural community. The theory of place and the concept of affordance are in some way interrelated. The foundations they lay for the physical, psychological, social, emotional and experiential dimensions of a place are useful in guiding the researcher to understand more about the place-people relationship. On the other hand, transactional approach and cultural ecology perspective provide valuable insights on the factors or variables that influence people's interactions with environment. The next chapter presents the methodology adopted for this study by explaining the whole research process, including the data gathering stage and data analysis process.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 Introduction

The previous chapter discussed the exploration of different theories that are essential to underpin this study. This chapter discusses the methods chosen for this study, the selection of case studies, their implementation process, including the pilot study, ethical considerations, and also the limitations and challenges faced during data collection. The theoretical framework is not only essential in underpinning this study but is also valuable in helping determine the most suitable methods for data collection. Various angles of mosque-based research have been covered using different methodologies, measuring the roles and functions of mosques and their open spaces as well as the importance of mosques in terms of use both within and by the community. Examples of previously used methods include:

- i) Case studies (Mohyuddin, 2008, Mohyuddin and Lamit, 2008, Ismail, Megat Abdullah and Ibrahim, 2010, Khalit, 2011, Kahraman, 2012, Saeli Aleamin, Shamaei and Bahmani, 2014);
- ii) Focus group discussions (Mosques and Imams National Advisory Boards, 2011);
- iii) Historical interpretation and content analysis (Salmani, Rahimi and Khakzand, 2016);
- iv) Interviews (Najafi and Sharif, 2014; Maroofi et al., 2014; Baharudin and Ismail, 2014; Najafi and Mohd Shariff, 2011; Khalit, 2011; Kahraman, 2012; Dewiyanti and Kusuma, 2012; Özaloglu and Ö. Gürel, 2011; Mosques and Imams National Advisory Boards, 2011; Halabi, 2006); and semi-structured interviews (Mohyuddin, 2008, Mohyuddin and Lamit, 2008);
- v) Observation: direct observation (Baharudin and Ismail, 2014; Khalit, 2011; Ismail et al., 2010; Halabi, 2006); participant observation (Kahraman,

2012); and observation with behaviour mapping (Mohyuddin, 2008, Mohyuddin and Lamit, 2008);

- vi) Questionnaire surveys (Baharudin and Ismail, 2014; Maroofi et al., 2014; Saeli Aleamin et al., 2014; Taib and Mohamad Rasdi, 2012; Dewiyanti and Kusuma, 2012; Ahmad et al., 2012; Najafi and Sharif, 2011; Özaloglu and Ö. Gürel, 2011; Mosques and Imams National Advisory Boards, 2011; Ismail et al., 2010; Halabi, 2006);
- vii) Patterns and spatial analysis using a Geographical Information Systems (GIS) application (El Jamassi, Al-Qeeq and Shehada, 2013); and Space Syntax (Halabi, 2006).

Moving attention to the prior research on mosque open spaces, a study by Ismail et al. (2010) on open spaces at mosques on Malaysian campuses employed three methods – case study, observation and questionnaire survey. The data collection methods employed in this study are case study (refer to Section 4.4), systematic or structured observation with behaviour mapping (refer to Section 4.5) and focus group discussion (refer to Section 4.6), in addition to a social media source as a supporting method for the two aforementioned methods (refer to Section 4.7).

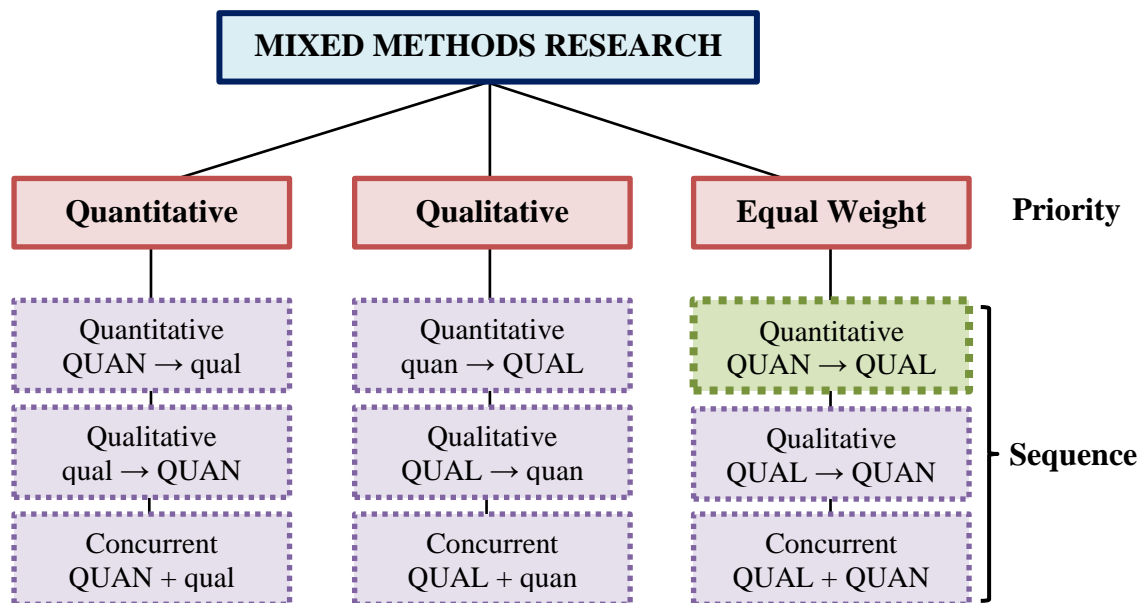
4.2 Research design

Bryman (2012) and Creswell (2009), in their respective books, describe research design as a plan or framework of research that helps the researcher in detailing the methods used for data collection and analysis. According to Creswell (2009), generally, there are three classifications of research design – qualitative, quantitative and mixed methods (a combination of qualitative and quantitative research). Qualitative research normally involves a process of exploring research through an interpretation of underlying meanings, hypotheses and opinions. It usually emphasises certain qualities such as verbal, textual forms, images and visual in data collection and analysis (Bryman, 2016). In contrast, quantitative research focuses on a more quantifiable strategy that generates numerical outputs in the sense that it is applicable to the testing of objectives or hypotheses by examining variables through descriptive or statistical analysis (Creswell, 2009). With regard to both above-mentioned

definitions, mixed methods research can be defined as an association or combination of both qualitative and quantitative research within a single study. Fielding (2012) asserts that mixed methods research is valuable because it can develop better qualitative understanding and quantitative representation about the research. Bryman (2012) provides the following quote in his book entitled *Social Research Methods* (Fourth Edition):

By mixed methods research I am referring to research that combines research methods that cross the two research strategies (...). In other words, the quantitative and the qualitative data deriving from mixed methods research should be mutually illuminating. (Bryman, 2012, p.628)

Moreover, Bryman developed a mixed methods research framework in terms of priority and sequence, as shown in Figure 4.1:



Note: Capitals and lower case indicate priority; arrows indicate sequence; + indicates concurrent

Figure 4.1: Classification of mixed methods research by (Bryman, 2012, p.632). The green box in the 'Equal Weight' category depicts a suitable sequence for this study.

In addition to the above-mentioned framework on mixed methods research, Bryman (2012) also shaped more detailed categories on research design. Menter et al. (2011) further support Bryman's outlining of five different types of research design, namely experimental design, cross-sectional design, longitudinal design, case study design and comparative design:

- Experimental design: This type of research design is not frequently used in the field of social science research, but is potentially applicable to several relevant studies in social psychology and organisation studies as well as social policy when assessing the impacts of policy making. Practically, it involves pre- and post-intervention measurements to compare experimental and control groups. Examples of experimental design are field experiments, laboratory experiments, quasi-experiments and natural experiments.

- Cross-sectional design: This is a descriptive type of research that involves different groups of people who differ in the variable of interest but who also have other characteristics in common such as socio-economic status, educational background, age group or ethnicity (Cherry, 2015). There are few elements that have been highlighted for this research design. It must contain variation in case selection (more than one case). The data must be collected within a predetermined time frame; any time frames before or after the predetermined time are not included. In ensuring variation between cases and examining patterns of association, the intended data must be quantifiable (more than one variable); thus, it is essential for researchers to employ a systematic method. Nonetheless, there is conceivably a qualitative research strategy involved in a cross-sectional research design to elicit further information from participants. Moreover, there may also be case study elements present within the cross-sectional design. Examples of methods falling within this research design are questionnaire survey, structured interview, structured observation and official statistics.

- Longitudinal design: This type of research design contrasts with the cross-sectional design in terms of the time frame involved. It encompasses a longer duration of data collection in which data are collected at different stages; for instance, a sample is repeatedly surveyed or observed. Due to the longer time frame involved, which consequently incurs more cost, longitudinal design is not highly used in

social science research. However, it is normally used within a number of other fields, such as sociology, social policy and human geography.

- Case study design: Basically, the term ‘case’ refers to a community, school, family, organisation, person, event, project, institution or even a system. Therefore, a case study is typically recognised as an in-depth investigation and analysis of a single case that can be studied using one or more research methods. A case study design does not necessarily involve a single case, but may involve multiple case studies.
- Comparative design: As the name indicates, this type of research design refers to the comparison of two or more cases that have similar characteristics and contexts. Comparative design helps the researcher to clearly present similarities and differences among and between cases through more or less identical methods, either qualitative, quantitative or a combination of both.

Based on the extensive discussion of various research designs by those scholars, a suitable methodological framework for this study was identified that employed a cross-sectional design with mixed methods and case study elements. Based on Bryman’s classification of mixed methods research (the green box in Figure 4.1), this study accords an equal weight to both quantitative and qualitative methods; however, the quantitative method came first in sequence, followed by the qualitative method. Driscoll et al. (2007) classify this situation as sequential design in which quantitative data are gathered first in order to determine which findings to focus on and develop further in the subsequent phase. Figure 4.2 expands this priority and sequence by illustrating the cross-sectional research design with mixed methods framework employed in this study.

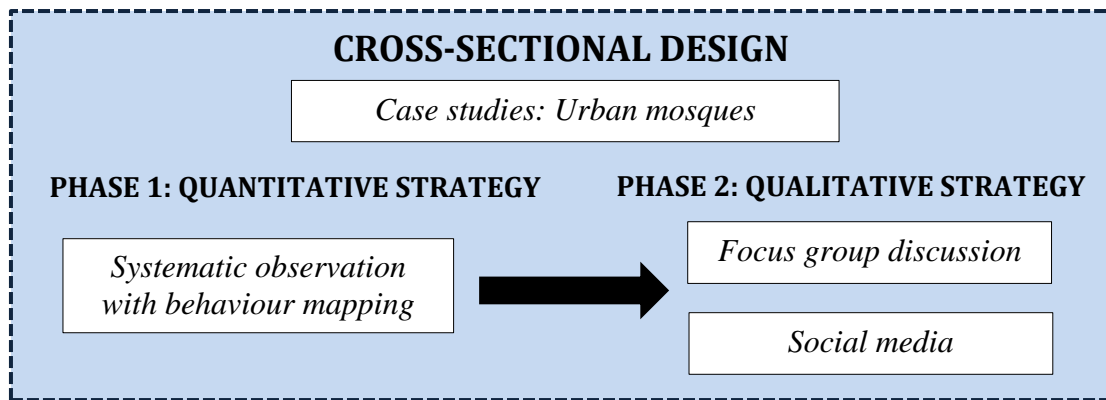


Figure 4.2: Cross-sectional design with mixed methods framework used in this study

As pointed out in Section 4.1, systematic observation (also known as structured observation) with behaviour mapping and focus group discussion were selected as the methods of data collection. These two methods were applied to gather data at the selected case study areas. In Chapter One (Section 1.5), it was stated that the data collection was conducted in two phases. During phase one, observation data were collected at three different urban mosques in Kuala Lumpur. These observation data or findings were very important to give a clear and structured representation of the real scenario present at each of the case study areas. This scenario included enquiries on spatial occupancy, user activities as well as physical settings at the urban mosque open spaces. Since the cross-sectional design is a type of descriptive research, systematic observation provided only direct information, without any causal aspect or relationship. Therefore, reflection on the observation findings was used to generate suitable questions for use during the focus group discussions in phase two. The focus group discussions as a qualitative strategy involved three different target participant groups – one professional group and two groups comprising members of the community. The discussions were significant in stimulating information that it was not possible to obtain through systematic observation. Additionally, the social media source in the form of information obtained from Facebook and blogs post was used as a supporting method for obtaining supplementary qualitative information with regard to the use of open spaces at the studied mosques (particularly the National Mosque).

The use of mixed methods research has its own advantage in which data from quantitative and qualitative methods is integrated (Fielding, 2012); the researcher is able to gather data from different sources and bring them together to develop a

comprehensive outcome. Data integration serves several purposes, as suggested by Fielding (2012), which are applicable for this study:

- i) Illustration – it helps to illustrate the reality of the research. Quantitative data can sometimes be rigid but very specific with numerical evidence. Qualitative data, on the other hand, can help to lessen this rigidity by providing narrative and dense evidence to acknowledge the real phenomenon. In the context of this study, the systematic observation method provided the empirical findings accompanied by numerical evidence presented via such methods as graphs and bar charts. The focus group discussion method yielded direct information and messages from the participants based on their experience and preferences, useful for building a better understanding of the actual situation. The social media method generated supporting textual and pictorial information that was derived from posts (e.g. Facebook and blogs) written by individuals based on their activities and experiences at the mosque open spaces.
- ii) Triangulation – this is also known as convergent validation and is used to examine whether data obtained from more than one method lead to the same results or findings. In the context of this study, triangulation is important to examine whether the findings from systematic observation and the focus group discussion yield similar ideas, something which is important for robustness and confidence in answering the research questions.

4.3 Ethics

When conducting research, ethics need to be considered to ensure that the research is conducted with integrity, especially when it involves different groups or parties. In the context of this study, ethical approval through the use of a ‘Self-Audit Checklist for Level One Ethical Review’ was granted by the principal supervisor and Graduate School, Edinburgh College of Art, The University of Edinburgh (refer to Appendix B). Throughout this study on open spaces in urban mosques (which are Islamic religious institutions), the researcher avoided exploration of any aspects that might

trigger sensitive issues with regard to any religions or towards any particular communities, be it in the Muslim or non-Muslim communities.

The exploration of the use of urban mosque open spaces by different groups and ethnicities within the community, through systematic observation with behaviour mapping, was conducted with the consent of the management of the urban mosques selected for study. Since observation was conducted at public area, the researcher chose to maintain an anonymous presence during the observation in order not to be unduly noticed by the users and thus reduce data bias (refer to 'protection of anonymity' in Table 4.2). Although the researcher made every attempt to maintain her anonymity throughout the observations, there were occasions when the presence and activities of the researcher were noticed by users, particularly at the district and sub-district mosques (although not at the National Mosque). This was due to the fact that the open spaces at the district and sub-district mosques are on a smaller scale to those at the National Mosque. There was thus a greater chance of the researcher's presence and activities being noticed by users. A very small number of users were sufficiently curious about what the researcher was doing for them to approach her. For the sake of maintaining anonymity, the researcher attempted to remain as neutral as possible during the conversations (without disclosing her position as a researcher undertaking observation on people).

In relation to focus group participants, the researcher also distributed consent forms (refer to Appendices D and E) for protecting and guaranteeing the anonymity and confidentiality of all who voluntarily took part in this study. The researcher also sought participants' consent to use recording devices throughout the sessions and assured them that all information provided would be kept fully confidential, stored securely and used solely for academic purposes.

With reference to use of the social media source, the researcher made an ethical request for consent to use his Facebook posts for the purpose of this study (refer to Appendix A for the proof of consent). Syed Azmi agreed to the researcher's request on the condition that he be credited by the researcher. Furthermore, the researcher has also cited several online blogs or websites that promote his activities at the mosque open spaces.

4.4 Case study

Based on the research design, case study research was chosen as an approach in this study. Case study research can be explicitly termed as research that is associated with an individual, a particular location or setting, a community, an organisation or a phenomenon (Yin, 2009, Bryman, 2012). It also has the potential to encapsulate real-life situations, influential factors and new information with regard to the context of the study (Ismail et al., 2010). Schell (1992) and Yin (2009) had similar ideas that, although case study research is typically recognised as part of qualitative research, it can also involve both qualitative and quantitative approaches. Fidel (1984) mentions that:

(...) case studies seem to be appropriate for investigating phenomena when (1) a large variety of factors and relationships are included, (2) no basic laws exist to determine which factors and relationships are important, and (3) when the factors and relationships can be directly observed. (Fidel, 1984, p.273)

Moreover, Schell (1992) and Yin (2009) similarly discuss that case study research is suitable for any research or studies (1) which address research questions with ‘how’, ‘why’ or ‘where’, (2) in which the researchers are in a position to have some freedom in conducting the studies, and (3) which place a greater emphasis on contemporary information. Engaging with these ideas, a case study research method seemed fit for use in this study as it fulfilled all of the above-mentioned requirements, and, by addressing the main research question with ‘how’, the researcher can exercise control in conducting the fieldwork, as well as it enabling a focus on the contemporary issues of mosque open spaces in urban settings. Johansson (2003) offers a further important insight into why case study research is advantageous, in the way that the combination of several methods is essential for triangulation with the intention of discovering and exploring the case(s) from different angles and confirming the robustness of the findings.

4.4.1 Case study research in the landscape architecture field

According to Francis (2001), case studies are typically employed in various science and social science fields, including law, health and medicine, engineering and construction, business and marketing, as well as built environment like architecture

and planning. More than that, he also mentions that case studies have been commonly used in the field of landscape architecture, whether in a larger-scale context such as a metropolitan park, or in a smaller context such as a small residential park or garden. Francis also believes that case studies are useful for the built environment field like landscape architecture because they can yield powerful empirical evidence for research projects which then lead to better suggestions for policy and design improvement. Furthermore, case studies may benefit stakeholders in landscape architecture in six different categories, namely 'teaching, research, practice, theory building, criticism as well as communication and outreach'. Focusing on the 'research' category, Francis found that researchers in this field (particularly Masters and Doctor of Philosophy of Landscape Architecture candidates) made excellent use of the case study method to evaluate pre- and post-occupancy of a project, to conduct historical analysis and many more. He also notes that it is possible to gather data for case study research by using various rigorous methods:

Most successful case studies incorporate a variety of methods such as site visits; site analysis; historical analysis; design process analysis; behavioral analysis; interviews with designer(s), developer(s), manager(s), and public officials; interviews with users and non-users; archival material searches including project files, newspaper articles, public records; bibliographic searches; and internet searches. (Francis, 2001, p.21)

Placing the ideas and thoughts of Francis (2001) discussed above within the context of this study, the use of case study research to explore the urban mosque open spaces seemed promising. It offers the potential for the researcher to obtain fresh empirical findings about the research subject matter from the selected case studies by using different methods such as behavioural analysis as well as interviews (focus group discussions) with professionals and members of the community (users and non-users). The process of selecting the case study areas is described in the next subsection.

4.4.2 Selection of case study areas



As mentioned previously, three case study areas were selected for this study. These case study areas were selected based on the settlement hierarchy of mosque development in Malaysia, as mentioned in Chapter Two (Section 2.2.3). A national-,


district- and sub-district-level mosque were chosen for this study because they offered the opportunity to observe real issues and situations at different levels of mosque, particularly in the context of the Kuala Lumpur urban area which is diverse in terms of mosque site location, context and scale, as well as design criteria and capacity. With regard to the selection of the case-study mosques based on the settlement hierarchy, there are reasons why examples from other categories of mosque, such as a rural mosque, surau, madrasah, musolla or prayer room, were not included in the selection. The rural mosque was not selected as it did not meet the contextual requirements for the study (i.e. being situated in an urban context). No surau, madrasah, musolla or prayer rooms were selected since most of these take the form of a designated space or room that is fully contained within another building or institution, thus incorporating no open spaces to study. Incorporating this variety provided the opportunity to explore a variety of communities and contexts relevant to the urban mosque open spaces that served to enrich the research and inform discussions held at a later stage. The case study areas for this study are described as follows (Figure 4.3 below and Table 4.1, which consists of Figures 4.4, 4.5 and 4.6 on the next page):



Figure 4.3: (Left) Map of Peninsular Malaysia indicating Kuala Lumpur as the capital city; (right) Zoom-in on the location of the case study areas in Kuala Lumpur (indicated by the light red boundary) (source: Google Maps).

Table 4.1: Case study areas

Description of selected urban mosques	Photos
<p><u>1) NATIONAL-LEVEL MOSQUE:</u> <i>National Mosque, Kuala Lumpur</i></p> <ul style="list-style-type: none"> ▪ This mosque was built over the course of two years (1963–1965). ▪ It is located at a very strategic area in the heart of Kuala Lumpur, near to Kuala Lumpur Old Railway Station, Al-Hijrah Television Station, the National Post Office, Islamic Art Museum, Kuala Lumpur Bird Park and Perdana Lake Garden. ▪ The total land area is 13 acres (the main building covers three acres). It can accommodate up to 15,000 people at a time. ▪ There are seven entrances, and facilities for non-Muslim visitors are also provided, such as Kuala Lumpur City Hall public toilet near to the main entrance for local and foreign visitors. <p>(Source: www.masjidnegara.gov.my)</p>	 <p>Figure 4.4: National Mosque, Kuala Lumpur (source: of www.attractionsinmalaysia.com).</p>
<p><u>2) DISTRICT-LEVEL MOSQUE:</u> <i>Abu Ubaidah Al-Jarah Mosque, Taman Seri Rampai, Kuala Lumpur</i></p> <ul style="list-style-type: none"> ▪ This mosque was built between 27 January 1986 and 24 April 1987. ▪ It was planned and built due to rapid development of the residential area around Taman Seri Rampai. ▪ The total land area is three acres, which originally included the main building, a religious school and mosque staff quarters. Various enhancements have since been made in an effort to make this mosque livelier; a mosque office, meeting hall and a row of shop units have been built. ▪ It can accommodate up to 2,500 people at a time. <p>(Source: www.masjidabuubaidah.com)</p>	 <p>Figure 4.5: Abu Ubaidah Al-Jarah Mosque, Kuala Lumpur (source: researcher).</p>

Description of selected urban mosques	Photos
<p><u>3) SUB-DISTRICT-LEVEL MOSQUE:</u> <i>Al-Ghufran Mosque, Pinggiran Taman Tun Dr. Ismail, Kuala Lumpur</i></p> <ul style="list-style-type: none"> ▪ This mosque was originally a <i>surau</i> (small-sized Islamic worship house) and was built in 1993. However, in 2000, the <i>surau</i>, with funding from noble corporate individuals, was upgraded to a mosque and named Al-Ghufran Mosque by the former Kuala Lumpur chief religious expert. ▪ The total land area is 26,000 sq. ft., equivalent to 0.6 acres. The mosque was built as a 6-storey mosque. It is unique in Kuala Lumpur as it provides various facilities including a religious school for children, religious classes for the public, 24 travellers' rooms for rent (limited to Muslim travellers only), four conference rooms (open for public rental) and dining halls. ▪ It also has a café (Café Al-Ghufran) with a very scenic view which makes it the mosque-café in Kuala Lumpur. This is an initiative of the mosque management to generate an income for the mosque and its future activities and development. <p>(Source: Mohamad Nor, 2009)</p>	 <p>Figure 4.6. Al-Ghufran Mosque, Kuala Lumpur (source: researcher).</p>

4.5 Systematic observation with behaviour mapping

Systematic observation, also known as structured observation, can be defined as a technique where the researcher employs predetermined protocols or procedures in observing and recording behaviour (Bryman, 2016). These protocols are developed in an instrument known as an observation schedule. It is quite different from the usual form of observation conducted in social science research because it is used to observe the behaviour of beings and the interaction between them and their surroundings. This idea fits with a view outlined by Bryman (2016), who elaborates that:

Central to any structured observation study will be the observation schedule or coding scheme. This specifies the categories of behaviour that are to be observed and how behaviour should be assigned to those categories. (Bryman, 2016, p.269)

According to the existing literature, systematic observation is a desirable method for use in certain research areas, such as education and urban design, to gauge specific information. In a similar vein to this study, which concerns urban public spaces and landscape architecture, the systematic observation method has been used by researchers such as Goličnik (2005), who observed the spatial occupancy of urban open public spaces in two cities; Edinburgh, Scotland and Ljubljana, Slovenia; and also by Hussein (2009), who observed the use of sensory gardens by children with special educational needs in two special schools in the United Kingdom. According to Al-Maimani et al. (2014), there are four factors that should be taken into consideration when conducting systematic observation in public spaces, namely people, activities, spaces and timing. Thus, by developing a proper observation schedule and coding scheme, as suggested by Bryman, these four factors can be systematically observed on site which will then lead to well-documented observational data.

It is recommended that the systematic observation method should be conducted in conjunction with supporting techniques such as an open spaces ‘tour’ within proposed time intervals, taking photographs of the important spaces, landscape elements and activities found around the spaces, as was carried out by Salama (2008, 2009, 2012) through the direct impressionistic observation method in his research at Qatar University campus outdoor spaces. This method was also employed by Ismail et

al. (2010), who documented their observational data through photographs in mosque open spaces at two Malaysian university campuses.

Together with the systematic observation method, behaviour mapping is also used as a supporting technique. Behaviour mapping has been widely used in environment behaviour studies to explore the interaction between people and place (Goličnik and Ward Thompson, 2010). According to Moore and Cosco (2010) and Salama (2008, 2009, 2012), behaviour mapping is a useful method that helps a researcher to compile or record users' locations and behavioural patterns in any given spaces. It provides an innovative method of assessing behaviour linked to the detailed physical characteristics of open spaces or outdoor areas.

Hanington and Martin, as cited by Al-Maimani, Salama and Fadli (2014), explain that behaviour mapping is used 'to document readily observable characteristics, movements, and activities, including approximate ages and genders, whether people are alone or with others, what they are doing, time spent at fixed location or in transit, and the details of the environmental context' (Al-Maimani, Salama and Fadli, 2014, p.57). In addition, Salama (2008) adds that behaviour mapping involves a combination of place- and individual-centred mapping. Place-centred mapping involves the use of plans or diagrams to record actions in particular locations or settings, while individual-centred mapping is used to document the activities and movements of users of the spaces. Goličnik (2005) identifies another value of the behaviour mapping technique in her study with the use of Geographical Information System (GIS) software to digitise manually recorded maps, establish an empirical database of people-place interactions as well as to generate necessary analysis based on the findings obtained through observation.

Looking at the strong precedents of the use of this method, together with the supporting techniques, it appeared to constitute a reliable method for use in this study to examine and investigate the spatial occupancy and activity patterns, and also user preferences, in the use of urban mosque open spaces. Also, to some extent, the value of this method emerged through its association with the theories used in this study. Canter's theory of place states that places are made up of activities, physical attributes and human conceptions, whereas the concept of affordance considers the possibilities of actions provided by the environment or spaces.

4.5.1 Pilot studies

Prior to embarking upon the main data collection fieldwork, the researcher conducted three pilot studies for this method at three different mosques. Pilot studies can be defined as small-scale preliminary studies, carried out before a full-scale study or fieldwork (Arain et al., 2010). They are also known as feasibility studies, and are important to test the feasibility of the proposed methodology, the fieldwork protocols and timeline and the research instruments, such as questionnaires or interview schedules. The advantage of conducting pilot studies is that they serve as a precaution, making the researcher aware of where the main research project may fail, where the research protocols may not be followed or if they should be revised, or whether the proposed methods or instruments are inappropriate, complicated or not feasible within the proposed timescale and schedule.

As stated by van Teijlingen and Hundley (2002), there are several reasons for conducting a pilot study, such as: generating and testing the suitability of the research instruments; evaluating the feasibility of full-scale data collection; assessing the feasibility and practicality of the research protocol; assessing the possible success of the proposed recruitment approaches; detecting any possible challenges and problems that may occur while using the proposed methods; identifying important resources, such as finance and research assistants; considering the proposed methods of analysis to discover potential problems; and revising the research questions and research plan. The pilot study is important and significant, as it creates several objectives, such as (1) to test the feasibility of the preliminary protocols before finalising the methods for the real fieldwork or data collection, (2) to examine possible on-site issues, potential challenges and limitations that may exist before finalising the methods, (3) to improve fieldwork protocols and (4) to see the interconnection between the research questions and the preliminary results. As mentioned previously, the pilot tests for this study were conducted in October 2013 at three different mosques in Malaysia, namely the Indian Mosque, Kuala Lumpur; the National Mosque, Kuala Lumpur; and the Putra Mosque, Putrajaya. These mosques were chosen because they are strategically located in important urban areas near Kuala Lumpur, and are also the centre of attractions at those places. These mosques are surrounded by mixed land uses such as commercial and residential. A period of three weeks was allocated to the undertaking of a pilot

study for each mosque, consisting of one random weekday, a Friday and one day during the weekend. The researcher was aided by one or two assistants for a few days.

4.5.1.1 Instruments and procedures of systematic observation with behaviour mapping

Instruments and procedures are two important elements that need to be prepared before the researcher embarks on a pilot study or full data collection. Procedures are mainly a series of instructions or guidelines that need to be followed during the fieldwork. Instruments are the equipment or tools (such as checklists or questionnaires) that are required during execution of both the preliminary and full-scale data collection. For this study, a set of procedures for systematic observation with behaviour mapping was developed, in order to ensure smooth workflow on site. For the purpose of these pilot studies, several instruments were used, namely A4-sized mosque layout plans, a fieldwork notebook (see Figures 4.7 and 4.8), A4-sized activity checklists (see Appendix C), stationery (coloured pens) as well as visual (video and photo) and audio recording devices (in this case, a digital camera and a mobile phone). These instruments were assessed for their suitability in terms of size and portability on site, for convenience.

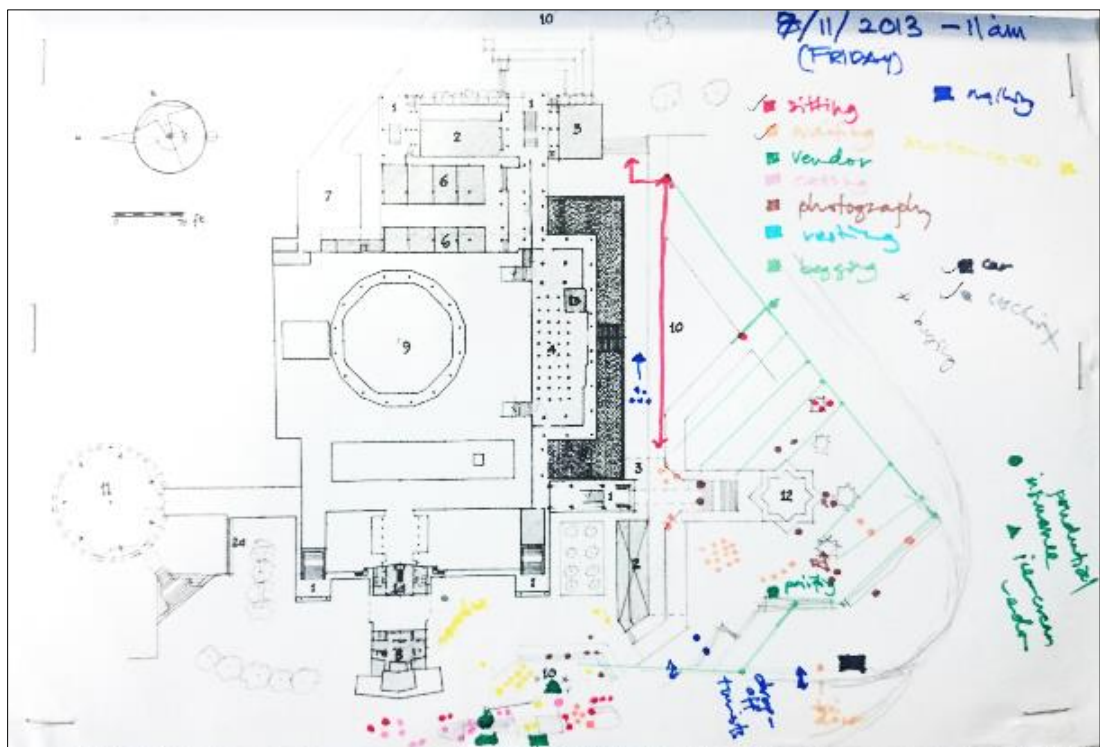


Figure 4.7: Example of the mosque layout plans used during the pilot studies –the National Mosque layout plan

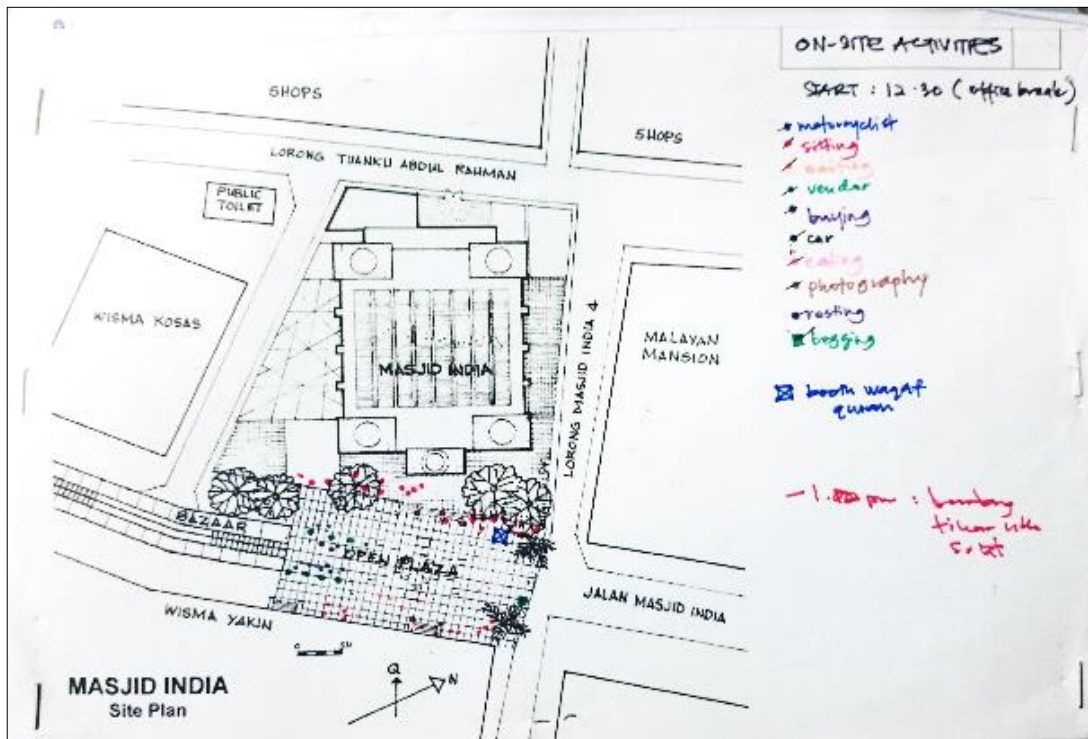


Figure 4.8. Example of the mosque layout plans used during the pilot studies – the Indian Mosque layout plan.

This subsection describes the procedures of systematic observation with behaviour mapping for the pilot studies (refer to Table 4.2). These procedures were tested in order to make the researcher familiar with the proposed procedures as well as to identify any challenges that may be addressed and improved for the main data collection. Before the pilot studies took place, the researcher went for a preliminary walk at the selected urban mosques to acquaint herself with the spaces and existing activities taking place.

Table 4.2: Procedures of systematic observations with behaviour mapping for pilot studies

Procedures for pilot studies
<p>1. <u>Preparation of instruments:</u></p> <ul style="list-style-type: none"> - Produce mosque layout plans and activity checklists. - Bring stationery such as coloured pens and a clipboard (if necessary). - Bring audio and video recording devices. Ensure they are fully charged. - Bring other items such as bottled water (to keep hydrated during the observations), shades and umbrella (in case of weather change).
<p>2. <u>Determine observation times and vantage points:</u></p> <ul style="list-style-type: none"> - Observation times were set as follows: morning (8 am – 11 am), early afternoon (12 pm – 2 pm) and afternoon (2 pm – 4 pm) on two weekdays and one day at the weekend. - Move from one vantage point to another based on these predetermined time intervals.
<p>3. <u>Protection of anonymity:</u></p> <ul style="list-style-type: none"> - Throughout observation at the mosque open spaces, the researcher needs to maintain his/her anonymity and avoid (as far as possible) being noticed by other users in the spaces. This is to reduce data bias or the tendency for users to purposely alter their behaviour if they are aware they are being observed. - Act as naturally as possible, as if the researcher is also a user of the mosque open spaces. - Prepare fieldwork instruments, such as notebooks, in a handy size. This is to ensure the researcher's note-taking is not obvious to users, thereby avoiding inciting their curiosity. - Avoid taking photos and videos in close proximity to users. The researcher must be aware of his/her distance from users while carrying out observations. - Try not to become involved in direct conversation with users unless absolutely necessary (e.g. to elicit very important information pertaining to certain situations during the observation). In the event conversation is entered into, the researcher must remain as neutral as possible and proceed with the conversation in a casual manner without disclosing his/her position as a researcher. -

Procedures for pilot studies

4. Behaviour mapping and field note-taking:

- Observe and map users based on their discernible ethnicity, gender and estimated age group. Ethnicity is observed and predicted based on users' identifiable physical characteristics and appearance, such as by noting their facial physiology and features, skin colour and also the clothing they are wearing. Ethnicity may also be predicted through observation of the language(s) spoken (if there is any opportunity to hear them speak).
 - Map on-site activities at the mosque open spaces.
 - Map physical elements and features at the mosque open spaces. These elements are important, as they might trigger an explanation as to why users prefer certain spaces.
 - Map users' preferred spots – which spaces attract them the most?
 - Map the movement of passers-by – who is passing through the site and which direction do they come from and go to?
-

5. Photo and video recording:

- Take photographs and record videos of the users' activities (visual evidence on the users' behaviour and activity patterns).
-

6. Compilation of behaviour maps:

- Compile all the mosque layout plans and activity checklists systematically according to the time intervals and dates of observations. This is to ensure that both documents are well recorded and not mixed up.
-

4.5.1.2 Rationale for the pilot studies and alternatives for data collection

The pilot studies highlighted several important issues that needed to be considered before the researcher was able to begin with the full-scale study or main fieldwork. Necessary amendments and adjustments needed to be carried out, in terms of the procedures themselves, the fieldwork schedule and the timings, as well as the possibility of collecting data with or without assistants. Several challenges and limitations also emerged during the process of piloting the method. On the positive side, the researcher had the opportunity to consider, in advance, any possible

alternatives that could be developed for the real data collection and this provided an opportunity for improvement before the main data collection.

The challenges and alternatives found are listed as follows:

- The researcher faced some difficulties in conducting observations (concurrently with behaviour mapping, photographing and video recording) alone at such huge open spaces with time limits. Thus, considering the hire of a few research assistants is important, in order to ensure that the data collection stage runs smoothly. However, this depends on the final protocols determined, as any research assistants would likely only be required at certain times.
- Another challenge was finding the best method to map the spatial occupancy of the users and their activities on the plan. There were various activities that involved movement from one area to another, and it was difficult to include everything on a single plan. The researcher quickly created a system of codes and symbols to indicate the activities happening within the spaces. Development of a specific and understandable coding system, or adopting one used by previous researchers, in order to produce systematic and organised behaviour maps. There are a few examples of coding systems developed by previous researchers such as Goličnik (2005) and Hussein (2009) that were referred to for the improvement of this study. The following day, various coloured pens were used in differentiating the different activities.
- Passers-by were considered for inclusion as users when this study was conducted. It was almost impossible, however, to map all of them on the plan, but a checklist was utilised to roughly record their frequencies. On the other hand, a video recording system, such as time-lapse recording, could be considered, in order to capture special activities that include passers-by, special events and others.
- There was an issue regarding the opening hours of one of the mosques (the Indian Mosque). The gate only opens at 12 noon every day and,

therefore, the researcher was unable to observe any activities occurring prior to its opening. While waiting for its opening, observation was carried out at the adjacent open plaza.

- The researcher did not get the opportunity to carry out an observation alone at night, for safety reasons. Thus, assistants were required for night observations.
- The weather was one of the greatest challenges during observation. The fieldwork could be affected should there be very high temperatures or heavy rain. There were times when observations needed to be rearranged due to changes in the weather.

Apart from the abovementioned alternatives, the researcher had decided to change the case study mosques for the main data collection. As explained in Section 4.5.1, there were few justifications provided on the selection of the case study mosques for pilot study – the Indian Mosque, the National Mosque as well as the Putra Mosque. However, the researcher had identified important rationales and alternatives that led to the shift of the case study mosques for the main data collection. The rationales and alternatives include:

- There were two different macro locations of the selected mosques for pilot study - Kuala Lumpur and Putrajaya. In order to ensure the consistency in obtaining significant and meaningful findings, the researcher had decided to choose the case study mosques for the main data collection which are located within Kuala Lumpur area only.
- The scale of the Indian Mosque was too small as compared to the scales of the National Mosque and the Putra Mosque which were relatively equivalent to each other. Through literature exploration after the pilot study, the researcher later found a reliable basis of selecting the mosques based on the typology and levels of development of mosques in Malaysia (as outlined in Table 2.3, Section 2.2.3). Therefore, three types of mosques (national, district and sub-district) had been selected for the main data collection. The National Mosque was remained as one of the case study mosques, but the Indian Mosque and the Putra Mosque had

been replaced with the Abu Ubaidah Al-Jarah Mosque (district mosque) and the Al-Ghufran Mosque (sub-district mosque). The justifications of the case study areas selection had been thoroughly elucidated in Section 4.4.2.

4.5.2 Data collection

The main data collection phase for systematic observation with behaviour mapping was from April 2014 to June 2014. During April 2014, the researcher collected observational data at the National Mosque. This was followed by Abu Ubaidah Al-Jarah Mosque in May 2014, and Al-Ghufran Mosque in June 2014. During any given week, observations were conducted over four days – on two random weekdays (between Monday and Thursday), Friday and on one day during the weekend (Saturday or Sunday).

In terms of time intervals for the observations, the researcher slightly adjusted the times from those used in the pilot. Aside from determining the time intervals based on peak and off-peak times of activities taking place at the urban mosques, the time intervals were also determined based on the start of the Muslim daily prayer times. As mentioned in Chapter One, Muslims pray five times a day – *Fajr* (morning prayer), *Zuhr* and Friday prayer (midday prayer), *Asr* (late afternoon prayer), *Maghrib* (early evening prayer) and *Isha* (late evening prayer). The time intervals adjusted for data collection are given as follows (refer to Table 4.3):

Table 4.3: Time intervals for systematic observations with behaviour mapping

Interval	Observation time	Prayer times
Morning	8 am – 11 am	-
Early afternoon	12 pm – 3 pm	<i>Zuhr</i> prayer/Friday prayer (starts at approximately 1 pm)
Late afternoon	3 pm – 6 pm	<i>Asr</i> prayer (starts at approximately 4.30 pm)
Evening	6 pm – 9 pm	<i>Maghrib</i> prayer (starts at approximately 7.30 pm, during sunset) <i>Isha</i> prayer (starts at approximately 8.30 pm)

Based on Table 4.3, observation took place within most of the prayer times, except for during *Fajr*, or morning prayer. This is because morning prayer begins at dawn, in the twilight before sunrise. The researcher opted not to include this time for the observations as it was too early and there was very minimal activity outside of that specific period of time (based on the researcher's preliminary observation). Also during the preliminary observations, the researcher noted that the intensity of activities gradually increased from 8 am onwards, hence, the time of morning observations. The researcher hired two assistants throughout the observations at the studied mosques. The researcher briefed the assistants prior to the observations on the procedures to conduct the observations and the behaviour mapping. The researcher and assistants were spread across a few subspaces around the studied mosques, so that observations could be conducted concurrently. The researcher and assistants observed the mosque open spaces and manually mapped the spatial occupancy of spaces based on several variables – users' genders, ethnicity, age group and activities.

In the pilot studies, activity checklists without proper observation symbols and a coding system were used to record the activities carried out by users. Subsequently, a set of codes and symbols were established by adopting and adapting the coding set used by Goličnik (2005) and Hussein (2009). Figure 4.9 shows an example of the coding system from previous research. Based on these precedents used for data collection purposes, Table 4.4 displays the coding system developed by the researcher.

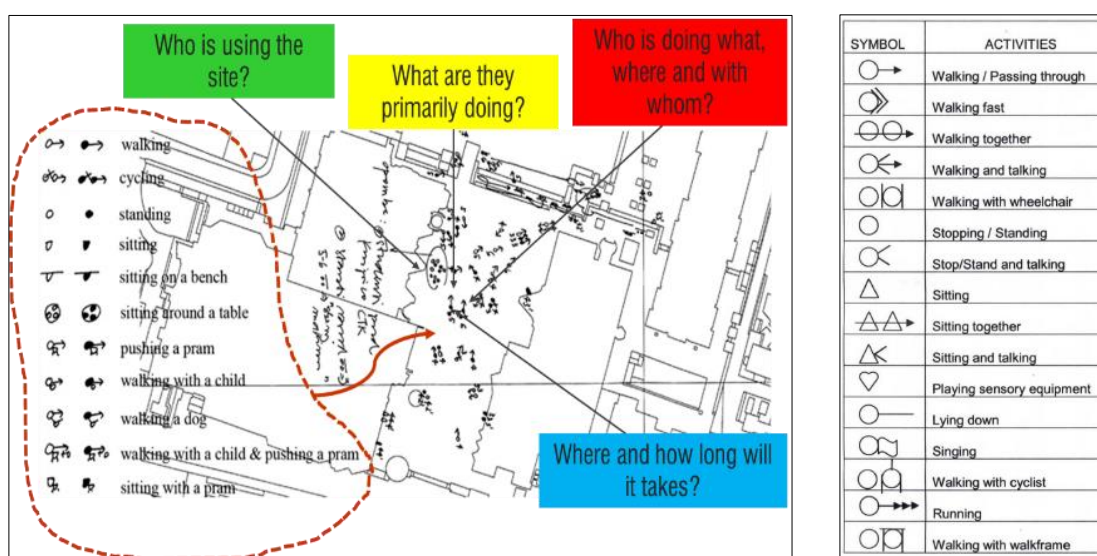


Figure 4.9: (Left) example of coding system by Goličnik (2005); (right) example of coding system by Hussein (2009).

Table 4.4: Coding system for the behaviour mapping in this study

Symbol	Description	Symbol	Description	Symbol	Description
♂	Male	●	Elderly	ST	Sitting
♀	Female	WK	Walking	C	Chatting
M	Malay	WT	Waiting	PL	Playing
C	Chinese	ET	Eating	PR	Praying
I	Indian	BY	Buying	SP	Sleeping
●	Child	SF	Selling foods	TP	Taking photo
●	Teenager	SG	Selling goods	BG	Begging
●	Adult	R	Resting	-	-

This coding system enabled the researcher and assistants to be more precise in collecting real-time data on site. Coloured and alphabetical symbols were used because they are more easily memorised, hence the mapping process would be quicker without the researcher having to continually refer to a symbols checklist. Moreover, it was more convenient for the researcher to distinguish the variables recorded on a single map for the purpose of data digitisation and analysis, as elaborated in the next topic (Section 4.5.3).

Prior to commencement of the data collection, the researcher considered the suggested alternatives for data collection based on the challenges found through the pilot studies. However, few of the proposed alternatives were still ineffective, for a number of reasons:

- For example, the researcher did not conduct observations at night for safety reasons. Since the assistants were not available to help the researcher at night, the researcher was potentially prone to unexpected risks while carrying out observations alone.
- The researcher also did not manage to record observations using time-lapse photography. It is undisputable that time-lapse photography would have been useful to generate a visual-motion representation of how the urban mosque open spaces were being used at certain times. However, its use requires some technical procedures in which the camera has to be set still on a tripod and left at a strategic spot. It was impractical to leave the

equipment unguarded since the researcher and assistants were required to multi-task during the observations – moving around the spaces, observing, mapping, jotting down field notes, as well as taking photos and videos. Thus, the researcher opted to visually record the observations by using still photos and videos.

In addition to the challenges encountered during the pilot studies, another challenge faced by the researcher during the primary data collection phase was the maintenance of anonymity while conducting observations. Two situations occurred during observations conducted at the Abu Ubaidah Al-Jarah and Al-Ghufran Mosques:

- Unintentional conversation: As explained in Section 4.3, a few users actually approached the researcher out of curiosity into the researcher's presence and activities at the mosque open spaces (e.g. being present at the mosque throughout the day, taking photos, sketching on an A4 clipboard). The researcher attempted to remain as neutral as possible, steering clear of mentioning anything related to the observations of this study in order to minimise data bias (i.e. a change in users' behaviours if they knew they were intentionally being observed).
- Purposive conversation: There were times when the researcher felt very curious regarding certain unique situations that were observed, which gave rise to short informal conversations between them. For example, the researcher saw an old Indian man who was present quite regularly at the main plaza of the National Mosque. For the researcher, it was very unique and rare to see the same individual occupying the same space on a regular basis. Hence, the researcher approached the man in question and initiated a conversation with him in order to elicit information regarding his preference for utilising the spaces. In acting as a fellow user of the open spaces wishing to engage in a social interaction with another, the researcher managed to protect and maintain her anonymity throughout the conversation.

Although maintaining anonymity during fieldwork is necessary in order to comply with research ethics, it was indeed a notable experience for the researcher, specifically in terms of engaging and dealing with the random users of public spaces. Having discussed the flow of the data collection phase for the systematic observation method, the following subsection presents the method of analysis employed for this particular method.

4.5.3 Method of analysis

After the data had been gathered in the form of physical maps, they were then digitised into a spatial analysis software, ArcGIS. This software was chosen for use as an analysis tool due to its capability in sorting the spatial data into layers and providing descriptive statistics that would help the researcher recognise the spatial occupancy of the multicultural community at the mosque open spaces. Furthermore, maps produced in ArcGIS are simple yet comprehensive, thereby helping the researcher to visualise the data in a simpler way. Figure 4.10 shows an example of data after they have been digitised in ArcGIS.

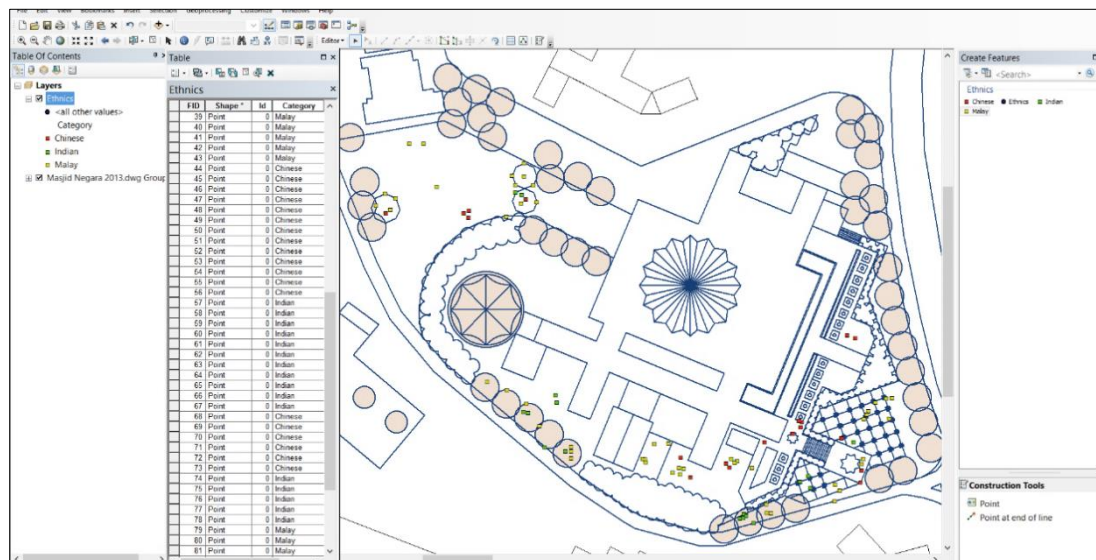


Figure 4.10: Example of ArcGIS data for the National Mosque open spaces.

The process of digitisation involved several sequences. The process began with manual mapping, which was then followed by several stages of transferring data into ArcGIS, including re-mapping the physical base maps. Following creation of the database with different attributes, further analysis was conducted. Figure 4.11 below elucidates the sequence of data digitisation and analysis process in ArcGIS.

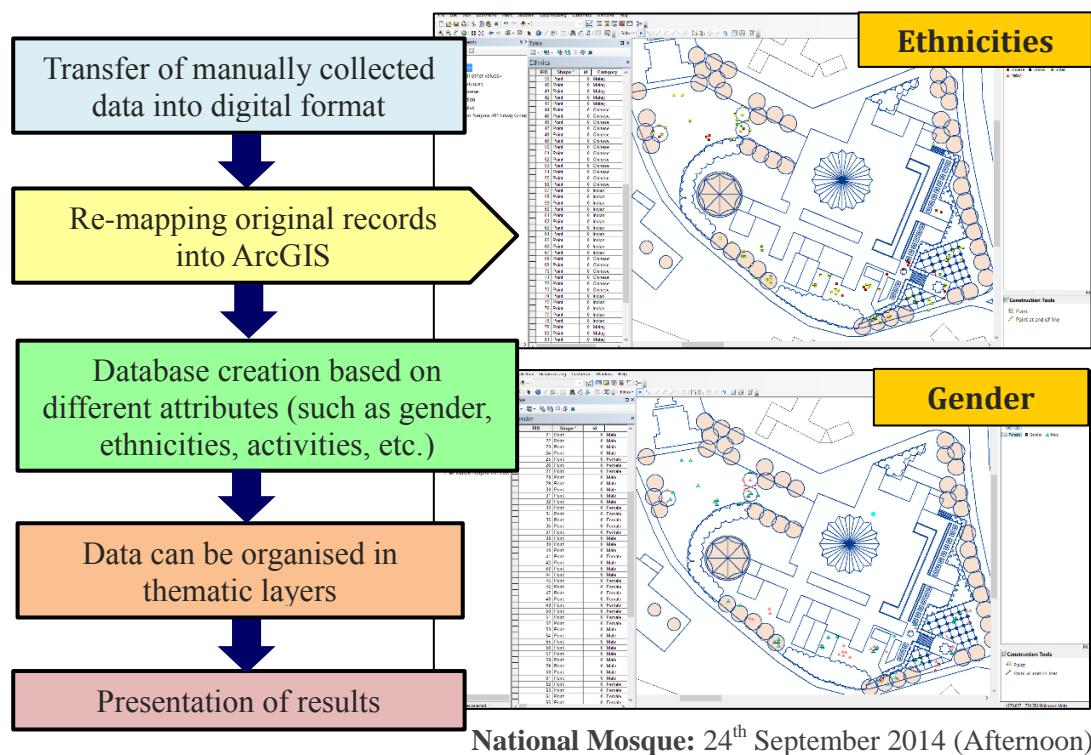


Figure 4.11: Digitisation process of ArcGIS plans which show daily patterns of occupancy at the National Mosque, stratified concerning ethnicities and gender.

Based on the previous flowchart of the data digitisation process within the ArcGIS application, it can be seen that this application offers a great extension of data absorption capability, allowing various types of social, cultural and natural factors to be incorporated into a single format or map (Lee et al., 2008). By using this application, data can also be organised in the form of thematic layers. The results of systematic observation with behaviour mapping could thus be presented through graphic representations such as maps with occupancy patterns, as well as graphs and charts. Systematic observation with behaviour mapping also provided some qualitative insights for exploring the social aspects of the urban mosque open spaces as intercultural spaces. It was crucial to undertake a deeper qualitative exploration of the subject matter by engaging with the ‘actors’ who play direct or indirect roles in either managing or utilising the mosque open spaces. Engagement with these actors could be accomplished through interviews and discussions. As mentioned in Section 4.4.1, in order to elicit fruitful findings for case study research, methods such as interviews or focus group discussions were considered. The following subsection describes the next method used in this study, that of focus group discussion.

4.6 Focus group discussion

Prior to employing the focus group discussion method, the researcher conducted a preliminary study and engaged with several individuals (mosque administrators and users) through semi-structured interviews. Since an interview is the best way to elicit information, particularly about people's demographic information, perceptions, attitudes and meanings (Menter et al., 2011), face-to-face communication with interviewees was used to generate such information. The researcher also had flexibility in asking questions and adapted them to suit the interviewees' responses. This approach is supported by Bryman (2012), in that the interviewer's questions are not limited or restricted only to the interview guide or checklist. Additional questions can also be introduced if necessary, to obtain new opinions from interviewees. This method was useful for this study, to obtain information that would be difficult to obtain through sole use of the observation method. The questions put to interviewees were very similar, so that it was easier to analyse and differentiate the answers or content from each of the interviewees. However, after the preliminary study, the researcher found that more inputs from more individuals or interviews from different social backgrounds were needed to satisfy the enquiries of the study. Using the semi-structured interview method was time-consuming and costly to interview different individuals in different sessions, times and places. Thus, the thought of having a 'group interview' was considered, in which a form of collective information could potentially be gathered from several individuals at the same time and in the same venue. After further exploring different types of interviews, the focus group discussion method was considered the most practicable alternative to the semi-structured interview method.

Wilkinson, in Liamputtong (2010), provides a simple definition of a focus group as 'an informal discussion among a group of selected individuals about a particular topic' (Liamputtong, 2010, p.3). Focus group discussion, according to Bryman (2012), is 'a method of interviewing that involves more than one, usually at least four, interviewees' (Bryman, 2012, p.501). He further elaborates that group discussions are usually led by a moderator or facilitator. Several groups of people or participants are selected from a broad target population, and these people are interviewed collectively regarding their opinions, perceptions, beliefs and suggestions

about the topic under discussion (Menter et al., 2011). Focus group discussion has been widely employed in academic research, especially in health, market and social sciences research (Liamputtong, 2010, Oliveira, 2011). On the other hand, Liamputtong (2010) also mentions that use of the focus group discussion method is widely recognised in multi-social groups and cross-cultural research. Some scholars have outlined the value of using focus group discussion in engaging with people from different social and cultural backgrounds, as indicated below:

- i) The discussion may produce collective rather than individual insights with regard to the topics discussed (Knodel, 1995);
- ii) This ‘collective nature’ can be expedient for participants who lack confidence and eloquence in expressing their ideas during the discussion. Opinions and comments given by other participants may inspire them to share their own insights (Knodel, 1995, Liamputtong, 2010);
- iii) It is suggested that participants should be split into similar groups depending on their social backgrounds (e.g. by gender, age, ethnicity or religious background). Compatibility among participants is important to ensure they are comfortable conversing with each other (Greenwood, Ellmers and Holley, 2014).
- iv) The discussion may draw out consensus – agreement or disagreement among participants (Greenwood, Ellmers and Holley, 2014).

Based on the above-mentioned purpose and rationale of the focus group discussion, particularly in conducting research with people from different social backgrounds, it is evident that use of the focus group discussion method was very appropriate. In order to obtain meaningful information regarding the sociocultural aspect of urban mosques in Kuala Lumpur, the aim was to directly listen to participants about their opinions, perceptions, self-experiences and suggestions on the occupancy, activities and interactions taking place at the case study mosques.

4.6.1 Preparation for pilot studies and data collection

Proper preparation for conducting the focus group discussions was crucial to this study since it involved people from different social backgrounds. Morgan, as quoted

in Oliveira (2011), emphasises that ‘segmentation’ is important in selecting and recruiting participants who possess differences in demographic backgrounds either by gender, age group, ethnicity or religion, etc. This is in line with the views of Greenwood, Ellmers and Holley (2014), as mentioned in (iii) Section 4.6. Referring to Oliveira’s work on ‘Immigrants and public open spaces: Attitudes, preferences and uses’, she segmented several groups based on three different nationalities. Based on these previous scholarly examples, it can be said that the application of segmentation seemed relevant for use in this study.

In the context of this study, the groups fell into two main categories – mosque managers and members of the community from each case study mosque. Based on these categories, the groups were also formed based on participants’ religious backgrounds – Muslim and non-Muslim. As for the mosque managers, they were obviously all Muslims; but with regard to members of the community, there were Muslim and non-Muslim community groups. The rationale of dividing the participants based on their religious background was because this variable was not observable through systematic observation. It is challenging to identify or guess someone’s religion based on their physical appearance. In addition to being difficult, it is not very accurate. Thus, findings based on participants’ religious backgrounds was elicited through the focus group discussions. Table 4.5 below shows the segmentation of the focus group participants used for this study.

Table 4.5: Segmentation of focus group participants

Categories	Religion
i) Mosque managers	Muslim
ii) Members of the community	Muslim
	Non-Muslim

Based on the segmentation of focus group participants, there were several processes involved in recruiting the participants. In order to recruit the mosque managers for the focus group discussions, the researcher contacted the mosque management of each case study mosque and requested for their assistance and consent to conduct the focus group discussions with the mosque managers or staffs. All the

mosque management and authorities were very cooperative in providing the best assistance to the researcher – they agreed to assign a few staffs to join the discussions. Due to time limitation and staffs availability, it was tacit that the number of staffs assigned by the mosque management might not meet the numbers as per requested by the researcher. Total number of the staffs gathered for the focus group discussions 12 staffs – the National Mosque (four staffs), the Abu Ubaidah Al-Jarah Mosque (three staffs), as well as the Al-Ghufran Mosque (five staffs).

The process to recruit the Muslim and the non-Muslim participants from the community was relatively different from the mosque managers recruitment. The researcher used two approaches to recruit the participants:

- i) Potential participants' information was retrieved through mosque visitors' logs provided by the mosque management. The researcher then contacted the shortlisted individuals to request for their participation in the focus group discussions.
- ii) A few visits was made to the nearby residential areas (within the site contexts) to seek for potential participants. The researcher also planned for appointments with leaders of the neighbourhood community to assist her with regard to the recruitment of the participants.

Both of the abovementioned approaches were very useful in helping the researcher to achieve the targeted number of the Muslim and the non-Muslim participants for the focus group discussions.

Before proceeding with the pilot study and main data collection phase, the researcher created a manual or set of procedures for conducting a focus group discussion. Knodel, Sittitrai and Brown, in Knodel (1995), state that it is important to develop a practical manual on conducting focus group research, especially for use in guiding researchers who may lack experience. This manual then serves as a standard guideline that can be followed by researchers who are also potentially acting as moderators of the discussions. A summary of the focus group discussion procedures used in this study is shown as follows (Table 4.6 at the next pages):

Table 4.6: Procedures for focus group discussion used for this study

Pre-focus group discussion
<ul style="list-style-type: none"> ▪ Determine clear target participants in order to satisfy the enquiries addressed in the study. ▪ Develop appropriate instruments, pilot the instruments within the targeted time frame with small groups of people and improve the instruments based on pilot study feedback. ▪ Recruit participants, set appointments and save the dates for the focus group discussions. ▪ If necessary, recruit one or two individuals as assistants and note-takers to facilitate the researcher, who will be the moderator. It is important for the researcher to guide and train his or her assistants on the note-taking task as well as on other supplementary tasks such as distributing documents (participant cards and consent forms). ▪ Determine a clear structure for the focus group session – set proper timings and book a proper venue; prepare sufficient instruments (question sets and any important checklists) and other equipment such as stationery, audio and visual recording devices; provide refreshments such as drinking water for participants to freshen up; as well as a token of appreciation (if necessary).
On the day of the discussion
<ul style="list-style-type: none"> ▪ <u>Prior to the discussion:</u> Arrive at the venue early to prepare the table and set up equipment. Make sure all recording devices are in working order before the discussion takes place. ▪ Upon arrival of the participants, greet and welcome them. Initiate an icebreaking session to ensure everyone feels comfortable with one another. ▪ Ask participants to complete their participant cards and interview consent forms as an ethical formality and for the researcher's records. Stress that the output of the discussions is for academic use only, and that their participation is completely confidential and anonymous.

On the day of the discussion

- **During the discussion:** The moderator (researcher) needs to introduce his/her team and brief participants on the purpose and flow of the discussion. The assistants-cum-observers and note-takers must be ready to perform the tasks given.
- Control the flow of the discussion by ensuring that the whole discussion is balanced. Try to subtly tone down any dominant participants by addressing more enquiries to other participants.
- **End of the discussion:** Thank all the participants for their participation. Inform them that they may be contacted for further information, if necessary. Present them with a token of appreciation (if available) to show gratitude for their participation.
- As a wrap, have a small discussion with the assistants – to know their insights with regard to the output of the focus group discussions as well as to gather all the important data and materials that had been collected.

Post-focus group discussion

- Organise all important documents such as participant cards, interview consent forms and field notes properly. This also includes audio and visual recordings for transcription purposes.
 - Prepare for the data analysis phase.
-

In order to test the feasibility of the procedures, the researcher conducted a pilot study with a group consisting of ten community members. A number of sample questions were asked, as follows (Figure 4.12):

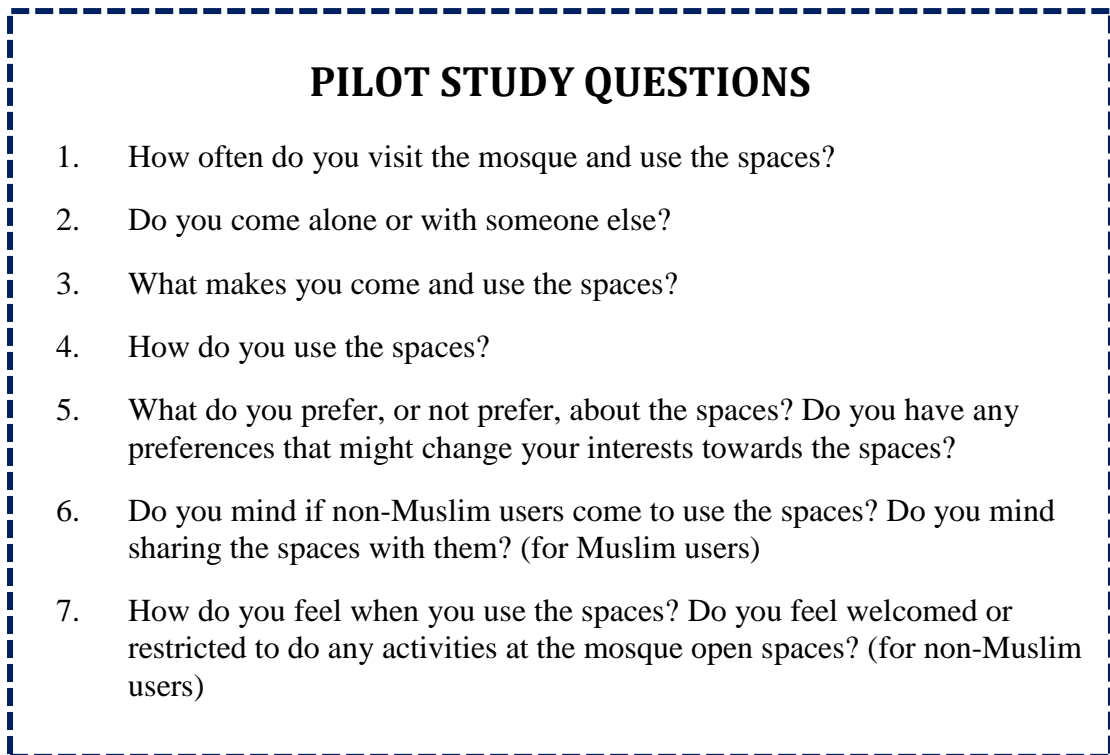


Figure 4.12: Sample of pilot focus group questions

After conducting the pilot study, the researcher determined that the procedures were feasible and convenient. However, a number of issues were noted while moderating the pilot discussion. The questions were quite general and broad, and did not yield detailed answers to the enquiries of this study. It was also discerned that the pilot discussion was fairly monotonous in nature in the sense that the participants were quite uncommunicative and unsociable with each other. The researcher carried out some improvisations to create a more interesting and responsive discussion environment during the main data collection. A few alternatives were identified before embarking on the data collection stage, including improvising questions and splitting the group into several more manageable discussion groups (for more elaboration, see Section 4.6.1.1).

4.6.1.1 Alternatives for data collection

In order to elicit more detailed information, three different sets of question were established, one for use with each group category – mosque managers, the Muslim community and the non-Muslim community (refer to Appendices K, L and M). Different question sets were established for each group category due to participants' different backgrounds and the different needs that they may reveal. As for venues, discussions with the mosque managers were conducted at mosque conference halls, whereas discussions with both the Muslim and non-Muslim community groups were conducted in more informal settings, such as cafeterias and discussion rooms in a public library.

Discussions were split into a few manageable groups rather than having a large group discussion. For instance, there were twelve participants in the Muslim group, but the researcher split these into two separate discussions of six participants per group, to achieve optimum output from each discussion within the determined duration. Smaller groups were more controllable and made the participants more contented and closer to each other. As a result, it was anticipated that the whole session would be more exciting and stimulating. Additionally, the researcher also improvised the manner for moderating the discussion. In order to get genuine expression and communication from the participants, the discussion ambience had to be more relaxed and less formal.

Discussions were expected to last for an hour or more (but less than two hours) depending on the participants' cooperation as well as the adequacy of information obtained throughout the discussions. Before the discussions started, the researcher distributed participant cards to all participants. The use of participant cards was important in helping the researcher record participants' demographic information. It was thought this demographic information may have a significant relationship with the qualitative findings obtained later. More details of the profiles of participants are elaborated in Chapter Six (Section 6.2). Even though some of the participants did not complete their cards in full – some were reluctant to reveal their educational and working backgrounds – this was not a particular problem so long as the required information such as age, gender, ethnicity and religion were completed.

4.6.2 Method of analysis

Once the data collection had been completed, the focus group data were transcribed verbatim using NVivo software, a powerful tool for qualitative analysis. Initially, it was planned to use NVivo for the whole data analysis, including data coding and thematic analysis. However, a new piece of qualitative analysis software called Quirkos was used instead as it appeared to offer better functionality. Quirkos, which was founded in Edinburgh, is a powerful yet simple analysis tool that helps a researcher to sort and manage textual data. The analysis was conducted by extracting themes from the discussions with focus group participants. By using Quirkos, themes can be extracted from the transcripts and organised in the form of bubble diagrams, as shown in Figure 4.13 below. The image below shows how textual data can be selected (highlighted in various colours in the right pane) and later inserted into thematic bubbles. The colours assigned to the selected texts correspond to themes denoted by the same-coloured bubbles (as shown by the red arrow). It was easier through this method to concurrently identify the themes and quotes.



Figure 4.13: Qualitative data analysis using Quirkos software

The themes were coded in a hierarchical order. The first bubble indicates the core of the theme and this was followed by a chain of subthemes (see Figure 4.14). The Quirkos software displays data in a more graphical and visual manner which enabled the researcher to distinguish the importance and magnitude of the data

through the size of the bubble diagrams. The size of the bubbles showed the ‘weighting’ held by each main theme or subtheme. The size of the bubble provides an indication of the frequency with which the corresponding theme was discussed by participants, in addition to an indication of its relative importance. A larger bubble indicates a higher frequency of discussion and a greater relative importance of the theme in question.

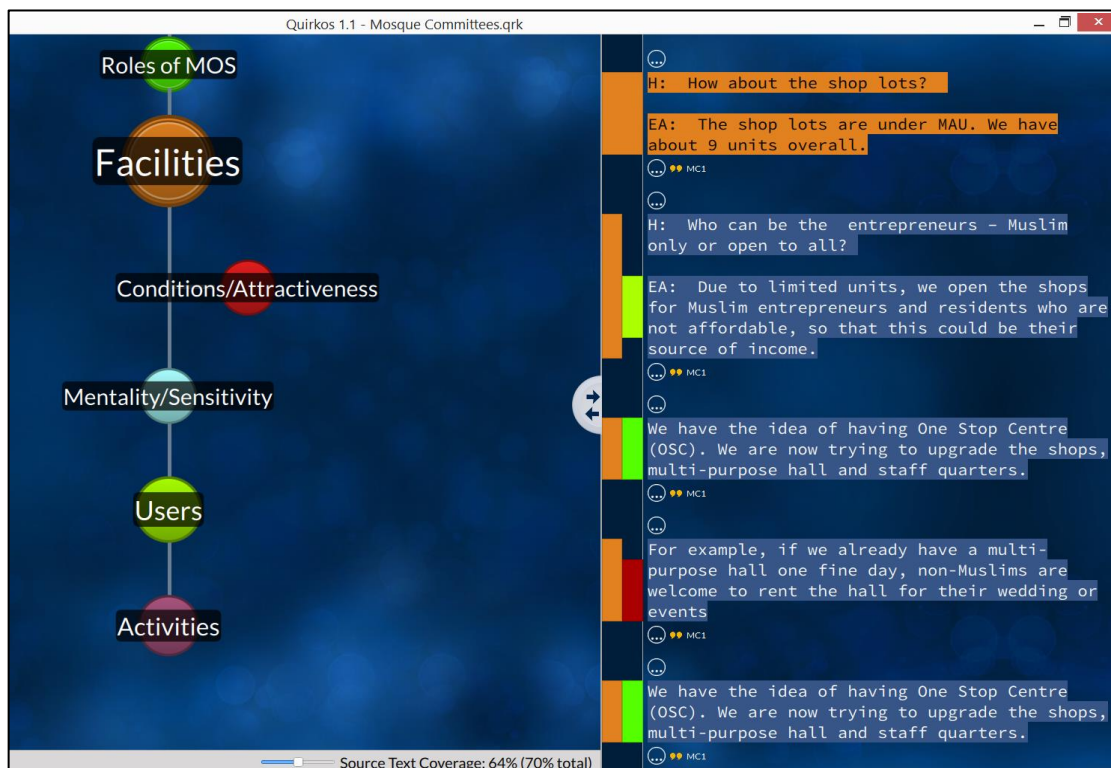


Figure 4.14. Hierarchy of the analysed themes in Quirkos software

Application of the Quirkos software comprehensively aided in analysing and managing the qualitative data in a systematic way. Once this analysis had been completed, it was possible to organise and arrange the findings based on the focus group category. The value of the focus group findings in this study emerged from the similarities and differences of the participants’ experiences, opinions, perceptions and also recommendations with regard to the issue of urban mosque open spaces in Kuala Lumpur. In addition to obtaining data pertaining to the use of mosque open spaces, the researcher also obtained further empirical evidence from social media with regard to the reality of how urban mosque open spaces in Kuala Lumpur are utilised for social activities. The following section presents the importance and values of having the social media source as a supporting qualitative method for this study.

4.7 Social media as a supporting qualitative method

In this digital age, people around the globe have become accustomed to keeping themselves up to date using social media and technology. According to Abdel-Aziz et al. (2016), social media provides a platform for people to share information, news and their points of view using multimedia content such as photos and videos, and indirectly encouraging discussion through people's comments on this content. Under the umbrella term social media, van Lammeren et al. (2017) describe the classification of social media proposed by Kaplan and Haenlein, namely – (i) social networking sites (e.g. Facebook), (ii) blogs (e.g. Tumblr), (iii) social news sites (e.g. Digg) and (iv) content communities (e.g. YouTube), as well as collaborative projects (e.g. Wikipedia). There has been a worldwide trend for the public to access these mobile applications for their personal or organisational benefit. Nonetheless, social media is seen as an important means of accessing information and public opinion in the quickest and simplest manner. Simm et al. (2015) point out that the rise of social media has led to great demand for public organisations to engage with the public and to obtain their opinions on different issues. They also assert that:

One area in which digital tools have great potential is in consultation on design of public spaces. Public organizations are expected to consult with users of a public space before, during and after occupancy. Digital tools could increase the effectiveness of this consultation because: (i) they are available 24h and do not rely on the presence of researchers and (ii) data are collected and analysed using automated methods, allowing faster decision-making. (Simm et al., 2015, p.1)

Based on the evidence presented above, it can be seen that social media also has an important role to play in portraying the image and improving the functions and design of public spaces. Adolfs (2012) concurs that the utilisation of public spaces in urban areas can be increased in line with the advancement of technology and social networking. It is seen as an advantage when members of the public, especially youth, who are well connected to digital social networks, promote their favourite public spaces via mobile applications. Information on certain places can very quickly be shared among their social circles, and this phenomenon definitely has the ability to shape the images of the places themselves. In relation to landscape architecture research, van Lammeren et al. (2017) suggest that social media can be considered an innovative way to obtain useful data for project and academic research:

Social media might be useful as a source of data for project research (such as discovering what happens around a design or planning area) and as a data collection tool for academic research (for example, setting up a platform and inviting members of the public to make entries which become qualitative data sets). (van Lammeren et al., 2017)

On the other hand, Social Media Research Group (2016) also outlines the use of social media method in social research. There are two types of data collection in social research that can be conducted through the use of social media method – (1) real-time and (2) timebound. Real-time data collection involves collecting socio-ethnographic data and social media specific data. Timebound data collection involves collecting interviews, surveys and experiments data. In terms of data analysis, this research group suggests a few quantitative and qualitative analysis approaches that can be applied in social research. Volume analysis, relationship analysis, correlation and the GIS are part of the quantitative approaches; whereas thematic analysis and graphical media analysis are part of qualitative approaches. Based on the aforementioned explanations, it can be identified that the qualitative approach which is graphical media analysis suits the context of this study – which involves the use of visual online sources such as photos that were posted via social media applications.

With reference to this study, the social media method has added value, notably in terms of it providing supplementary qualitative information concerning the use of the urban mosque open spaces in Kuala Lumpur. It has helped to bring new information that it would not have been possible to obtain solely through on-site observations and focus group discussions. The researcher found a number of write-ups and interesting photos relating to the activities performed by members of the public at the open spaces of the National Mosque that had been posted by a Malaysian social activist, Syed Azmi, on the popular social networking site Facebook. This triggered the researcher's interest in exploring the reality of the utilisation and activities held in urban mosque open spaces via this alternative method (i.e. from another person's perspectives), for use in support of the two aforementioned methods. As mentioned in Section 4.3, the researcher approached Syed Azmi and requested his consent to use his writing and photos for the purpose of this study. In the same vein as this desire to draw on the information contained within photos posted via social media, van Lammeren et al. (2017) refer to a study entitled 'Amsterdam, the

Netherlands: Analysing Tourist Behaviour by Social Media Posted Photos'. This study attempted to use photos posted on social media as a way of uncovering the preferences of tourists in the city of Amsterdam.

In the case of the other two mosques studied – Abu Ubaidah Al-Jarah and Al-Ghufran Mosques, the number of reliable sources accessible to the researcher that portrayed the use of the mosque open spaces was relatively limited in comparison. Although the findings obtained from the social media source in this study focused mainly on the National Mosque open spaces (refer to Chapter Seven), of greater significance is the valuable evidence that social media can provide in supporting this study, as well as other studies in the field of landscape architecture.

There is another example of a study conducted by Ben-Harush, Carroll and Marsh (2012) that involves the use of social media method which is relevant to the context of this study. In their study concerning people, health and place research, they applied the use of location based social media applications such as Facebook, Twitter and Foursquare as well as the use of the GIS to obtain meaningful quantitative, qualitative and real-time findings with regarding urban residents' behavioural, recreational and physical activity patterns. The integration of both social media method and the GIS as an analysis tool allows these researchers to investigate people interactions with places and influencing factors to their health. In relation to the context of this study, the images found through social media such as Facebook and a few reliable blogs also contain the location-based information. For example, the photos were tagged by the users as 'at National Mosque, Kuala Lumpur' or 'at Masjid Negara, Kuala Lumpur'. It is a trend that most of the social media users use the function of geotagging or casually known as 'location check-in'. This type of function may generate information regarding users' locations in public places as well as the frequency of their visits to those places. Presumably, the role of technology and the social media method should not be underestimated in terms of its ability to provide a better understanding of good people places.

So far, this chapter has focused on the methods undertaken in conducting this study – systematic observation with behaviour mapping and focus group discussions as well as the social media method. The following section contains a summary of this study's research methodology and its links to the research questions.

4.8 Summary of research methodology

Table 4.7: Connection between research questions and methodology

Main Question	Sub-questions	Research Objectives	Methods
How do urban mosque open spaces encourage intercultural activities and interaction?	i. Do urban mosque open spaces encourage multicultural use?	The study aims to investigate the extent to which urban mosque open spaces are used as intercultural spaces.	Systematic observation with behaviour mapping + Focus group discussions + Social media
	ii. How are the urban mosque open spaces being used by the community?	The study intends to examine and investigate spatial occupancy and activity patterns, and also users' preferences regarding the use of urban mosque open spaces.	
	iii. What leads multicultural users to use the urban mosque open spaces?	The study aims to examine the views of mosque managers, the Muslim and the non-Muslim communities regarding activities and interactions within urban mosque open spaces.	Focus group discussions
	iv. Does the use of the urban mosque open spaces by multicultural users present any possible opportunities or challenges?	The study intends to examine non-Muslim users' perceptions, experiences and feelings towards urban mosque open spaces, and to find out how the spaces are perceived by other users.	
	v. What aspects of design support intercultural use and interaction at the urban mosque open spaces?	The study aims to make recommendations about how urban mosque open spaces should ideally be designed in order to make them suitable for the multicultural community.	Focus group discussions

CHAPTER 5

FINDINGS: SYSTEMATIC OBSERVATION WITH BEHAVIOUR MAPPING

5.1 Introduction

Having discussed the fundamentals of the research in the previous chapters, this chapter now presents the quantitative findings gathered through systematic observation with behaviour mapping. As presented in Chapter Four, this method was used to investigate the spatial occupancy of urban mosques open spaces in Kuala Lumpur. Based on the observations, the behavioural patterns of users were recorded in the form of behavioural maps that were digitised and analysed in ArcGIS. Goličnik (2005) asserts that ‘behavioural patterns show the possibilities of occupancies in places (...)’ (Goličnik, 2005, p.77). Since this method lends itself to investigation of the usage-spatial relationship of open spaces, a number of questions may arise from the investigation, such as: ‘who is using the spaces?’, ‘what are the users primarily doing?’, ‘where and when do the activities take place?’; and much more.

The purpose of this chapter is to demonstrate the patterns of spatial occupancies of the urban mosque open spaces studied in Kuala Lumpur, namely those at the National Mosque, Abu Ubaidah Al-Jarah Mosque and Al-Ghufran Mosque. The findings obtained from each studied mosque are presented based on the observations on selected weekdays, weekends and also the cumulative occupancies of the urban mosque open spaces based on different attributes (gender, ethnicities, age groups and activities). Based on the analysis, each of the studied urban mosques was found to possess its own spatial and sociocultural distinctiveness that influenced and affected the use of its open spaces. The following spatial factors influenced the occupancies of the open spaces: the location of the mosque; the layout and design of the studied spaces; the design and condition of existing landscape elements; and the provision of facilities and amenities. A number of sociocultural factors were also identified from the observations and conversations with users, such as the diversity of users and their interactions, the range of physical and social activities taking place in and around the studied spaces, as well as users’ preferences and rationales for using the spaces. The

findings in this chapter are presented following the hierarchical sequence of the studied mosques, i.e. national, district and sub-district mosques. The next section presents the findings from the first case study – the National Mosque, Kuala Lumpur.

5.2 Case Study 1: National Mosque, Kuala Lumpur, Malaysia

5.2.1 Site and context appraisal

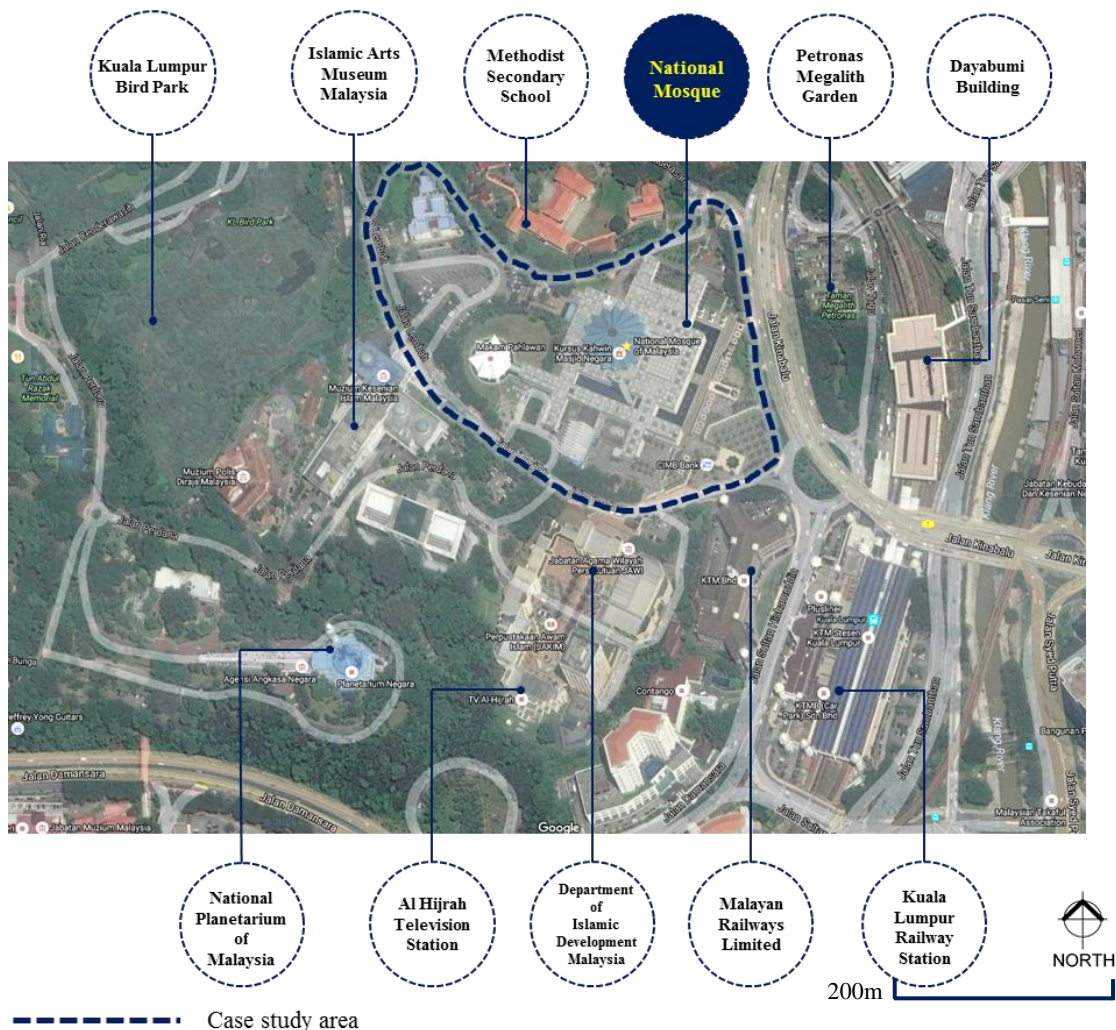


Figure 5.1: Macro site context – the National Mosque, Kuala Lumpur (aerial image source: Google Maps). The diagram above displays the location of the first case study area and its surrounding context and land uses.

The National Mosque is the principal mosque of Malaysia, located in the heart of Kuala Lumpur city centre. From Figure 5.1, in a macro context, it can be seen that the National Mosque is surrounded by various different land use contexts including institutional, educational and commercial zones. Adjacent to the mosque there are governmental and private institutions such as the Department of Islamic Development

Malaysia and Malaysia's first Islamic television station, TV Al-Hijrah. There are multiple points of interest for tourists around the National Mosque, including the Islamic Arts Museum Malaysia, Kuala Lumpur Bird Park and National Planetarium of Malaysia. This mosque is easily accessible by various forms of public transport including trains, public taxis and hop-on-hop-off buses for tourists. Right next to the mosque is the old Kuala Lumpur railway station, operated by Malayan Railways Limited, also known as Keretapi Tanah Melayu Berhad (KTMB). The images in Figure 5.2 below illustrate the above-mentioned surrounding context of the National Mosque.

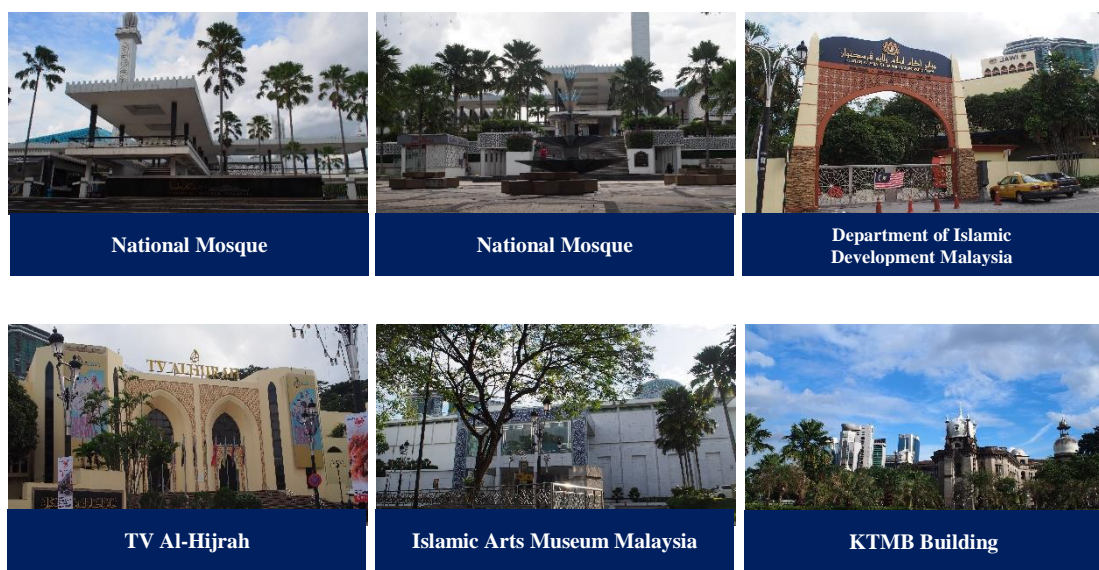


Figure 5.2: Surrounding context of the National Mosque

Strategically located in the heart of the national capital, the National Mosque attracts massive numbers of local and international tourists every year. Abdul Aziz et al. (2016) reveal that one of the elements of the mosque appreciated by tourists is its modern and sleek architectural style, taking its inspiration from India, Pakistan, Iran, Turkey, Saudi Arabia, the United Arab Emirates and also Spain (Islamic Tourism Centre of Malaysia, 2015). Figure 5.5 shows the micro setting of the National Mosque, together with its surrounding context and the existing physical environment around the studied spaces. Four open spaces (Spaces 1 to 4) were selected for observations on selected weekdays and weekends in April 2014, as shown in the figure on the next page::

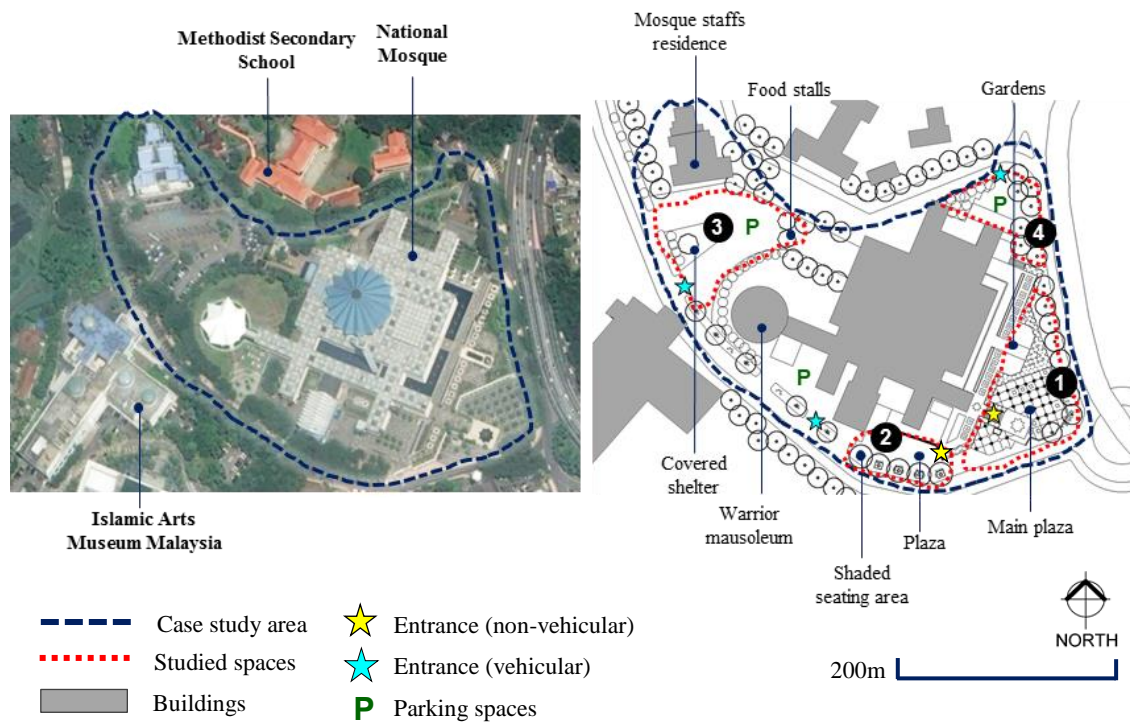


Figure 5.3: Micro site context - the National Mosque. Aerial image (left) shows a close-up view of the case study area (source: Google Maps). Base map (right) displays the existing physical environment available around the mosque and the studied spaces. The numerical labels indicate the spaces studied during the systematic observation.





Figure 5.4: Images of the studied spaces at the National Mosque

A walkthrough session Initially was conducted to identify the most suitable spaces for study and observation. The identification process considered several important criteria such as spatial context and accessibility, the existing condition of the spaces, types of users and the nature of activities. Space 1 is the main plaza of the National Mosque and the open courtyard (*sahn*). The main staircase and entrance (non-vehicular) of this mosque are adjacent to the main plaza. This entrance also leads visitors and users from the main plaza to the open courtyard and garden on the upper level. The main plaza is enhanced by various features such as Islamic geometric floor patterns, seating and benches, palm trees, a water fountain, a gazebo as well as a sculpture. In addition, there are public facilities such as toilets and cash machines available at the main plaza. The open courtyard is also designed with the symbolism of Islamic gardens, containing diverse features such as water fountains, reflective pools, Islamic geometric patterns as well as plantings in grid and symmetrical spatial organisations. Space 2 contains the side plaza and shaded seating area. This plaza is decorated with chequered floor patterns, large roadside canopy trees in planter boxes and both concrete seating and benches. There is another non-vehicular entrance for users from this side of the plaza. At certain times, this plaza is used for parking space for motorcycles and bicycles. Space 3 is an open space on the northwest side of the mosque, near to the staff residence. This open space is accessible by vehicles and has public parking spaces for cars and buses, a large gazebo with a rest area and food stalls. Space 4 is located on the northeast side of the mosque, adjacent to the Methodist secondary school. This space has public parking spaces and outdoor gym equipment. Space 1 can be accessed from Space 4 using staircases and there are ramps provided for people with disabilities (PWDs). As mentioned earlier, these four spaces were observed on selected weekdays and weekends. The next section discusses the detailed findings obtained throughout the period of systematic observation at the National Mosque on selected weekdays for three consecutive weeks in April 2014.

5.2.2 Selected weekdays: Gender

Figure 5.5 shows the patterns of behavioural occupancies on selected weekdays at the National Mosque open spaces based on gender attribute. With reference to the occupancy of the studied spaces, it can be seen that all of the spaces were accessed by both male and female users. It is very interesting to see how the spatial occupancy patterns of male and female users changed from week to week. Details on the presence of the different genders at the National Mosque open spaces on selected weekdays are given below.

- **Week one:** The spatial distribution of male and female users was balanced in all spaces except for Space 4. Space 4 appeared to have more male users.
- **Week two:** There were more female users occupying Spaces 1, 2 and 3 as compared to male users on this day.
- **Week three:** The distribution of male and female users in all spaces was fairly balanced except for Space 4, where only one female user was present.
- **Cumulative occupancies:** Cumulatively, throughout the selected weekdays, Space 4 was highly utilised by male users as compared to other spaces for which the distribution of male and female users was in proportion.

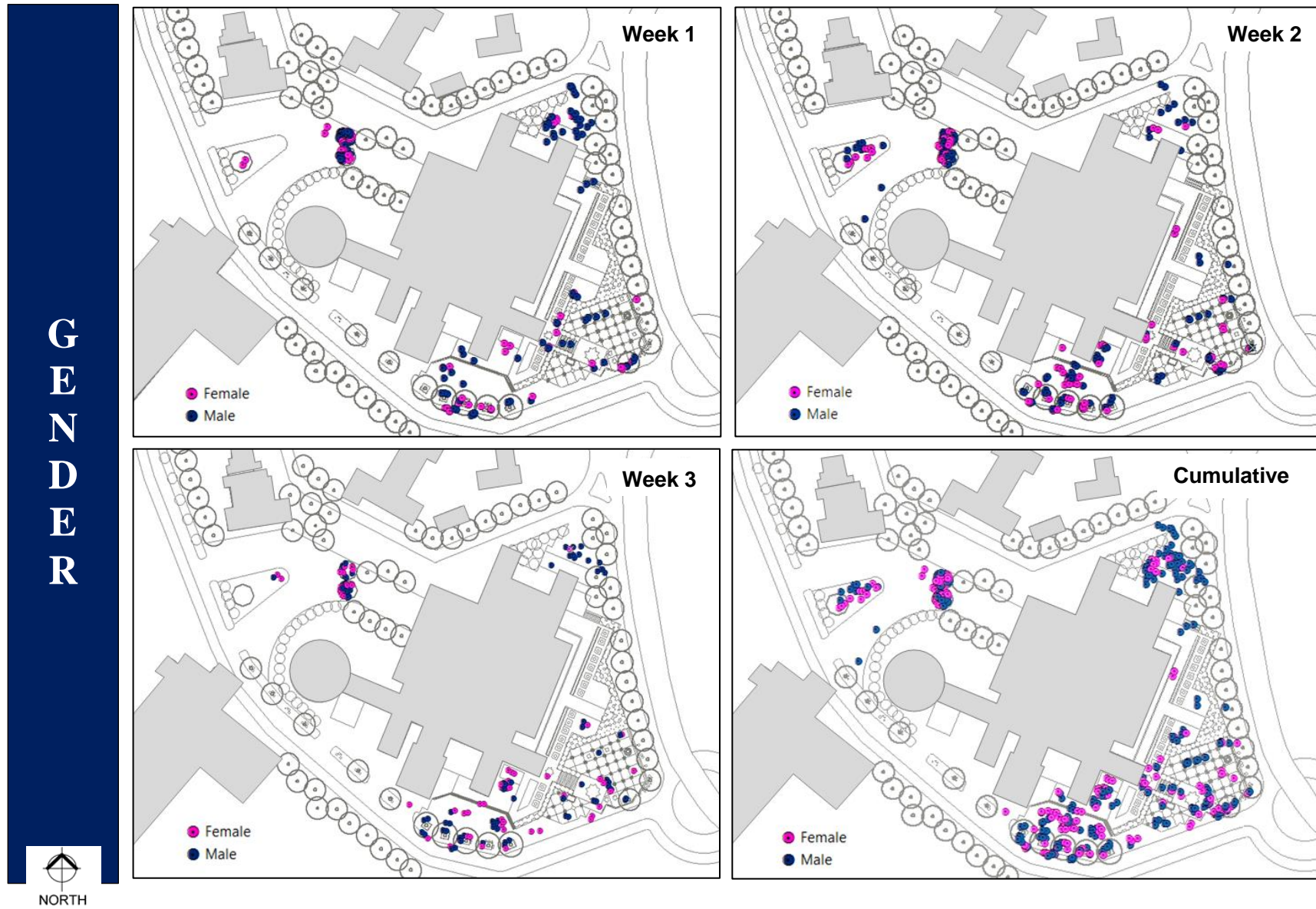


Figure 5.5: Daily and cumulative occupancies based on gender on selected weekdays at the National Mosque open spaces.

5.2.3 Selected weekdays: Age groups

Figure 5.6 shows the patterns of behavioural occupancies on selected weekdays at the National Mosque open spaces based on the age groups attribute. Overall, it can be seen that users from different age groups occupied all of the studied open spaces. Details of user occupancy based on age group for the selected weekdays at the National Mosque open spaces are given below:

- **Week one:** Spaces 1 and 2 were utilised highly by adults but very little by teenagers and the elderly. During the observations, two food vendors (adults) routinely operated businesses at the roadside from afternoon until early evening. In contrast, fewer than five teenagers, a child and one elderly user were present in Spaces 1 and 2. This was slightly different for Space 3, where adults, teenagers and children were all seen at the food stalls area.
- **Week two:** A few groups of children and adults were found in Spaces 3 (at the food stall area and in front of the large gazebo) and 4. Notable were the groups of elderly people appearing in Spaces 1 (main plaza) and 2.
- **Week three:** Adults were observed in all the spaces. However, there were two elderly users in Space 2, a teenager in Space 3 and two groups of children seen in Space 4.
- **Cumulative occupancies:** Adults were the main users cumulatively at the open spaces of the National Mosque, especially for Spaces 1, 2 and 3, throughout the observed weekdays. Space 4 was largely occupied by children. Very few teenagers and elderly were present in those spaces.

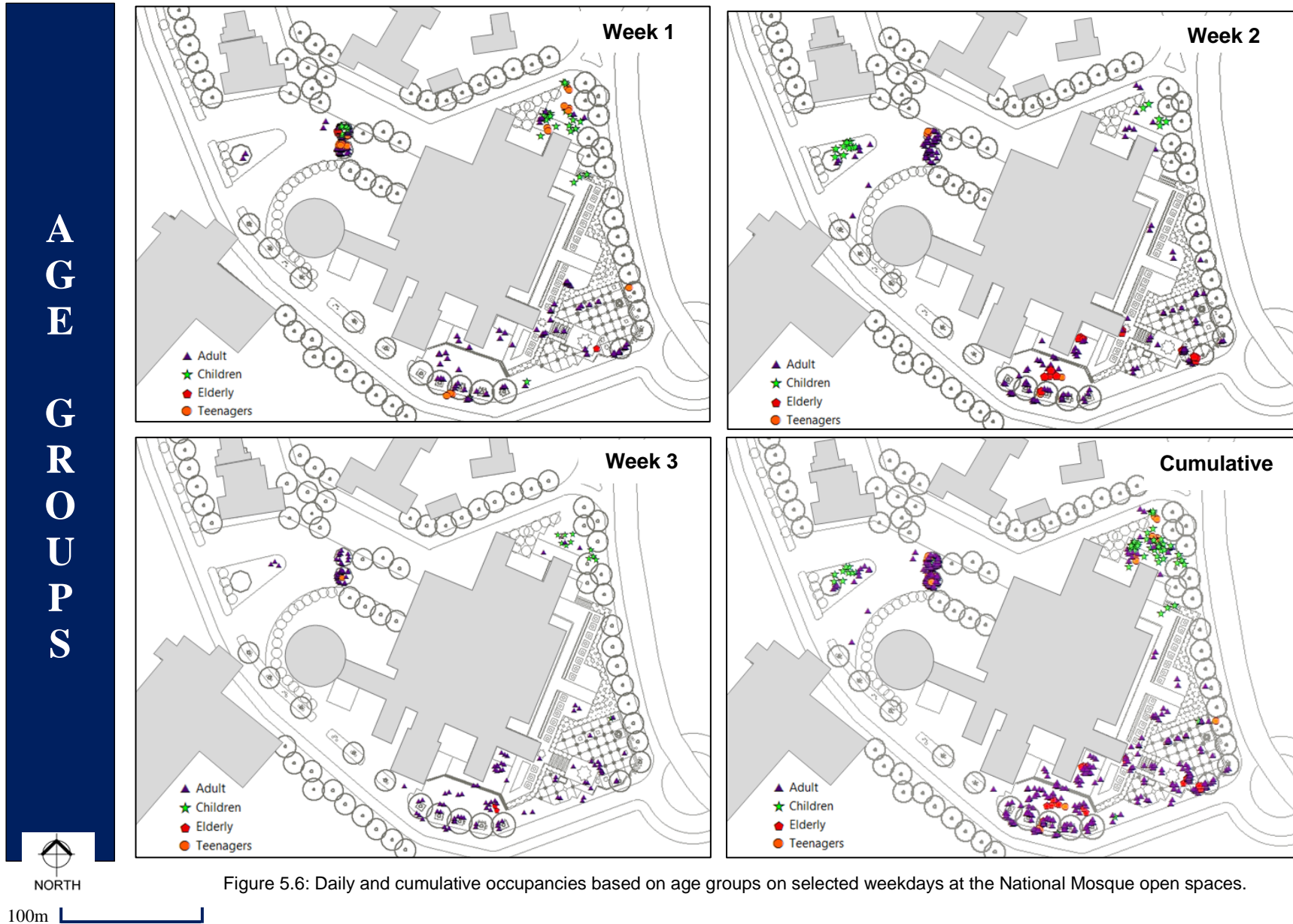


Figure 5.6: Daily and cumulative occupancies based on age groups on selected weekdays at the National Mosque open spaces.

5.2.4 Selected weekdays: Ethnicities

Figure 5.7 shows the patterns of behavioural occupancies on selected weekdays at the National Mosque open spaces based on the ethnicities attribute. All spaces were utilised by multi-ethnic users but there was a greater intensity of use observed in Spaces 1 and 2 compared to the other two spaces. Details of the users' occupancies based on ethnic groups on the selected weekdays at the open spaces of the National Mosque are presented below:

- **Week one:** Spaces 1 and 2 were occupied by multi-ethnic users, in contrast to Spaces 3 and 4. The majority of these users were tourists visiting the mosque. The remainder were presumed to be working in nearby areas and to have come to the mosque for afternoon prayers and to spend their lunch break at the mosque open spaces. Spaces 3 and 4 were mostly occupied by Malay users, while only one foreign tourist was observed there, at the food stall area (Space 3).
- **Week two:** Similar to the previous week, Malays were the predominant users of all spaces, especially Spaces 3 and 4. Meanwhile, a Chinese tour group and other tourists (presumably Caucasians based on their physical characteristics and appearance) were also present in Spaces 1 and 2.
- **Week three:** Spaces 1 and 2 appeared to contain multi-ethnic groups. It was observable that most of the Chinese users and users from other backgrounds performed their activities as part of these groups. In addition, three Indian users were observed; one at the main plaza and the other two at the food truck vendors. On the other hand, according to the maps, it was evident that only Malay users were seen at the food stalls in Spaces 3 and 4.
- **Cumulative occupancies:** Overall, it can be seen that Spaces 1 and 2 were highly occupied by multi-ethnic users in comparison to Spaces 3 and 4, the latter being largely dominated by Malay users.

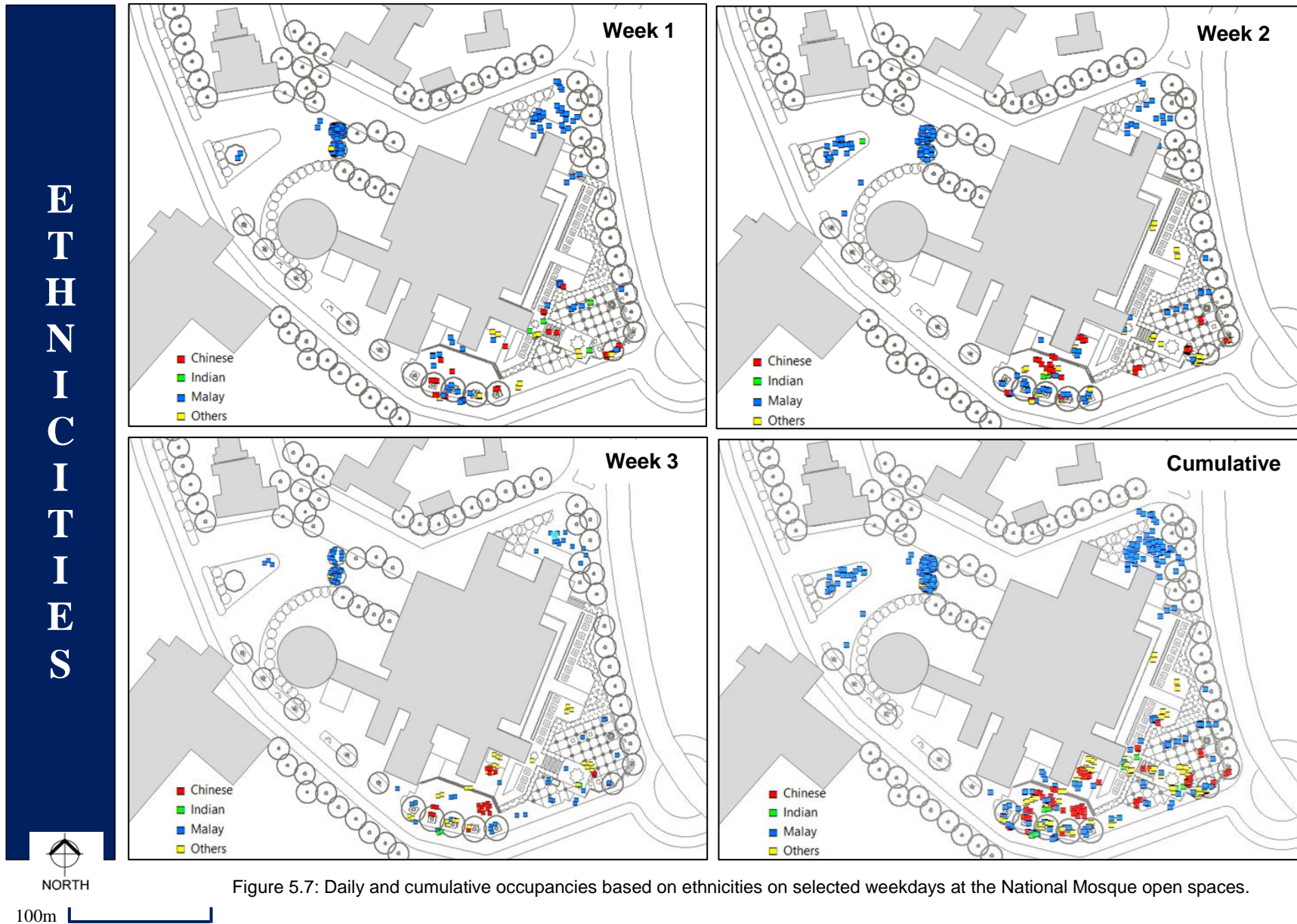


Figure 5.7: Daily and cumulative occupancies based on ethnicities on selected weekdays at the National Mosque open spaces.

5.2.5 Selected weekdays: Activities

Figure 5.8 illustrates the patterns of activities taking place at the National Mosque open spaces for the selected weekdays. It can be seen that users were widely using Spaces 1, 2 and 4, but that occupancy in Space 3 was more concentrated in certain areas within the space (e.g. at the food stalls). In terms of the intensity of use, Spaces 1 and 2 allowed for a greater range of activities to take place. Below are the details of the activities taking place on the selected weekdays at the open spaces of the National Mosque:

- **Week one:** Since all the studied spaces are connected to the entrances and exits of the National Mosque, these spaces were noticed and regarded as routes for passers-by, connecting them to different locations. On the selected day, activities such as walking, sitting, eating, buying and selling food, chatting, playing, taking photos and sleeping were recorded at all spaces. In Space 1, some users sat together on the concrete benches, conversing with each other, whereas two male adults (a Malay and an Indian) were found sound asleep. Based on the belongings they carried, these two users were presumed to be homeless. Furthermore, it was noticeable that some adults preferred to occupy the seating area under the shady trees while others socialised and carried out activities around the main plaza. On the other hand, a female Malay food vendor was observed selling food and beverages under the large tree canopy at the main plaza. This attracted a few Chinese tourists and other tourists from different backgrounds to go and purchase food. The grand water fountain in the middle of the main plaza was also seen by some users as a photographic opportunity. In Space 2, most users preferred to sit and wait at the seating area under the shady trees while enjoying food (drinks and snacks) they had purchased from roadside food vendors. In contrast, in Space 3, most users went to the food stalls to enjoy Malaysian cuisine offered by a variety of vendors, especially during lunchtime. Moreover, there were two Malay female adults resting on the benches under the large gazebo. There were also children playing together within the open parking spaces in Space 4, while other users were walking and chatting to each other.

- **Week two:** During the second week, the intensity of activities was relatively similar to that seen during the first week. More activities took place around Space 2, and the distribution of users around this space was more disseminated. Similarly to the previous week, it was seen that the users enjoyed sitting, socialising, chatting and eating under the trees. It seemed as if this spot enabled interactions between multicultural users and local street food vendors. The use of Space 3 was more focused on the food stalls area, where users queued up to purchase and enjoy their meals, either individually or with acquaintances. A group of children and a few accompanying adults were observed occupying the space, waiting for the arrival of an excursion bus. Turning to the use of Space 1, this was used for several activities, such as an art and painting business, resting, walking and sitting. Square concrete benches at the main plaza were occupied by three Malay males, who were resting. In addition, a pair of Chinese people were using the concrete seating under a shady tree in front of the main plaza. In Space 4, children were observed playing together, with adults also walking into and out of the space. In terms of the proximity of users of different ethnicities while using the spaces, it was visible that some were tolerant and open in terms of performing their activities in close proximity to each other. In fact, on certain occasions, it could be acknowledged that there were interactions between users who were unfamiliar with each other. For example, the researcher observed a situation where a group of Chinese tourists approached a local Malay male walking in Space 2 and asked for directions to the nearest train station.
- **Week three:** A variety of activities were performed by users in Space 1. One user was observed sleeping, with a further three users resting at the main plaza. Some were taking photos at the main plaza and the open courtyard, and several Malay users were walking from Space 1 to Space 2, and vice versa. In Space 2, the activities performed by users included chatting, sitting, walking, eating, buying food and walking. A group of Chinese tourists gathered at the space were having a conversation. A number of users were eating, sitting and chatting under the trees, including four Malay users who were conversing with each other. Food stalls were the major attraction in Space 3, as people

gathered there to eat, either alone or with friends. In contrast, Space 4 was occupied by two groups of children; one group was playing and the other group was walking around.

- **Cumulative activities:** There were multiple activities (see Figure 5.9) performed by the users at all spaces on the selected weekdays – more than six activities took place in Spaces 1 and 2, while three and six activities occurred in Spaces 4 and 3, respectively. The most common activity noticed in all spaces was walking. Contrary to other spaces, the most interesting activity that took place in Space 1 was homeless people sleeping at the main plaza. The main plaza is a favourite and regular spot for these people, who use the physical environment all over the plaza to cater to their basic needs. For example, the square concrete benches are used as ‘beds’, with the plaza floor being used as a ‘laundry drying rack’. On a regular basis, Space 1 has attracted a female artist who displays her paintings for sale under the tree at the main plaza. On the other hand, it can be seen that several spots in Space 1 (e.g. in front of the grand water fountain and open courtyard) have become preferred spots for users, especially tourists, to take individual or group photos. In the case of Space 2, the seating area under the shady trees was the most desired spot for users to perform activities such as eating, sitting and chatting. Throughout the observation period, it was observed that several food vendors would regularly park their trucks at the roadside near to the seating area, to sell food, snacks and beverages. Furthermore, this space also functioned as a waiting area.

With reference to the occupancies in Space 3, the food stalls were evidently the spots occupied most by the multicultural users – they enjoyed eating there, especially during their lunch breaks. Since this space has large parking areas to accommodate cars and buses, it was also utilised by some users as a waiting area. Some of these would be waiting for excursions or even school buses. In terms of the spatial occupancies observed in Space 4, fewer activities took place in this space in comparison to other spaces. However, this space is unique in a sense that children were more attracted to using it as a

play area compared to the other three spaces. Besides this, during the observations, many passers-by entered and exited the space, making their way either to the mosque, to Spaces 1 and 2 or to other places adjacent to the mosque.

Having discussed the observational findings for the selected weekdays at the National Mosque open spaces, Figure 5.9 contains pictorial evidence of the physical and social activities that occurred at the spaces studied, from Spaces 1 to 4. The following sections (Sections 5.2.6 to 5.2.9) thus proceed to discuss the observational findings obtained on three consecutive Fridays.

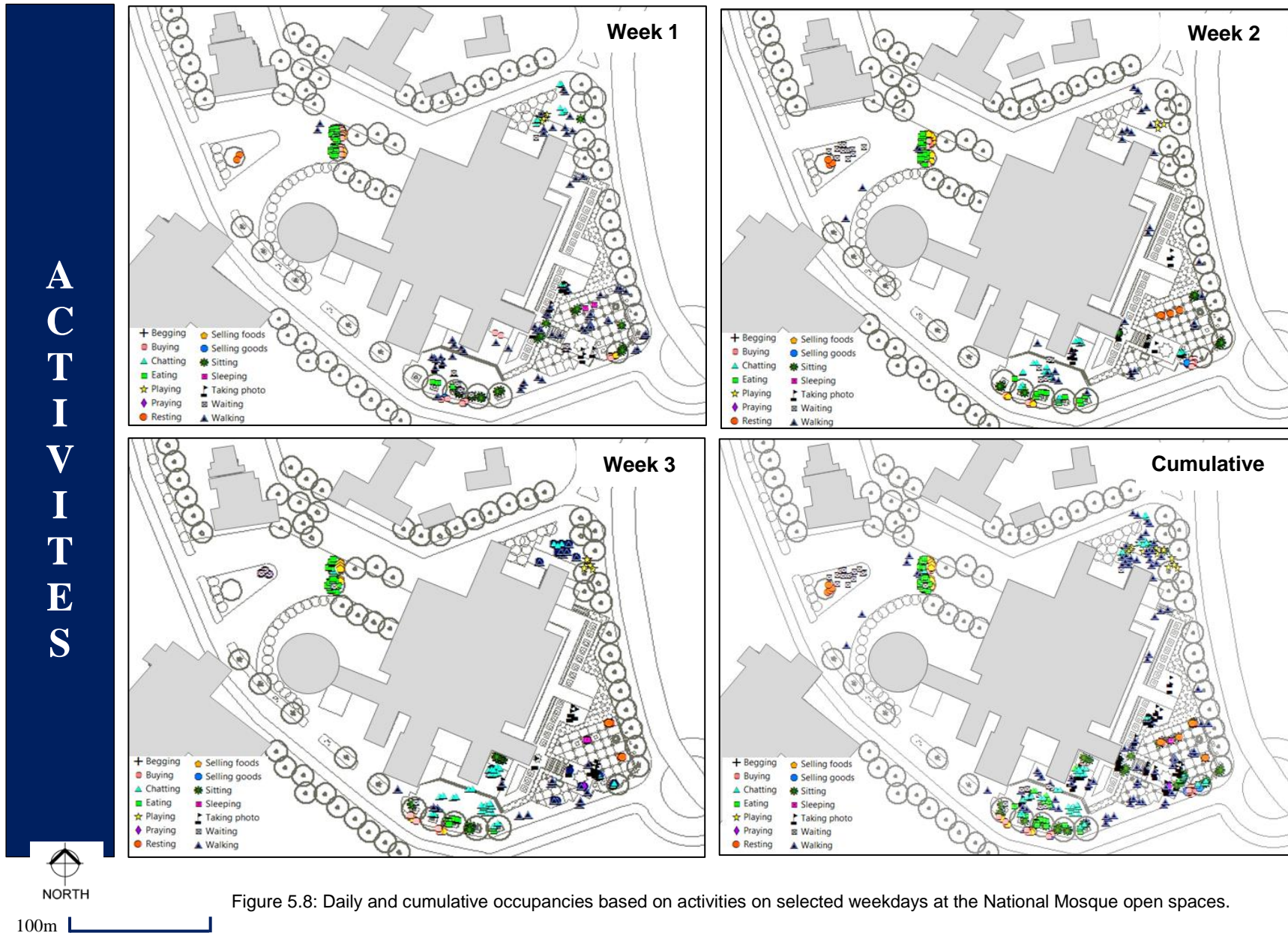


Figure 5.8: Daily and cumulative occupancies based on activities on selected weekdays at the National Mosque open spaces.

ACTIVITIES AT THE NATIONAL MOSQUE OPEN SPACES DURING SELECTED WEEKDAYS

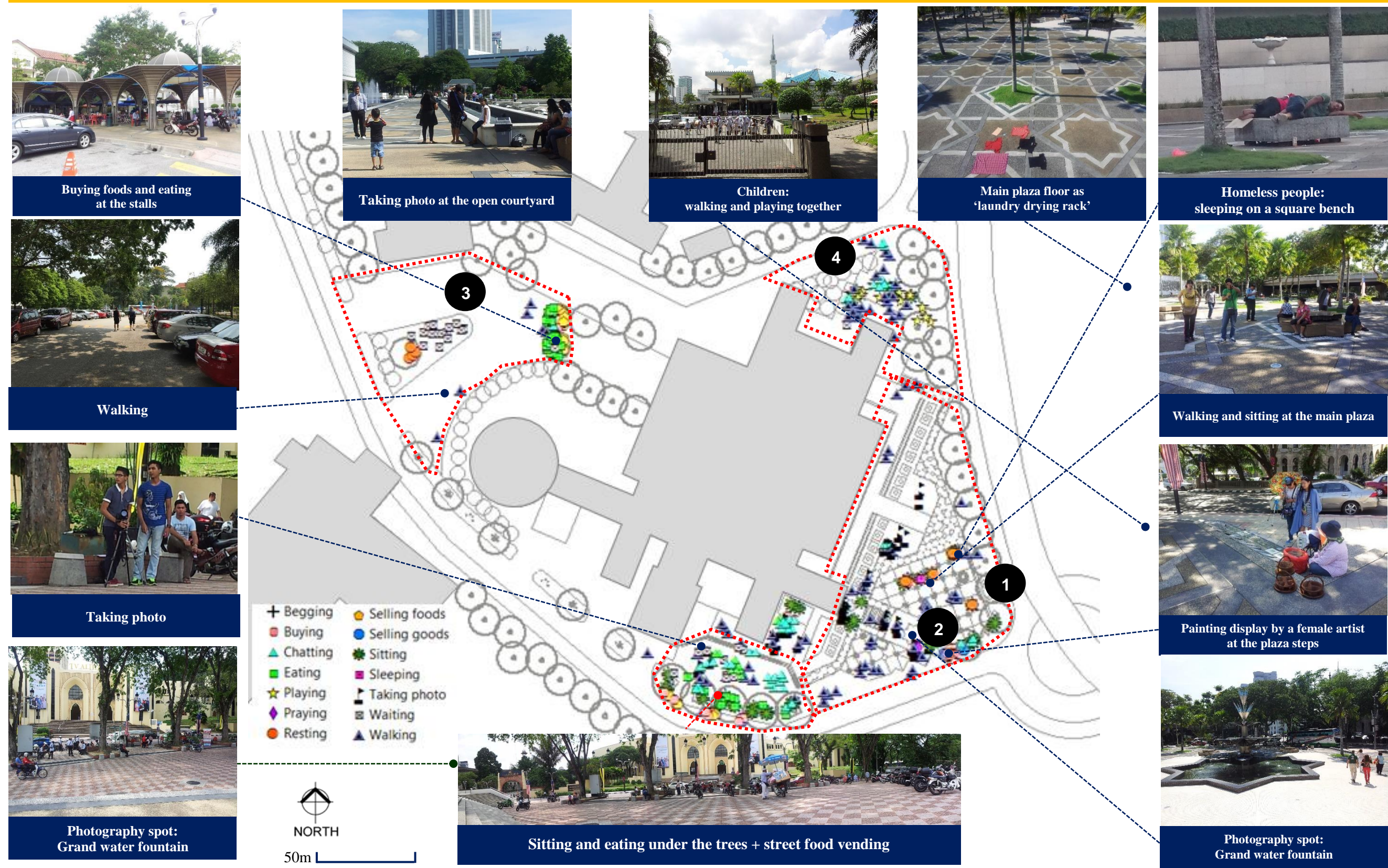
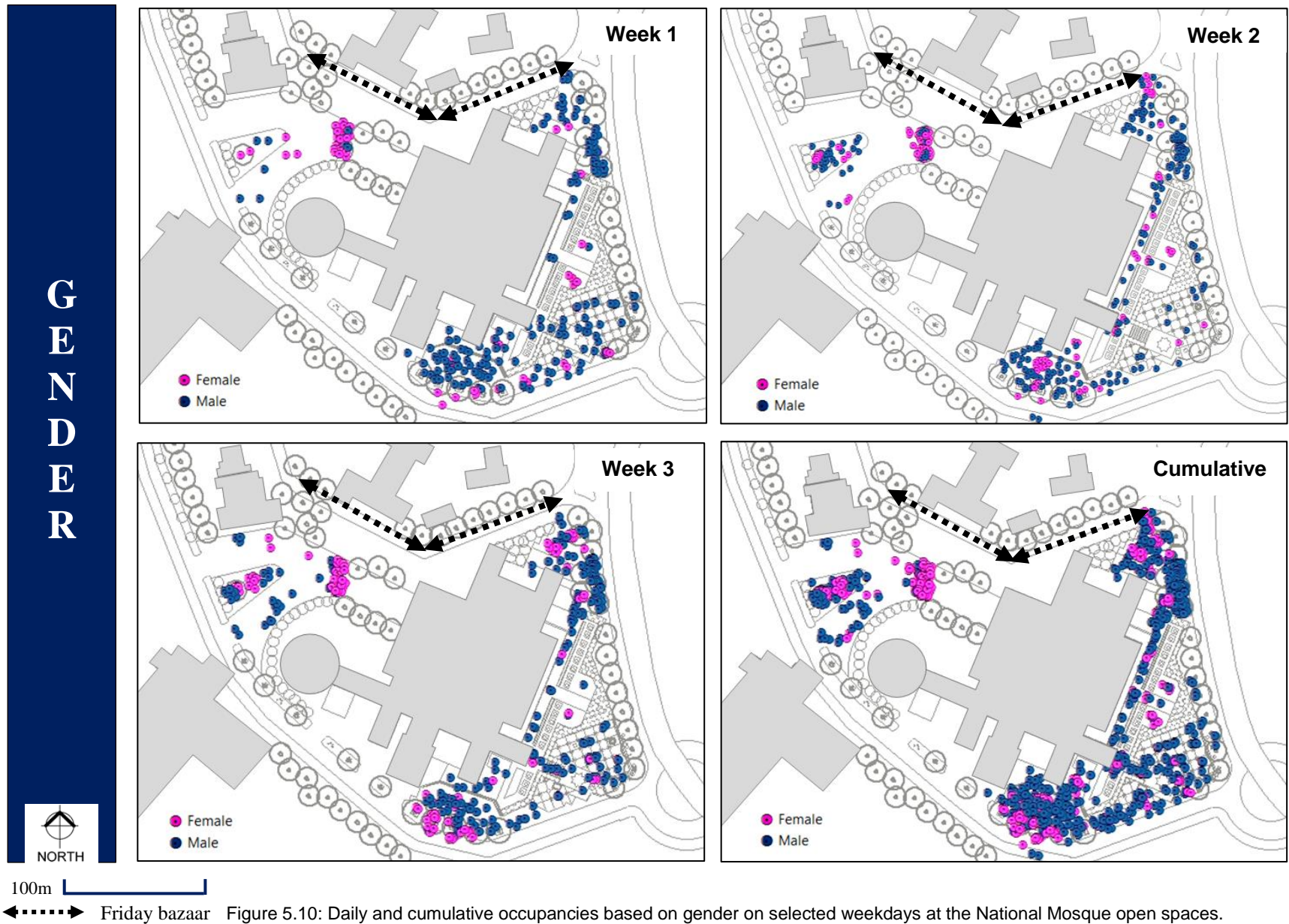


Figure 5.9: Activities occurred around Spaces 1, 2, 3 and 4 during selected weekdays at the National Mosque.

5.2.6 Fridays: Gender

Figure 5.10 shows the patterns of behavioural occupancies on Fridays at the National Mosque open spaces based on the gender attribute. Overall, it can be seen that all spaces were intensely used by both male and female users. However, the patterns of male and female usage were found to be very different from those seen on the selected weekdays. Details of gender presence on Fridays at the open spaces of the National Mosque:

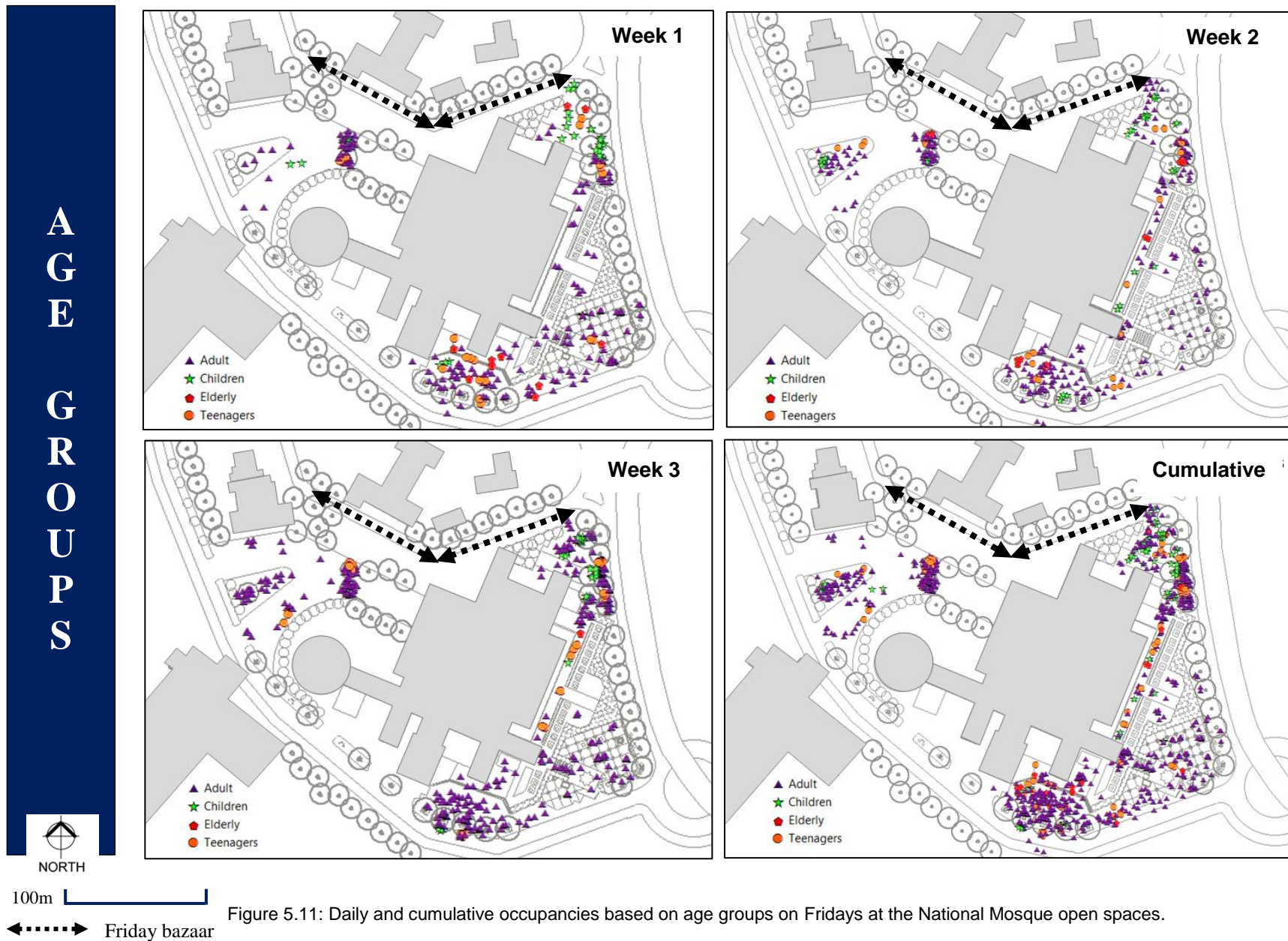
- **Week one:** Male users were largely found to occupy Spaces 1, 2 and 4, but not so much Space 3. Several female users were observed around the main plaza (Space 1) and at the shaded seating area (Space 2), with very few seen in Space 4.
- **Week two:** During this week, the frequency of male users was higher than that of female users in Spaces 1, 2 and 4. There were few female users (individually and in groups) seen occupying Spaces 1 (main plaza and open courtyard), 2 and 4, but more female users were spotted at the food stalls area in Space 3.
- **Week three:** In Spaces 1, 2 and 4, it can be seen that more male than female users occupied the space, in contrast to Space 3, where the numbers of female users were higher than males. This is relatively similar to the patterns of gender presence seen in week two. Nevertheless, it can be seen that in this week, more females appeared at the shaded seating area in Space 2 as compared to the preceding weeks.
- **Cumulative occupancies:** Collectively, male users were found to be the major users in Spaces 1, 2 and 4. Although there were female users present at these three spaces, their presence was highly concentrated in Space 3, especially at the food stalls area.



5.2.7 Fridays: Age groups

Figure 5.11 depicts the patterns of behavioural occupancies on Fridays at the National Mosque open spaces based on the age group attribute. It is evident that diverse users from various age groups utilised the studied spaces. Following are details of the users' occupancy patterns based on age groups during Fridays at the National Mosque:

- **Week one:** Adults occupied Spaces 1, 2 and 3 the most. Despite this, a high number teenagers were present in Space 2. On the other hand, Space 4 was mostly dominated by children as compared to other age groups.
- **Week two:** The frequency of adults was higher than other groups in all spaces. Furthermore, it can be noticed that a group of children appeared in Space 2, two groups in Space 3 and five groups in Space 4. Even though the frequency of the elderly was lowest as compared to that of other groups, they were still found in Spaces 2, 3 (food stalls area) and 4 (temporary food stalls).
- **Week three:** Similarly to week two, more adults were seen at all spaces as compared to other age groups. Additionally, more children appeared in Space 4, while some teenagers were present at the food stalls in Space 3 as well as at the makeshift food stalls in Space 4.
- **Cumulative occupancies:** Cumulatively, adults were the predominant users of all spaces, throughout the observed Fridays. A few children and teenagers were spotted in Space 3, nearby the large gazebo and at the food stalls area. There were large numbers of children found occupying Space 4. Very few elderly were present in all spaces.



5.2.8 Fridays: Ethnicities

Figure 5.11 displays the patterns of behavioural occupancies on Fridays at the National Mosque open spaces based on the ethnicities attribute. These were similar to the ethnicity patterns seen on the selected weekdays, whereby the intensity of multicultural use was higher in Spaces 1 and 2 compared to Spaces 3 and 4. Below are the details of the users' occupancies based on ethnic groups on Fridays at the open spaces of the National Mosque:

- **Week one:** It is obvious that Malays were the major users in all the spaces. In terms of other ethnic groups, it can be seen that Chinese, Indian and other ethnic groups were also present in Spaces 1, 2 and 4. Only one user of another ethnicity was found using Space 3.
- **Week two:** Malays predominated in all four spaces. A few groups of Chinese users were observed performing activities in Spaces 1 and 2, with a few Indian users also present at the open courtyards in Spaces 1 and 4 (makeshift food stalls). In addition, users from other backgrounds were identified in all spaces except for Space 4.
- **Week three:** Malay users were the major occupants in all spaces. Nevertheless, the occupancies of Spaces 1, 2 and 4 also included multi-ethnic users, including Indians, Chinese and users from other backgrounds.
- **Cumulative occupancies:** Overall, it can be seen that all spaces were largely occupied by Malays. Nonetheless, the presence of the multi-ethnic users particularly Chinese and users from other backgrounds were highly concentrated in Spaces 1 and 2. Very few of them were seen at the remaining two spaces.

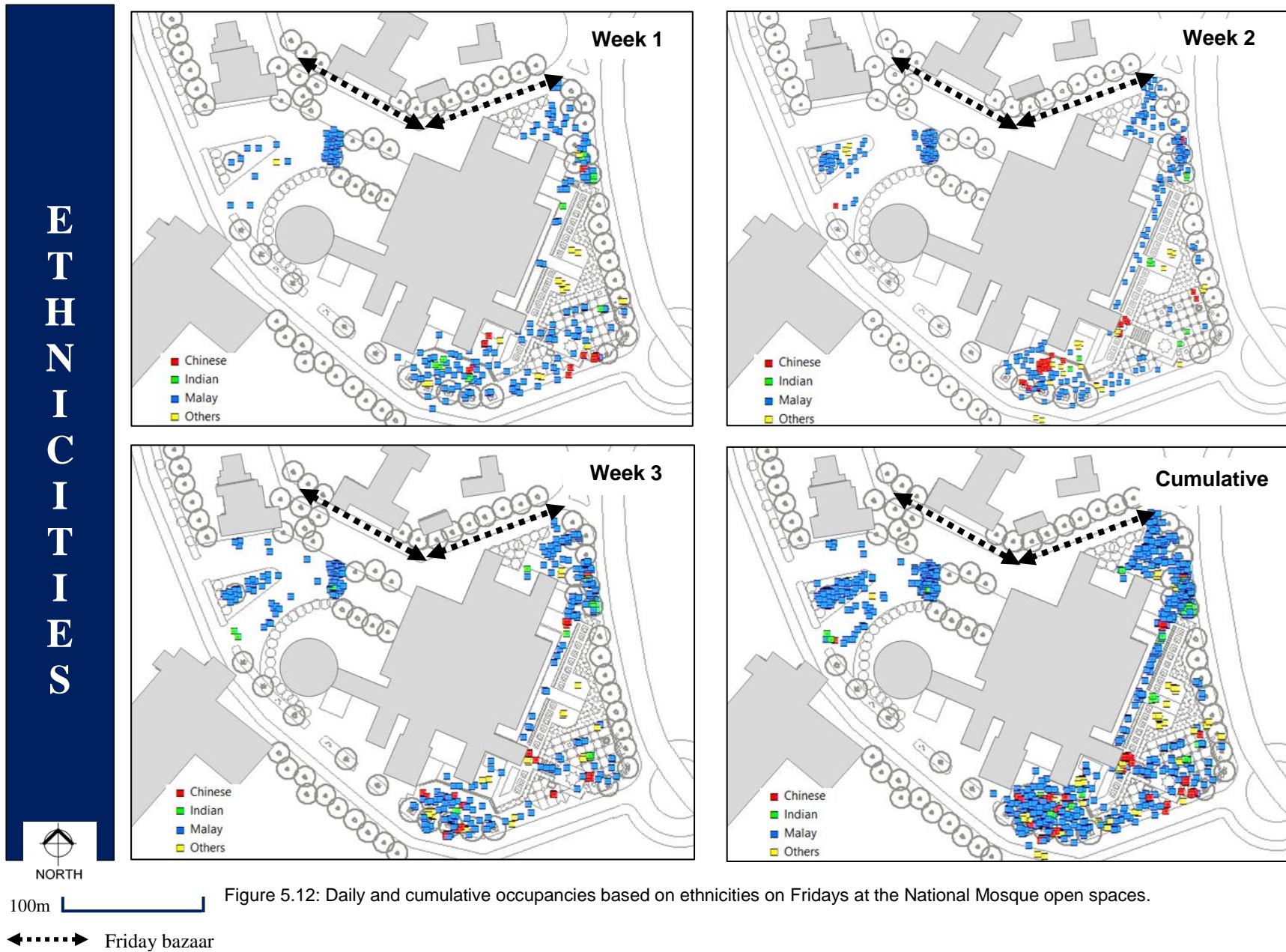


Figure 5.12: Daily and cumulative occupancies based on ethnicities on Fridays at the National Mosque open spaces.

5.2.9 Fridays: Activities

Figure 5.13 shows the patterns of activities that took place at the National Mosque open spaces during Fridays. Different activities took place on the selected weekdays and Fridays. Below are details of the activities undertaken on Fridays at the open spaces of the National Mosque:

- **Week one:** On this particular Friday, it can be seen that walking was the most frequent activity taking place within all the spaces. In Space 1, the open courtyard was users' favourite location for photography. In contrast, three users were found sleeping at the main plaza in the morning (two users were sleeping on the concrete benches while another was on the floor near to the staircase). Interestingly, besides the female artist who regularly utilised the main plaza for her art and painting display, several vendors selling food and beverages were also spotted in Space 1, both before and after Friday prayers (from noon until early afternoon). In addition, some users were observed sitting, chatting and resting at the main plaza. In Space 2, a few users were found sitting on the steps. Some were waiting for prayer time and conversing. Furthermore, the seating area under the shady trees was occupied by users for activities including eating, sitting and chatting. Three street food vendors were there from the morning until the late afternoon. Similarly, during weekdays, most users in Space 3 were found enjoying their meals, especially during lunchtime at the food stalls. However, during this particular Friday, most of the users encountered were female. With regard to the occupancy of Space 4, most users were walking either to or from the mosque. Children were seen walking towards the bazaar while others played under the trees. Surprisingly, a makeshift food stall with tables and chairs was set up under the trees in Space 4, for users to enjoy their lunch before and after Friday prayer. Some adults, teenagers and children were seen eating and also queuing up to buy food. It was noticeable during prayer time that the food stall was temporarily closed to allow Muslim users and vendors to pray.
- **Week two:** Similar to the previous week, most of the users were seen passing by and walking through the interconnected spaces (Spaces 1, 2 and 4). Some

male users were seen waiting around Spaces 1 and 2 for Friday prayers to begin. An Indian male was spotted sitting and begging for money from passers-by at the main plaza. A few groups of Indian and foreign tourists were taking photos at the open courtyard area. A group of female Chinese tourists who had just completed a visit to the National Mosque were spotted chatting with each other in Space 2 while waiting for their tour guide. As usual, some users were found at the seating area under the trees eating food and snacks they had bought from the regular street food vendors. This was also similar to the regular occupancy in Space 3, where most of the users preferred to eat at the food stalls. In addition, users were also spotted eating and resting at the large gazebo. Some users were standing and waiting in front of the gazebo, including a group of foreign tourists. In terms of the use of Space 4, a large group of male users was spotted under the trees enjoying the food they had bought from the makeshift food stalls. Moreover, some users were walking towards the Friday bazaar area.

- **Week three:** In terms of activities performed by the users, it can be presumed that the activities carried out in the final week and in the week preceding it would be relatively similar. Evidently, the activities carried out most frequently at all spaces were walking, eating, chatting and waiting. Some of the users were sitting and resting at the benches while one user was seen begging for money in Space 1. As for Space 2, people were enjoying their food and snacks under the trees. Besides, male users were waiting for Friday prayer time to commence, with some standing and chatting with each other. In Space 3, users were having their lunch at the food stalls before and after Friday prayer. At the gazebo, some users were eating, while many users were simply waiting and chatting. A similar situation scene was recorded in Space 4, where users were having lunch before and after Friday prayer. In contrast, others were seen heading towards the nearby bazaar.

ACTIVITIES



100m

◄.....► Friday bazaar

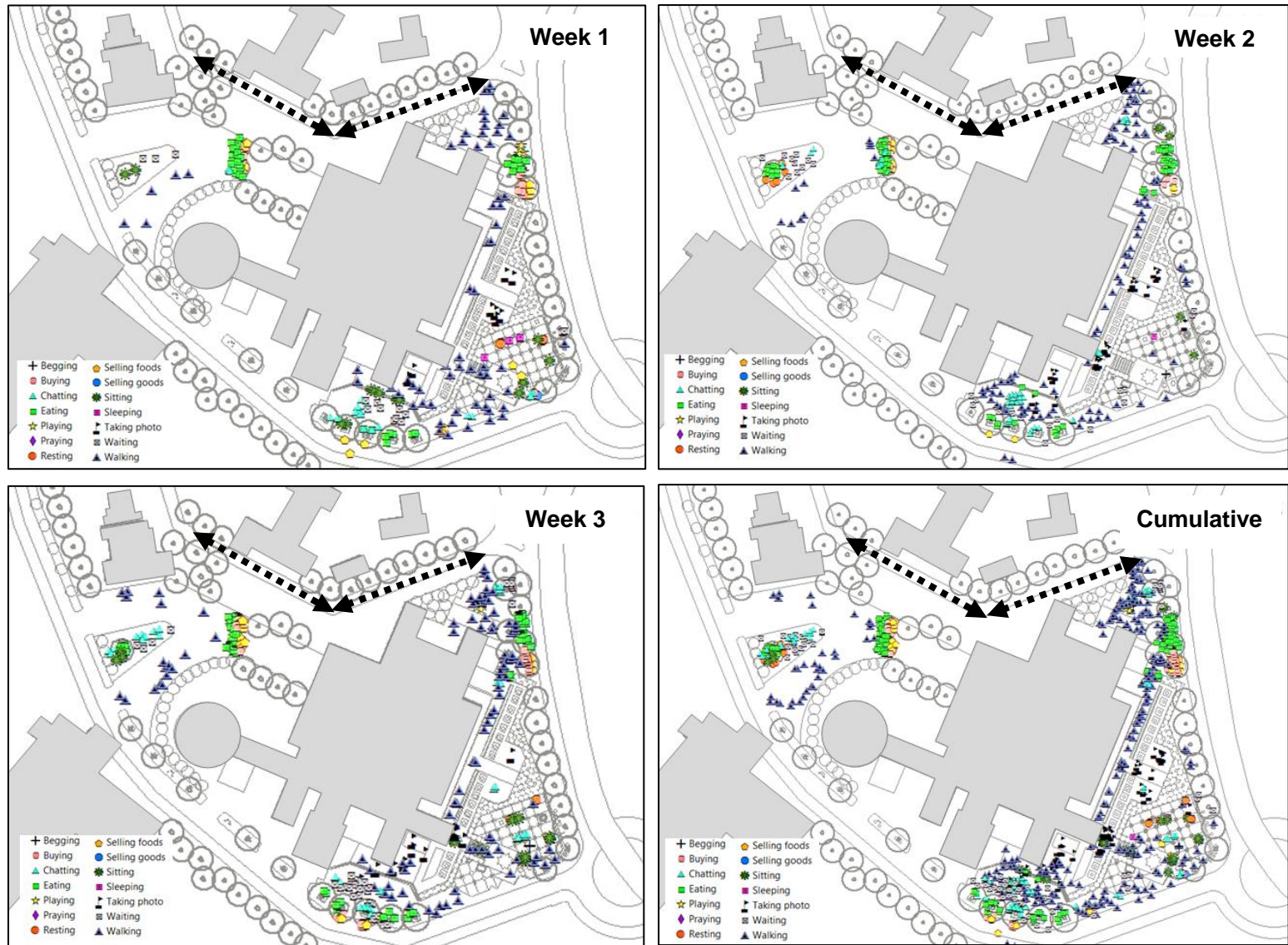


Figure 5.13: Daily and cumulative occupancies based on activities on Fridays at the National Mosque open spaces.

Figure 5.14 shows the patterns of behavioural occupancies on selected weekends at the National Mosque open spaces based on the gender attribute. Overall, it can be seen that all spaces were utilised by both male and female users. Details of gender presence on selected weekends at the open spaces of the National Mosque:

- **Week one:** Female users were largely found to occupy Spaces 1, 2 and 3, whereas the frequency of male users was higher in Space 4.
- **Week two:** In this particular week, spatial distribution of male and female users was fairly balanced in all spaces. In Space 3 (food stalls area), more males were found to present at the space.
- **Week three:** During this week, the numbers of male users were higher than female users in Spaces 1 and 4, while Space 2 was predominantly used by the females.
- **Cumulative occupancies:** Collectively, the presence of male and female users during selected weekends was relatively proportional in Spaces 1, 2 and 3. In contrast, Space 4 was immensely occupied by the males.

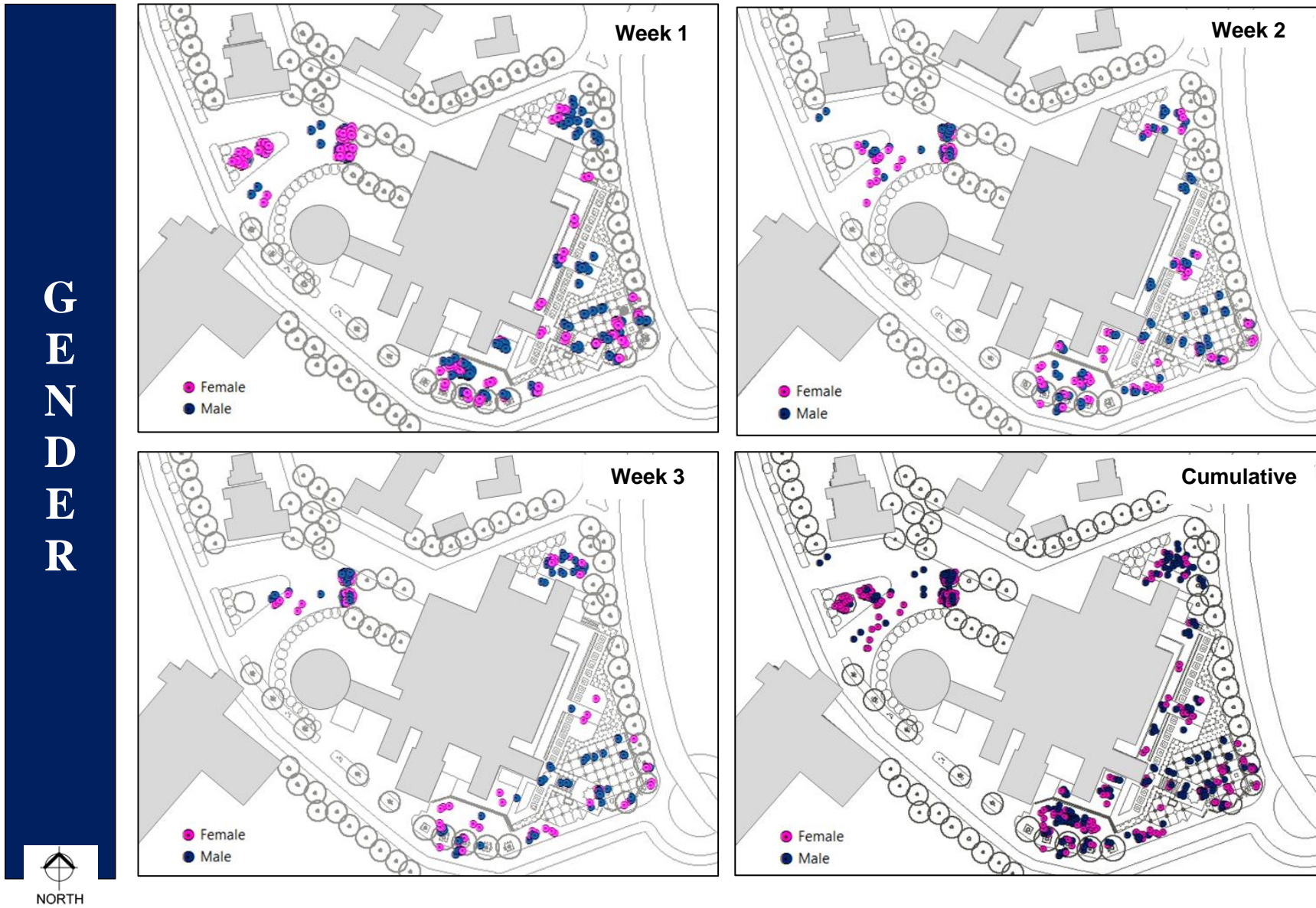


Figure 5.14: Daily and cumulative occupancies based on gender on selected weekends at the National Mosque open spaces.

5.2.10 Selected weekends: Age groups

Figure 5.15 depicts the patterns of behavioural occupancies on selected weekends at the National Mosque open spaces based on the age group attribute. It is obvious that various users from different age groups utilised the studied spaces. Following are details of the users' occupancy patterns based on age groups during selected weekends at the National Mosque:

- **Week one:** Adults were found to be present in Spaces 1, 2 and 4 the most. A few groups of children occupied Spaces 2 and 3 (in front of the large gazebo). On the other hand, very few teenagers were present in Spaces 1, 3 and 4.
- **Week two:**
 - The frequency of adults was higher than other groups in all spaces. Furthermore, it can be noticed that a group of children appeared in Space 2, two groups in Space 3 and five groups in Space 4. Even though the frequency of the elderly was lowest as compared to that of other groups, they were still found in Spaces 2, 3 (food stalls area) and 4 (temporary food stalls).
- **Week three:** Similarly to week two, more adults were seen at all spaces as compared to other age groups. Additionally, more children appeared in Space 4, while some teenagers were present at the food stalls in Space 3 as well as at the makeshift food stalls in Space 4.

Cumulative occupancies: Cumulatively, adults were the predominant users of all spaces, throughout the observed Fridays. A few children and teenagers were spotted in Space 3, nearby the large gazebo and at the food stalls area. There were large numbers of children found occupying Space 4. Very few elderly were present in all spaces.

AGE GROUPS



NORTH

100m

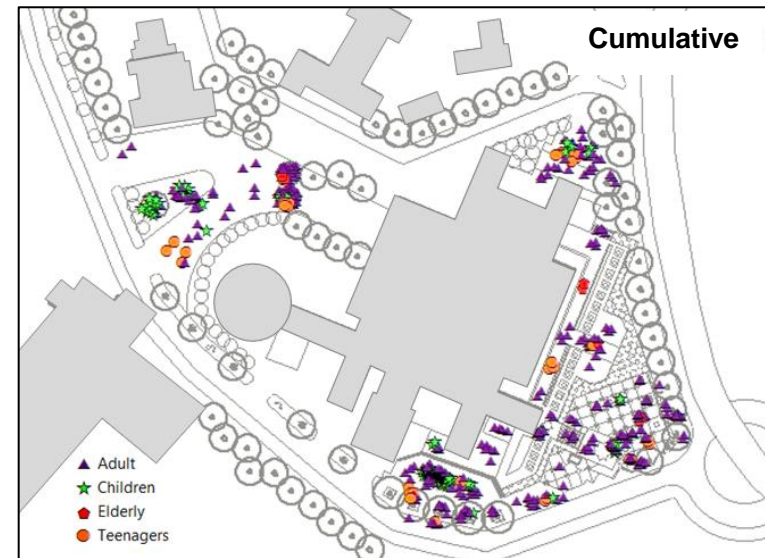
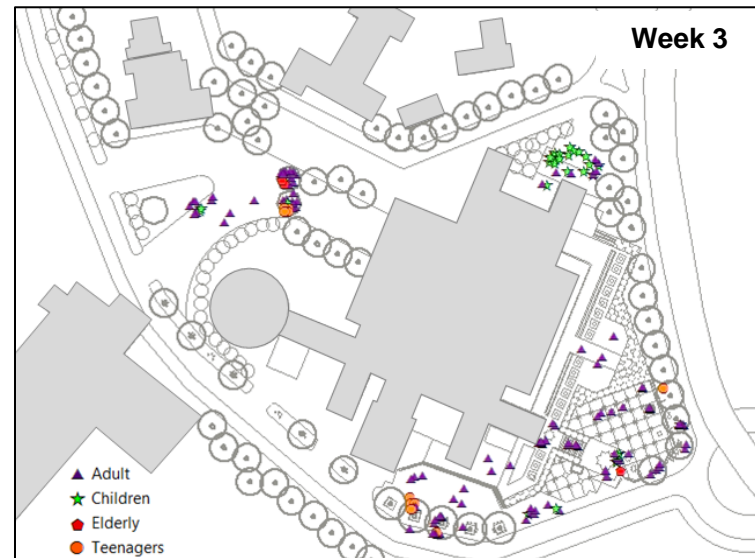
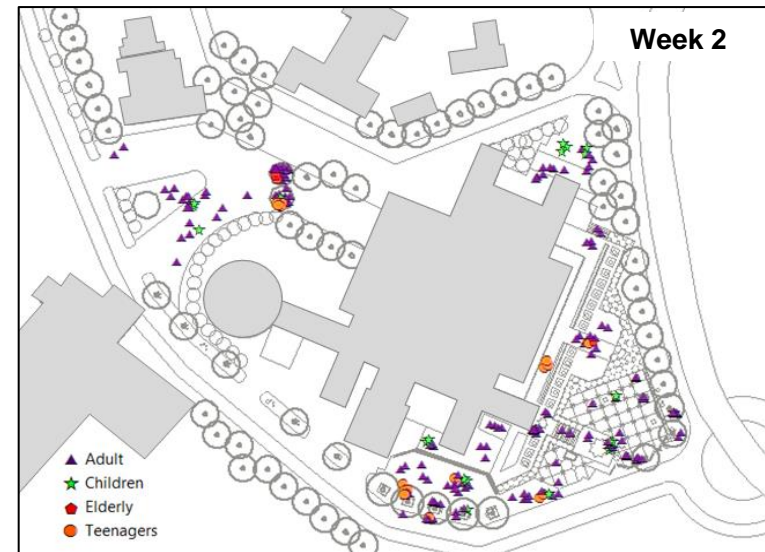
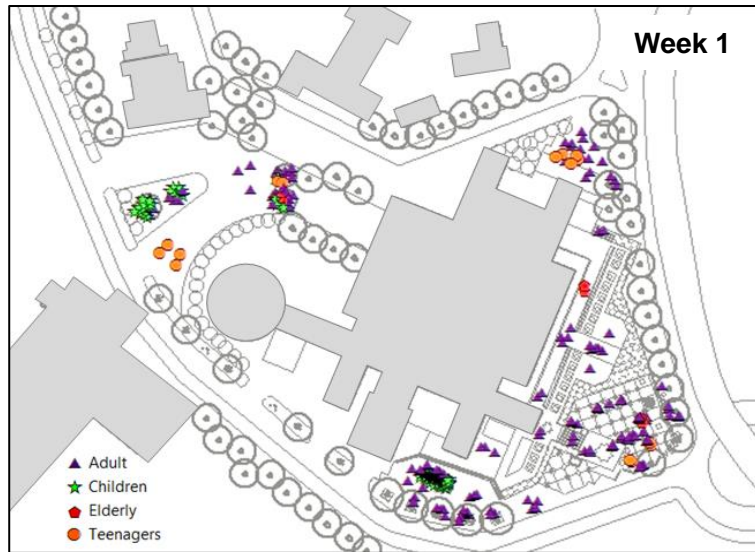


Figure 5.15: Daily and cumulative occupancies based on age groups on selected weekends at the National Mosque open spaces.

5.2.11 Selected weekends: Ethnicities

Figure 5.16 shows the patterns of behavioural occupancies on selected weekends at the National Mosque open spaces based on the ethnicities attribute. All spaces were utilised by multi-ethnic users but there was a greater intensity of use observed in Spaces 1 and 2 compared to the other two spaces. Details of the users' occupancies based on ethnic groups on the selected weekends at the open spaces of the National Mosque are presented below:

- **Week one:** Spaces 1 and 2 were occupied by multi-ethnic users mainly Chinese users and users from other backgrounds, in contrast to Spaces 3 and 4. Spaces 3 and 4 were mostly occupied by Malay users, while few Chinese and foreign tourists were observed there, at the food stall area (Space 3) as well as, two foreign users were spotted in Space 4.
- **Week two:** It was different for this week. Malays were the predominant users of all spaces, especially Spaces 1 and 2. There were more foreign tourists present at both spaces, together with few Chinese and Indian users.
- **Week three:** Spaces 1 and 2 appeared to comprise of multi-ethnic groups. It was discernible that most of the Chinese users and users from other backgrounds performed their activities as part of these groups. On the other hand, according to the maps, it was evident that only Malay users were seen at the food stalls in Spaces 3 and 4.
- **Cumulative occupancies:** Overall, it can be seen that Spaces 1 and 2 were highly occupied by multi-ethnic users in comparison to Spaces 3 and 4, the latter being largely dominated by Malay users.

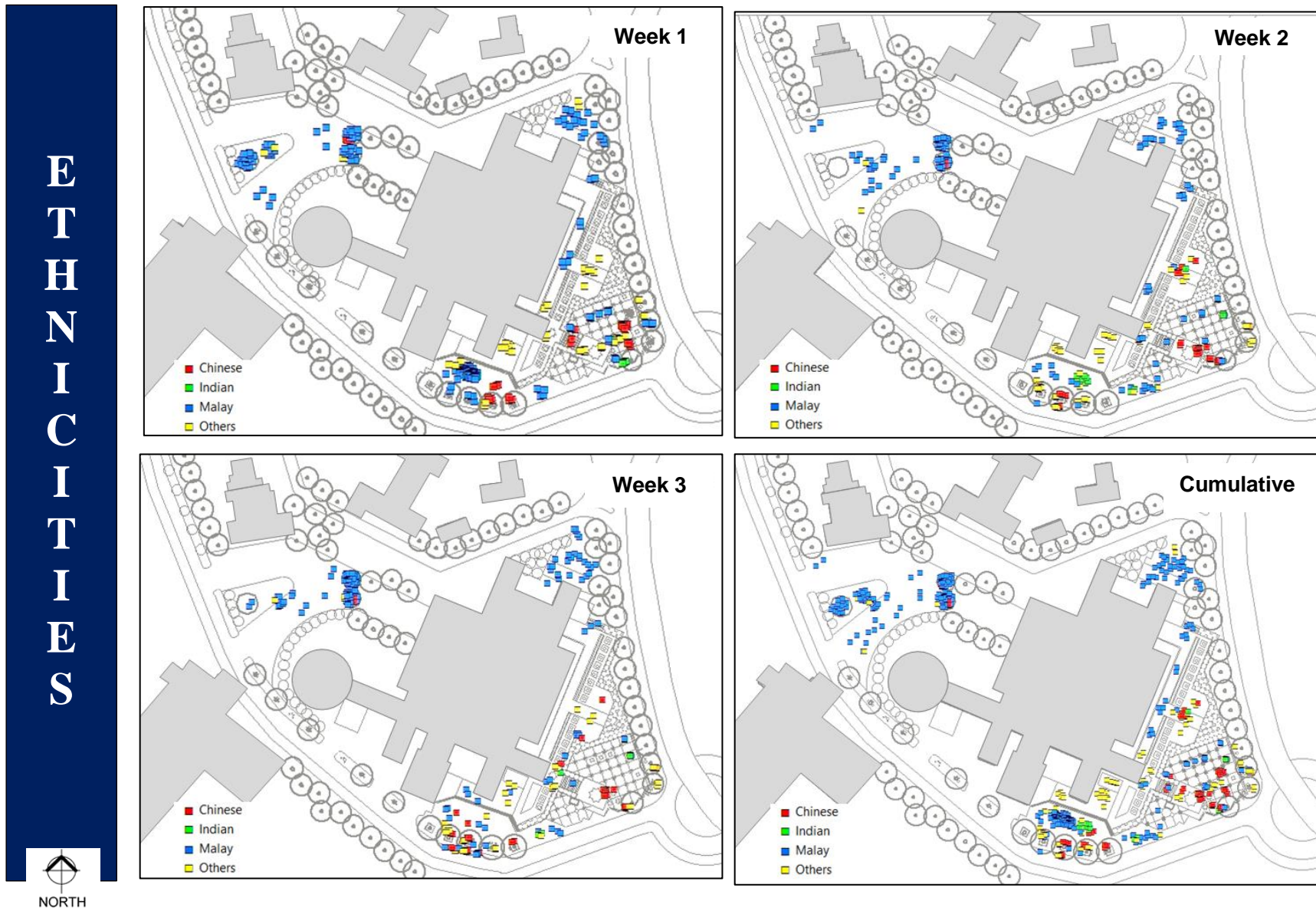


Figure 5.16: Daily and cumulative occupancies based on ethnicities on selected weekends at the National Mosque open spaces.

5.2.12 Selected weekends: Activities

Figure 5.17 shows the patterns of activities taking place at the National Mosque open spaces for the selected weekends. It can be seen that users were widely using Spaces 1, 2 and 4, but that occupancy in Space 3 was more focused in certain areas within the space (e.g. at the food stalls and the large gazebo). Below are the details of the activities taking place on the selected weekends at the open spaces of the National Mosque:

- **Week one:** On the selected day, activities such as walking, sitting, eating, , chatting, playing, taking photos and sleeping were documented at all spaces. In Space 1, some users sat together on the concrete benches, conversing with each other, whereas there were homeless people found sleeping and resting at the main plaza. Besides, it was visible that some users preferred to utilise the seating area under the shady trees while others socialised and carried out activities around the main plaza. The main plaza was also perceived by some users as a photographic opportunity. In Space 2, most users preferred to sit and wait at the seating area under the shady trees while chatting with each other. In Space 3, most users went to the food stalls. Moreover, there were numbers of users found sitting under the large gazebo. There were also users seen standing and waiting within the open parking spaces in Space 4, while other users were walking and talking to each other.
- **Week two:** Similarly to the previous week, it was observed that the users enjoyed sitting, socialising, chatting and eating under the trees. This spot enabled interactions between multicultural users and the street food vendors. The occupancy of Space 3 was more focused on the food stalls area, where users queued up to purchase and enjoy their meals. Turning to the use of Space 1, this was used for several activities, such as taking photo, resting, walking and sitting. A group of users was found at the open courtyard taking photo of themselves with the background of the mosque. In Space 4, it was seen that some users walking into and out of the space.
- **Week three:** Few activities were performed by users in Space 1. Two users were observed resting, with a further one user sleeping at the main plaza.

Some were taking photos at the main plaza and the open courtyard. In Space 2, the activities performed by users included chatting, sitting, walking, eating, buying food and walking. Few users were eating, sitting and chatting under the trees. Food stalls were the major attraction in Space 3, as people assembled there to eat. In contrast, Space 4 was occupied by few users who were walking around.

- **Cumulative activities:** The most common activity noticed in all spaces was walking. Contrary to other spaces, the most fascinating activity that took place in Space 1 was homeless people sleeping at the main plaza. It can be seen that several spots in Space 1 (e.g. in front of the grand water fountain and open courtyard) have become preferred spots for users, especially tourists, to take individual or group photos. In the case of Space 2, the seating area under the shady trees was the most desired spot for users to perform activities such as eating, sitting and chatting. Also, it was observed that several food vendors would regularly park their trucks at the roadside near to the seating area, to sell food, snacks and beverages. Furthermore, this space also functioned as a waiting area. In Space 3, the food stalls were evidently the spots occupied most by the users. Meanwhile in Space 4, many passers-by entered and exited the space, making their way either to the mosque, to Spaces 1 and 2 or to other places adjacent to the mosque.

ACTIVITIES



NORTH

100m

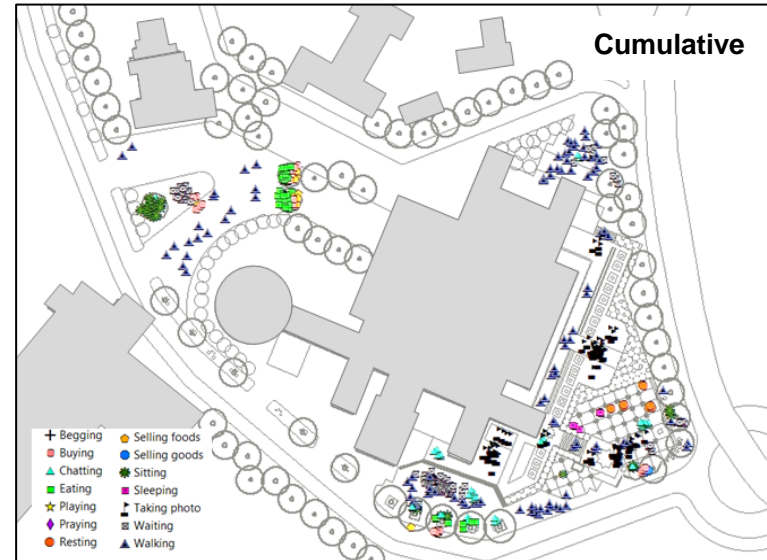
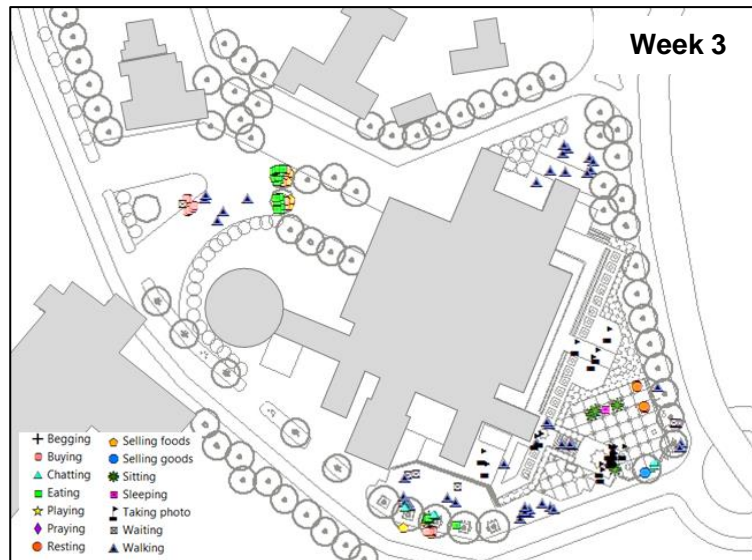
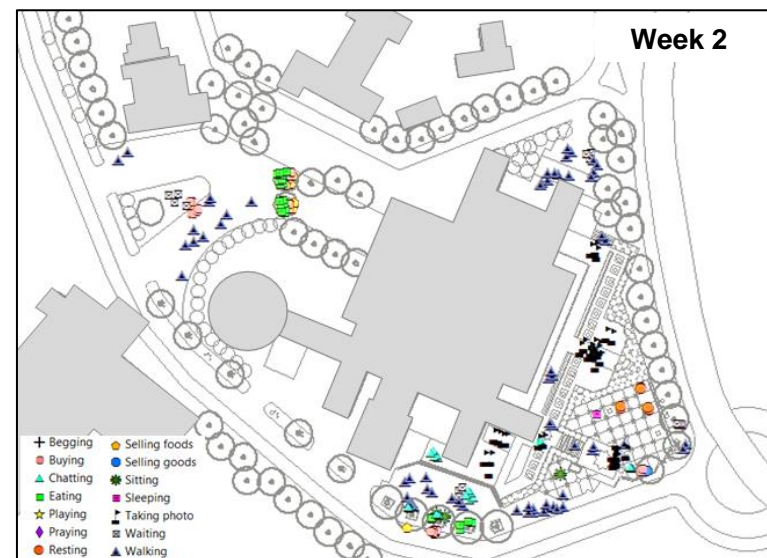
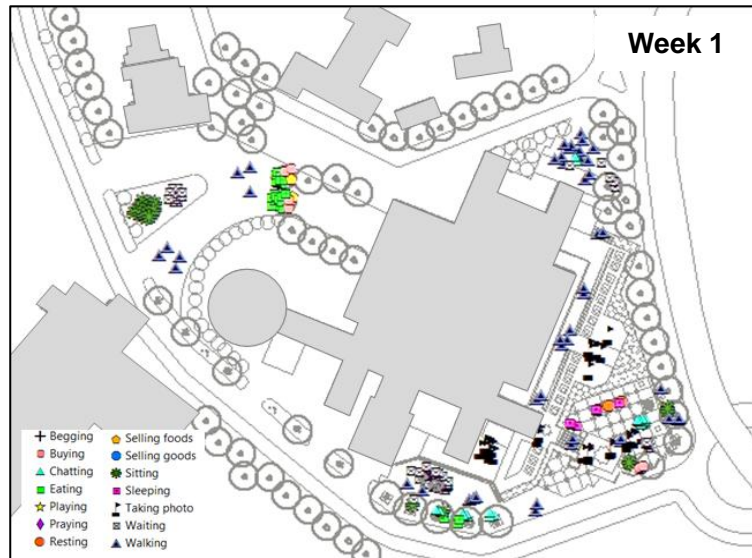


Figure 5.17: Daily and cumulative occupancies based on activities on selected weekends at the National Mosque open spaces.

5.2.13 Key findings from the whole observations at the National Mosque

Based on the whole observations conducted at the National Mosque open spaces, there are several key findings that can be highlighted according to the attributes of gender, age groups, ethnicities and activities. Figure 5.18 shows that there were more male users present than female across the weeks. However, both male and female users were observed to use the mosque open spaces more on Fridays in comparison to during weekdays and weekends. The frequencies with which both genders occupied the mosque open spaces during the selected weekdays and weekends were relatively similar to each other, with fewer than 300 users across the three-week observation time.

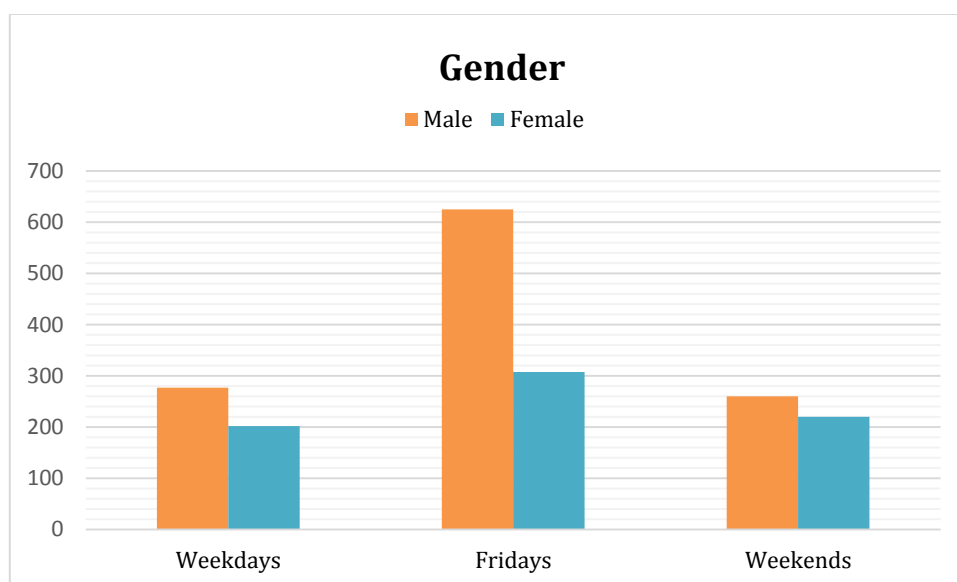


Figure 5.18: Gender attribute during selected weekdays, Fridays and selected weekends

With reference to the age groups attribute (see Figure 5.19), adults were the users most commonly seen at the National Mosque open spaces throughout the weeks as compared to children, teenagers and the elderly. Similarly to the gender attribute, Fridays marked the highest frequencies of adults, seen performing diverse activities at the mosque open spaces. During the observations, it was noticeable that this group included local residents and visitors, foreign tourists and government and private workers who work in offices near the National Mosque. This pattern was roughly equivalent to that of the teenage users, who were seen more frequently on Fridays, despite this being the age group with the second-lowest frequency of use of the

mosque open spaces. In the case of younger users, it was found that more children used the mosque open spaces during the weekends.

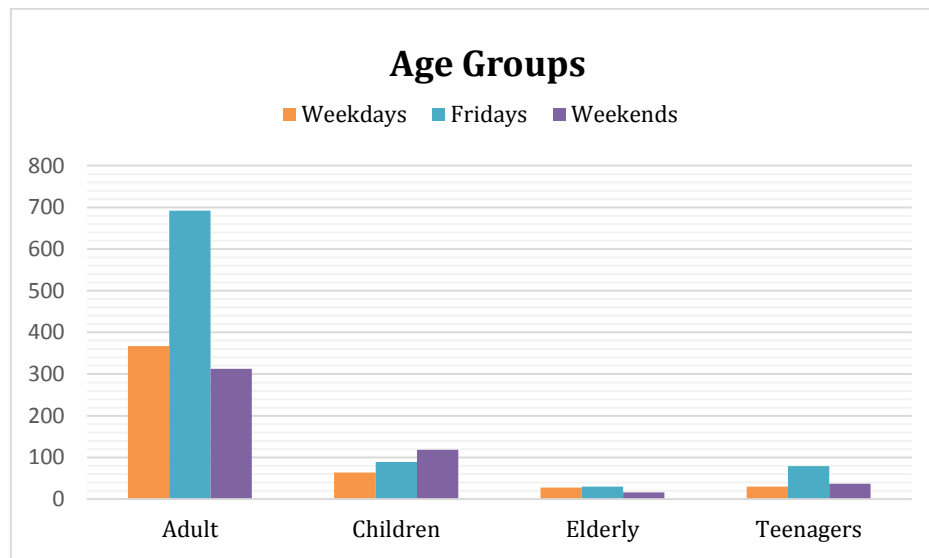


Figure 5.19: Age groups attribute during seleted weekdays, Fridays and selected weekends

In terms of ethnic backgrounds (see Figure 5.20), it is evident that Malays were the major users of the National Mosque open spaces throughout the weeks in question, particularly on Fridays. This was followed by Chinese users and users from other backgrounds. The latter includes foreign or international tourists from different social and cultural backgrounds. It was rare, however, through the entirety of the observation period, to see Indian users occupying the mosque open spaces.

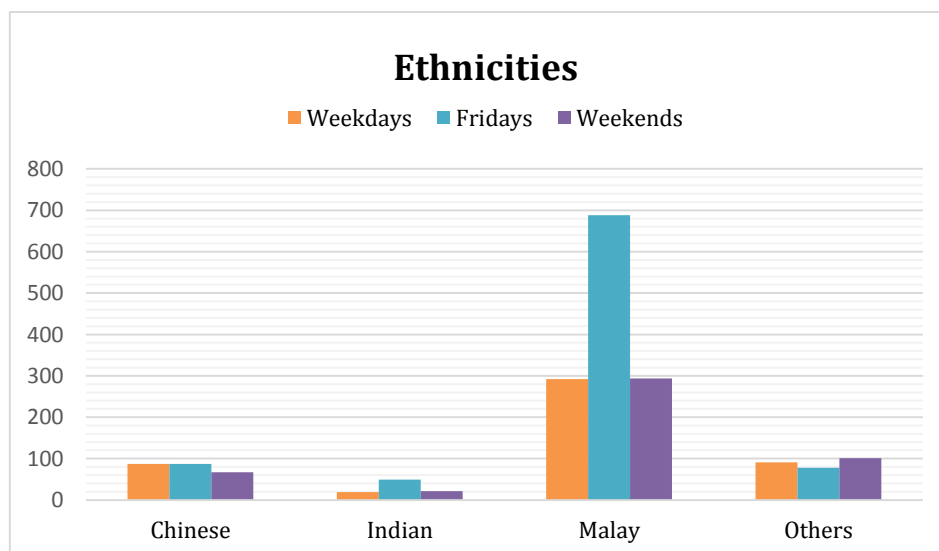


Figure 5.20: Ethnicities attribute during selected weekdays, Fridays and selected weekends

Of the 14 activities that were seen occurring around the National Mosque open spaces, walking, eating and chatting were the activities performed most frequently by users. Based on Figure 5.21 below, it is evident that these activities were frequently conducted on Fridays, followed by during weekdays. It was noticed that the National Mosque open spaces became a ‘desired route’ for passers-by, to connect them to various other spaces or places. Moreover, most users preferred to eat at the food stalls in Space 3, as well as under the shady trees in Space 2. On the other hand, activities like begging, praying, selling goods and sleeping were among the activities observed least frequently. A few beggars were spotted, however, mostly sitting at the main plaza, especially on Fridays, asking for donations from other users. Also, there was a female artist who regularly used Space 1 (main plaza) to display and sell her paintings to mosque visitors. It was also found that physical features such as concrete square benches and the gazebo provided at the main plaza served to attract homeless people, who would use them as places to sleep. In fact, it was interesting to observe that these homeless people did their laundry at the nearest toilets and dried their clothes on the floor of the main plaza.

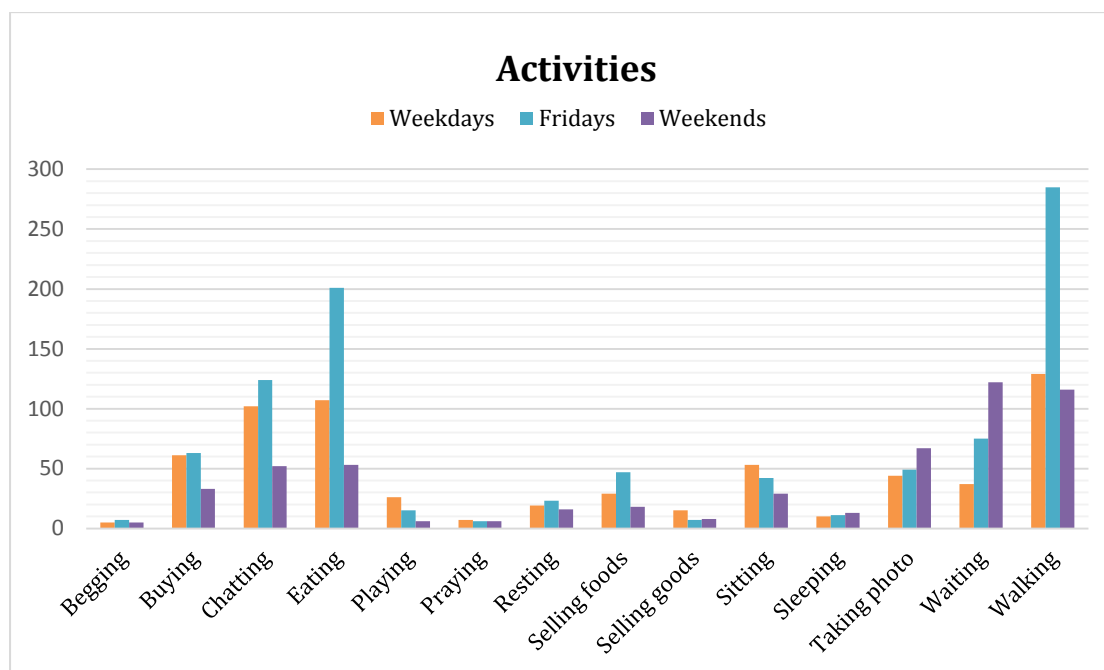


Figure 5.21: Activities attribute during selected weekdays, Fridays and selected weekends

5.3 Case Study 2: Abu Ubaidah Al-Jarah Mosque, Kuala Lumpur, Malaysia

5.3.1 Site and context appraisal

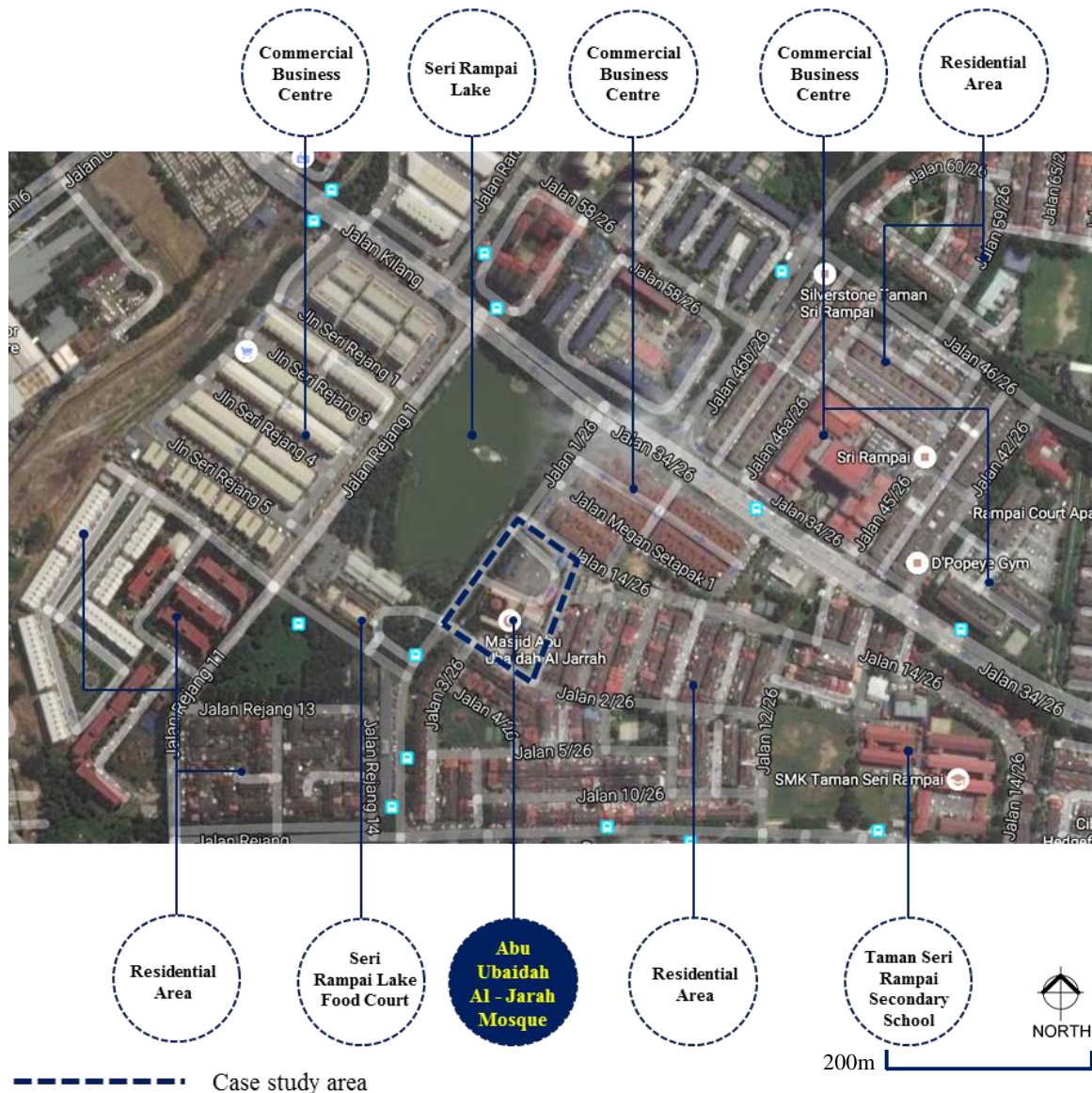


Figure 5.22: Macro site context – Abu Ubaidah Al-Jarah Mosque, Kuala Lumpur (aerial image source: Google Maps). The diagram above displays the location of the first case study area and its surrounding context and land uses.

Abu Ubaidah Al-Jarah Mosque is located in a multi-ethnic neighbourhood of Taman Seri Rampai, Kuala Lumpur. Based on Figure 5.22, it is evident that this mosque is surrounded by mixed development zones including residential, commercial and

educational zones. Across from the mosque, there is a lake called Seri Rampai Lake which has been a famous fishing spot for the nearby residents and also for fishing enthusiasts from different places in Kuala Lumpur. A commercial business centre named Megan Setapak comprises of various shop houses and shop lots, is located at the northeast side of the mosque. This mosque is also situated nearby an indoor market and a food court.



Figure 5.23: Surrounding context of Abu Ubaidah Al-Jarah Mosque

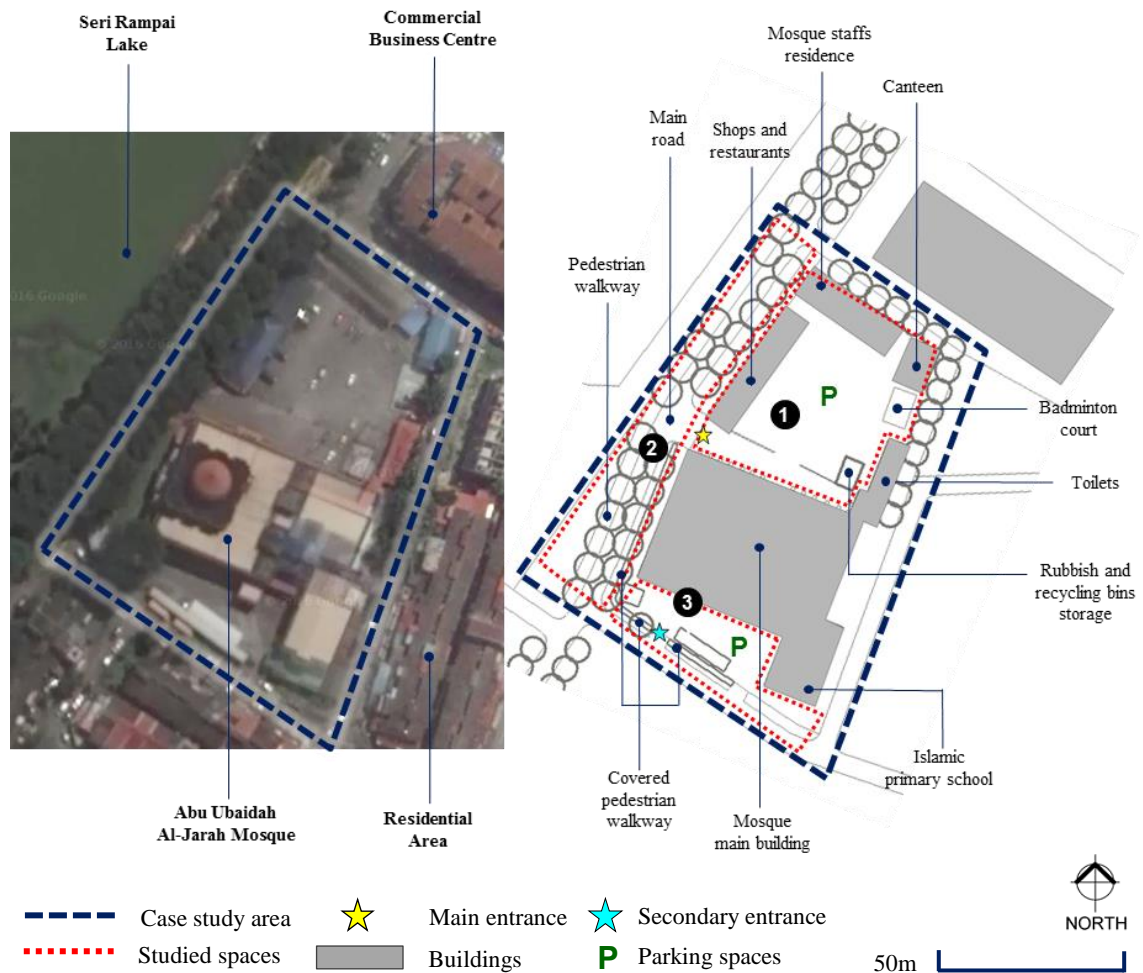


Figure 5.24: Micro site context – Abu Ubaidah Al-Jarah Mosque. Aerial image (left) shows the close-up view of the case study area (source: Google Maps). Base map (right) displays the existing physical features available around the mosque and the studied spaces. The numerical labels indicate the spaces studied during the systematic observation.





Figure 5.25: Images of the studied spaces at Abu Ubaidah Al-Jarah Mosque

In the micro context of Abu Ubaidah Al-Jarah Mosque, there were three spaces identified to be studied during the observations (refer to Figure 5.24 and 5.25). Space 1 is basically the main open space available for the mosque which comprises of parking spaces for the users and located adjacent to the mosque staffs residence as well as shop lots. Within this space, there are few facilities available such as a badminton court, a canteen as well toilets and ablution areas. Space 1 can be accessed through the main entrance of the mosque (as indicated by yellow star). Space 2 is the space located in front of the mosque – which mainly involve covered and uncovered pedestrian walkways along the roadsides. There are series of large canopy trees along planted along this space. On the other hand, Space 3 is located at the other side of the mosque building. This space can be accessed through secondary entrance (as indicated by blue star). There is a covered motorcycle parking space within this area and it is also located adjacent to an Islamic primary school which is attached to the mosque building. For the purpose of the observations, these spaces were observed on selected weekdays, Fridays and weekends. Therefore, the next section discussed the detailed findings obtained throughout systematic observations at Abu Ubaidah Al-Jarah Mosque on selected weekdays for three consecutive weeks in May 2014.

5.3.2 Selected weekdays: Gender

Figure 5.26 shows the patterns of behavioural occupancies on selected weekdays at Abu Ubaidah Al-Jarah Mosque open spaces based on gender attribute. With reference to the occupancy of the studied spaces, it can be seen that all of the spaces were accessed by both male and female users. It is very interesting to see how the spatial occupancy patterns of male and female users changed from week to week. Details on the presence of the different genders at Abu Ubaidah Al-Jarah Mosque open spaces on selected weekdays are given below.

- **Week one:** Very few of female users were present at all spaces as compared to male users. The frequency of male users was higher in Space 1 as compared to two other spaces.
- **Week two:** The frequency of both genders was decreased in this week. However, male users were hugely occupied all spaces especially Space 1.
- **Week three:** It was quite different during this week, where the frequency of female users was increased as compared to the previous weeks. It can be said that during this week, spatial distribution of both genders was balanced. Space 1 was highly utilised by male users, while Space 3 was mostly occupied by female users.
- **Cumulative occupancies:** Cumulatively, throughout the selected weekdays, Space 1 and 2 were highly utilised by male users. However, in Space 3 the distribution of male and female users was in proportion.

GENDER

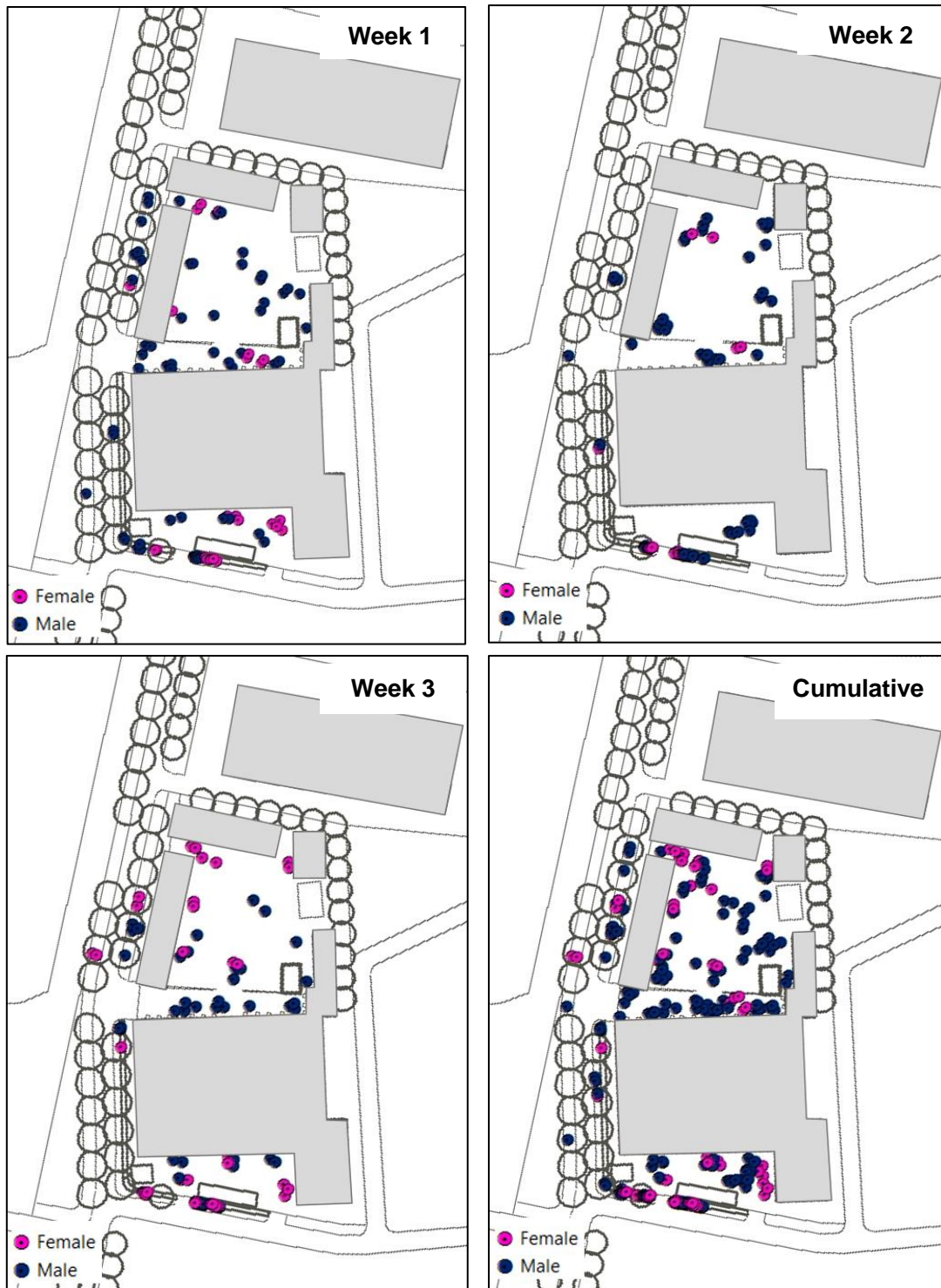


Figure 5.26: Daily and cumulative occupancies based on gender on selected weekdays at Abu Ubaidah Al-Jarah Mosque open spaces.

5.3.3 Selected weekdays: Age groups

Figure 5.27 shows the patterns of behavioural occupancies on selected weekdays at Abu Ubaidah Al-Jarah Mosque open spaces based on the age groups attribute. Overall, it can be seen that users from different age groups occupied all of the studied open spaces. Details of user occupancy based on age group for the selected weekdays at Abu Ubaidah Al-Jarah Mosque open spaces are given below:

- **Week one:** Spaces 1 and 2 were utilised highly by adults but very little by teenagers and the elderly. However, Space 3 was highly occupied by children.
- **Week two:** In this week, Space 1 was largely occupied by adults, but there were a group of elderly and children spotted at this space. Three teenagers were present in Space 2, while Space 4 was mostly occupied by children.
- **Week three:** Adults were observed in all the spaces. However, there were two elderly users in Space 2, a teenager in Space 3 and two groups of children seen in Space 4.
- **Cumulative occupancies:** Adults were the main users cumulatively at the open spaces of Abu Ubaidah Al-Jarah Mosque, especially for Spaces 1 and 2 throughout the observed weekdays. Space 3 was largely occupied by children. Very few teenagers and elderly were present in those spaces.

AGE GROUPS

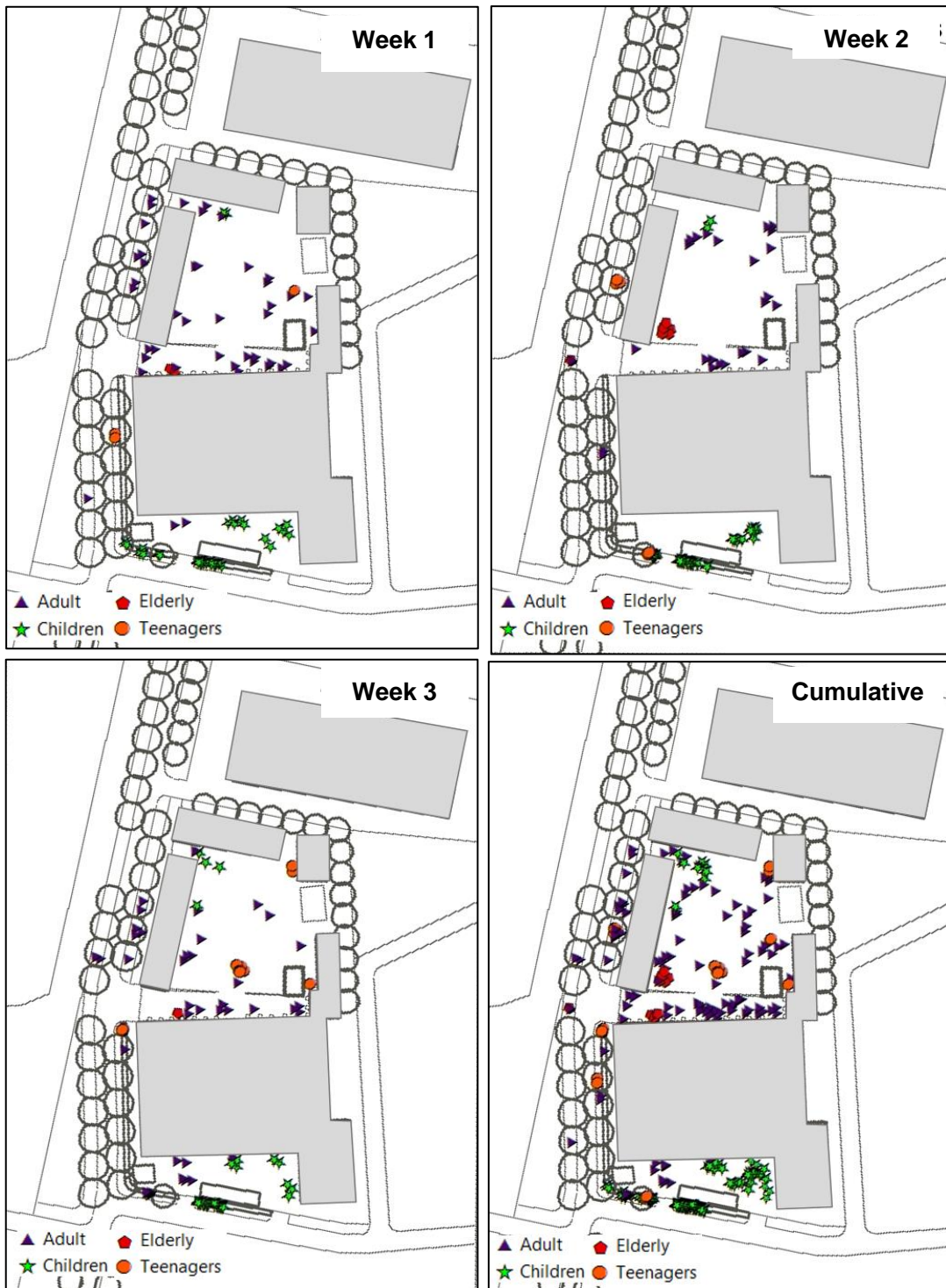


Figure 5.27: Daily and cumulative occupancies based on age groups on selected weekdays at Abu Ubaidah Al-Jarah Mosque open spaces.

5.3.4 Selected weekdays: Ethnicities

Figure 5.28 shows the patterns of behavioural occupancies on selected weekdays at the Abu Ubaidah Al-Jarah Mosque open spaces based on the ethnicities attribute. The presence of multi-ethnic users was very minimal at this mosque. Details of the users' occupancies based on ethnic groups on the selected weekdays at the open spaces of Abu Ubaidah Al-Jarah Mosque are presented below:

- **Week one:** All spaces were predominantly used by Malays except there were one Chinese user and a user from other backgrounds were present in Spaces 1 and 2.
- **Week two:** Similar to the previous week, Malays were the predominant users of all spaces. Only one Chinese user was spotted present in Space 2.
- **Week three:** Spaces 1 and 2 appeared to contain multi-ethnic groups. It was observable that three Indian users were present in Space 1, three users from other backgrounds were present in Space 2, and the rest were predominantly used by Malays.
- **Cumulative occupancies:** Overall, it can be seen that all open spaces of Abu Ubaidah Al-Jarah Mosque were frequently occupied by Malays. Only a few of Chinese, Indians and users from other backgrounds were seen in Spaces 1 and 2.

ETHNICITIES



Figure 5.28: Daily and cumulative occupancies based on ethnicities on selected weekdays at Abu Ubaidah Al-Jarah Mosque open spaces.

5.3.5 Selected weekdays: Activities

Figure 5.29 shows the patterns of activities that took place at Abu Ubaidah Al-Jarah Mosque open spaces during selected weekdays. There were few activities took place in all three spaces. Below are details of the activities undertaken on the selected weekdays at the open spaces of Abu Ubaidah Al-Jarah Mosque:

- **Week one:** There were four activities took place around all spaces in this week – walking, chatting, waiting and playing. Based on the observations, it was found that some of the users in Space 1 were conversing to each other in Space 1. Some other users were found standing and waiting in all spaces, but more were spotted in Space 3. A group of children were playing together in Space 3. Interestingly, the most frequent activity happened was walking. It can be said that all spaces can be regarded as transition space where they allowed user's access from one space to another.
- **Week two:** The patterns of activities during this week were slightly different from week one. The intensity of space use was lower in all spaces. Some users were walking from Space 2 to Space 1 together. Few users were seen walking together to the canteen and toilets, and two groups of users were talking with each other in Space 1. Interestingly, two street food vendors were found selling foods under the covered pedestrian walkway in Space 2. Whereas in Space 3, a group of children were seen playing together at the parking spaces, while there were few users waiting for buses along the covered pedestrian walkway.
- **Week three:** Similar to week two, the same activities took place during this week. In Space 1, three users were spotted standing and waiting in the middle of the space and in front of the canteen. Two groups of users were in conversations, while the rest were found walking in and out. A street food vendor opened a small snack booth under the covered walkway in Space 2. On the other hand, three kids played together in Space 3, whereas two other users chatted to each other. Four

users were walking together to the secondary entrance of the mosque. There were regular faces who were seen waiting under the covered walkway.

- **Cumulative occupancies:** Overall, there were not more than five activities took place in Abu Ubaidah Al-Jarah Mosque open spaces all over the weekdays. The most frequent activity happened in all spaces was walking. Most of the group conversations occurred in Space 1. Space 2 (covered pedestrian walkway) has attracted three street food vendors to run their businesses. Children were only spotted in Space 4, where it became their regular playing space. The covered walkway along Space 4 became the waiting area for certain users.

ACTIVITIES

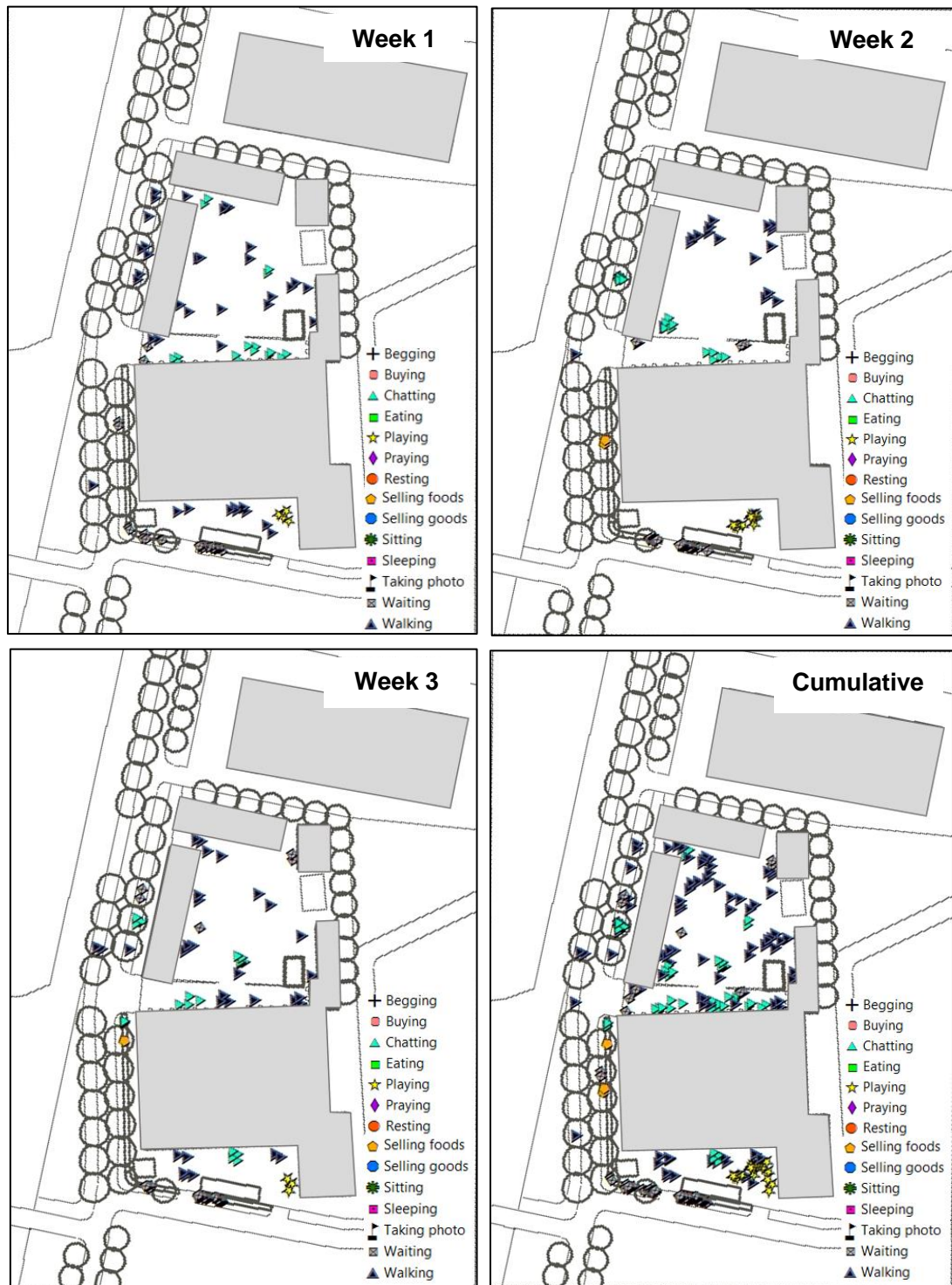


Figure 5.29: Daily and cumulative occupancies based on activities on selected weekdays at Abu Ubaidah Al-Jarah Mosque open spaces.

5.3.6 Fridays: Gender

Figure 5.30 shows the patterns of behavioural occupancies on Fridays at Abu Ubaidah Al-Jarah Mosque open spaces based on gender attribute. With reference to the occupancy of the studied spaces, it can be seen that all of the spaces were accessed by both male and female users. Details on the presence of the different genders at Abu Ubaidah Al-Jarah Mosque open spaces on Fridays are given below:

- **Week one:** There were more male users present in all spaces of Abu Ubaidah Al-Jarah Mosque during this week. However, spatial distribution of female users was higher in Space 2, along the Friday bazaar (at the roadside and under the covered walkway).
- **Week two:** Although the presence of male users was higher than female users in Space 1 during this week, the frequency of male users was lesser than the previous week. This week, the intensity of space use was more concentrated in Space 2 as compared to other spaces. More females were present in Spaces 2 and 3.
- **Week three:** Again, male users were the predominant occupants in all spaces during week three. Despite this, it can be seen that the numbers of female users occupying Space 1 were increased. It can be said that the spatial distribution of female users was relatively in proportion in all spaces.
- **Cumulative occupancies:** Based on the cumulative map, it can be seen that the distribution of male users was higher than female users in all spaces throughout Fridays. In Space 1, male users were mostly found near to the mosque building, while the patterns of the female users's occupancies in this space was scattered around the parking spaces.

GENDER

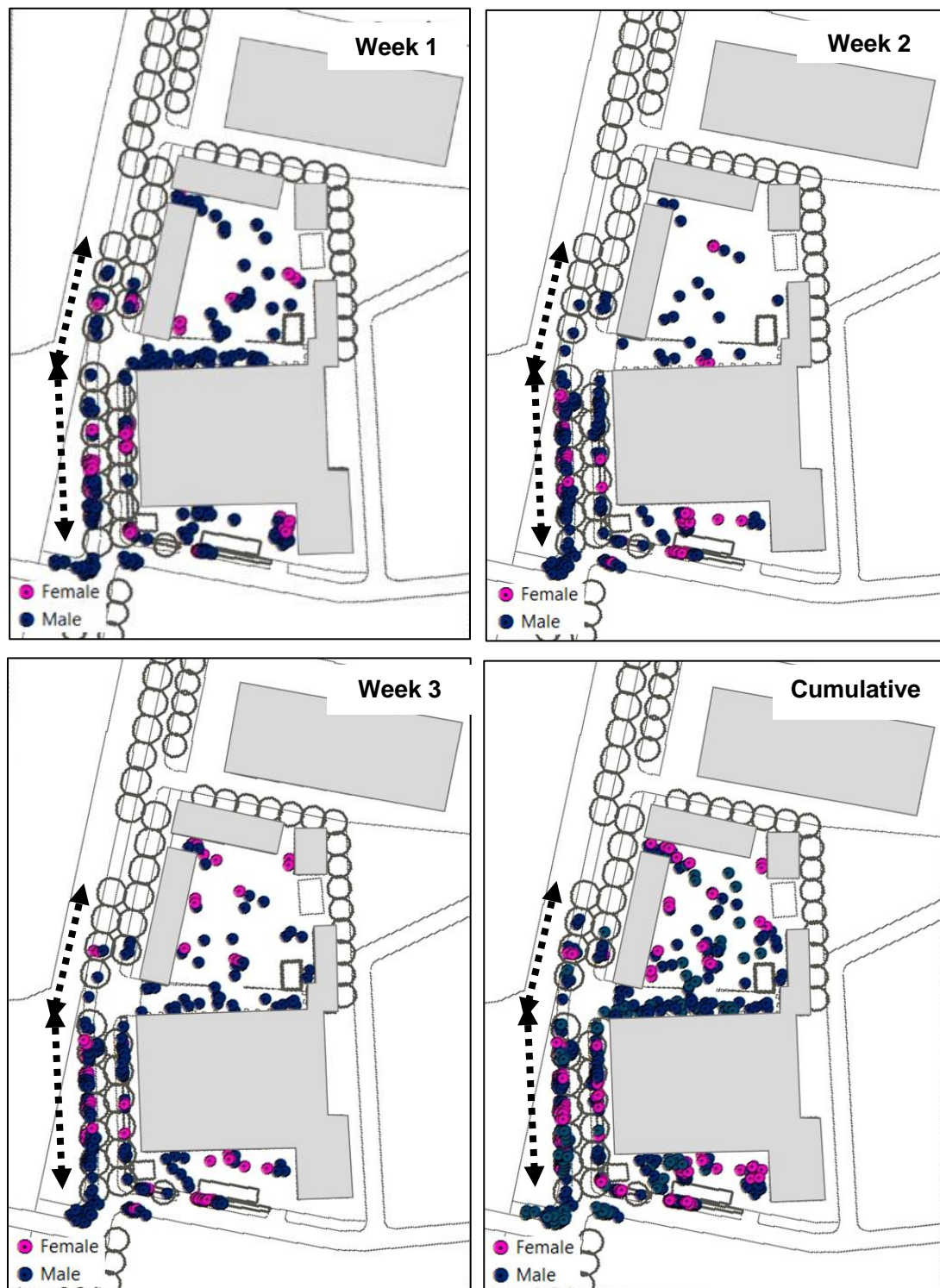


Figure 5.30: Daily and cumulative occupancies based on gender on Fridays at Abu Ubaidah Al-Jarah Mosque open spaces.

20m NORTH
 ←.....→ Friday bazaar

5.3.7 Fridays: Age groups

Figure 5.31 shows the patterns of behavioural occupancies on Fridays at Abu Ubaidah Al-Jarah Mosque open spaces based on the age groups attribute. Overall, it can be seen that users from different age groups occupied all of the studied open spaces. Details of user occupancy based on age group for the selected weekdays at Abu Ubaidah Al-Jarah Mosque open spaces are given below:

- **Week one:** Spaces 1 and 2 were utilised highly by adults with the presence of few teenagers and the elderly. Nevertheless, Space 3 was highly occupied by children.
- **Week two:** In this week, the frequency of adults was decreased in Space 1. Three teenagers and elderly was present at the same space. In the case of Space 2 (Friday bazaar), the identifiable age groups present in this space were adults and teenagers. On the other hand, Space 3 was proportionally utilised by children and adults.
- **Week three:** Adults were observed in all the spaces. The numbers of teenagers were slightly higher than in the previous weeks. Similar to week two, adults and teenagers were found present in Space 2 (Friday bazaar). The frequency of children and adults present in Space 3 was fairly equivalent.
- **Cumulative occupancies:** Adults were the main users cumulatively at the open spaces of Abu Ubaidah Al-Jarah Mosque, especially for Spaces 1 and 2. Teenagers were mostly spotted in Spaces 1 and 2. On Fridays, elderly was seen occupying Spaces 1 and 3, while most of the children present in Space 3 and a few of them found in Space 1.

AGE GROUPS

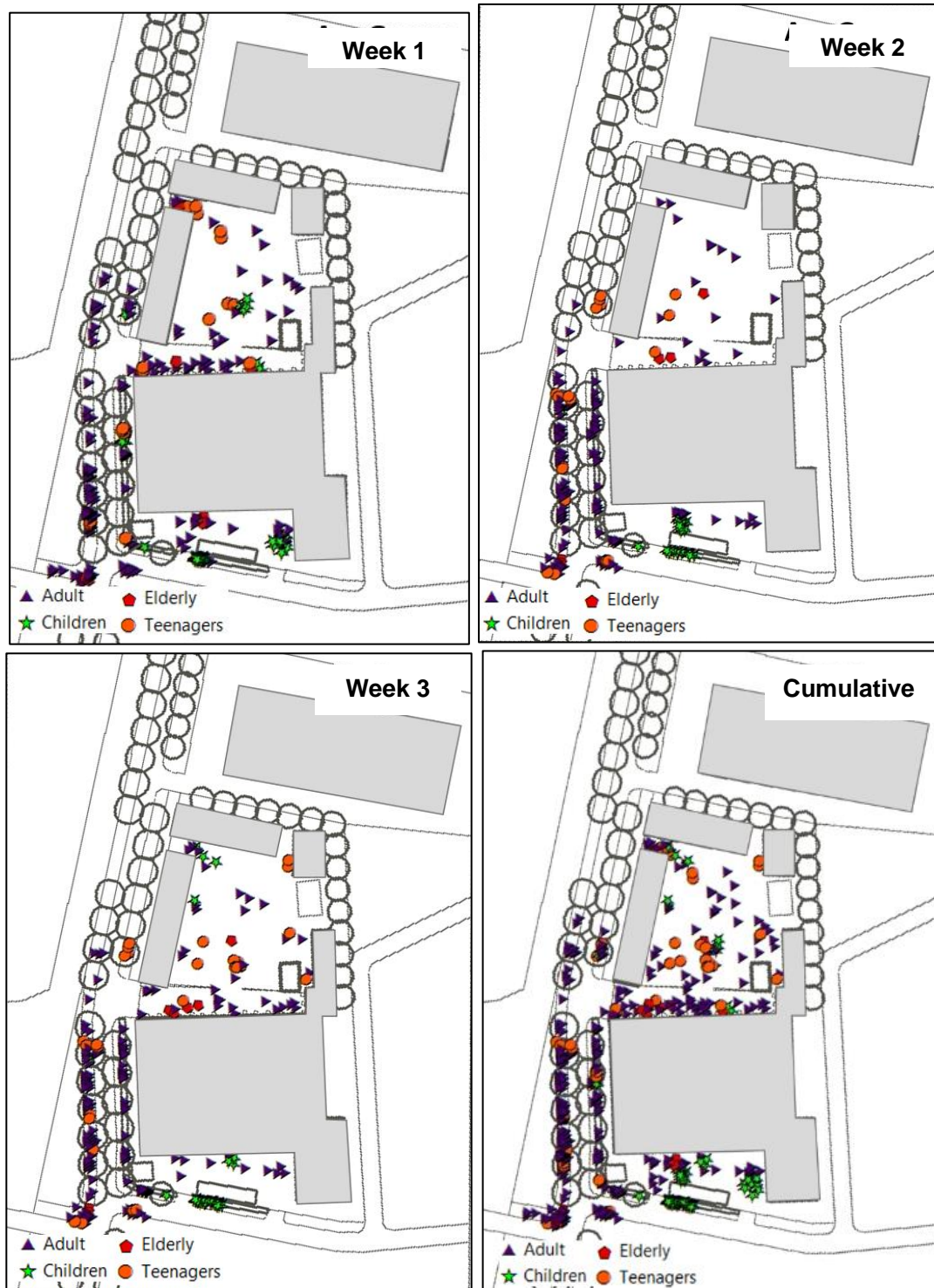


Figure 5.31: Daily and cumulative occupancies based on age groups on Fridays at Abu Ubaidah Al-Jarah Mosque open spaces.

5.3.8 Fridays: Ethnicities

Figure 5.32 illustrates the patterns of behavioural occupancies on Fridays at Abu Ubaidah Al-Jarah Mosque open spaces based on the ethnicities attribute. Multi-ethnic users were found occupying the studied spaces. Details of the users' occupancies based on ethnic groups on Fridays at the open spaces of Abu Ubaidah Al-Jarah Mosque are presented below:

- **Week one:** All spaces were predominantly used by Malays except there were few Chinese users, Indian users and users from other backgrounds were present in Spaces 1 and 2.
- **Week two:** Malays were largely occupied all spaces of Abu Ubaidah Al-jarah Mosques. In Space 1, there were four users from different ethnic groups found occupying the space (two Chinese, an Indian and a user from other backgrounds). More multi-ethnic users were present in Space 2 and a few Chinese users were spotted in Space 3.
- **Week three:** Again, all spaces were largely used by Malay users. Similar to the previous week, users from different ethnic backgrounds were mostly present in Space 2 (Friday bazaar).
- **Cumulative occupancies:** Cumulatively, all open spaces of Abu Ubaidah Al-Jarah Mosque were regularly occupied by Malays. On the other hand, few Chinese, Indians and users from other backgrounds can be seen present in all spaces .

ETHNICITIES

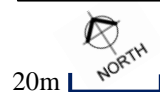
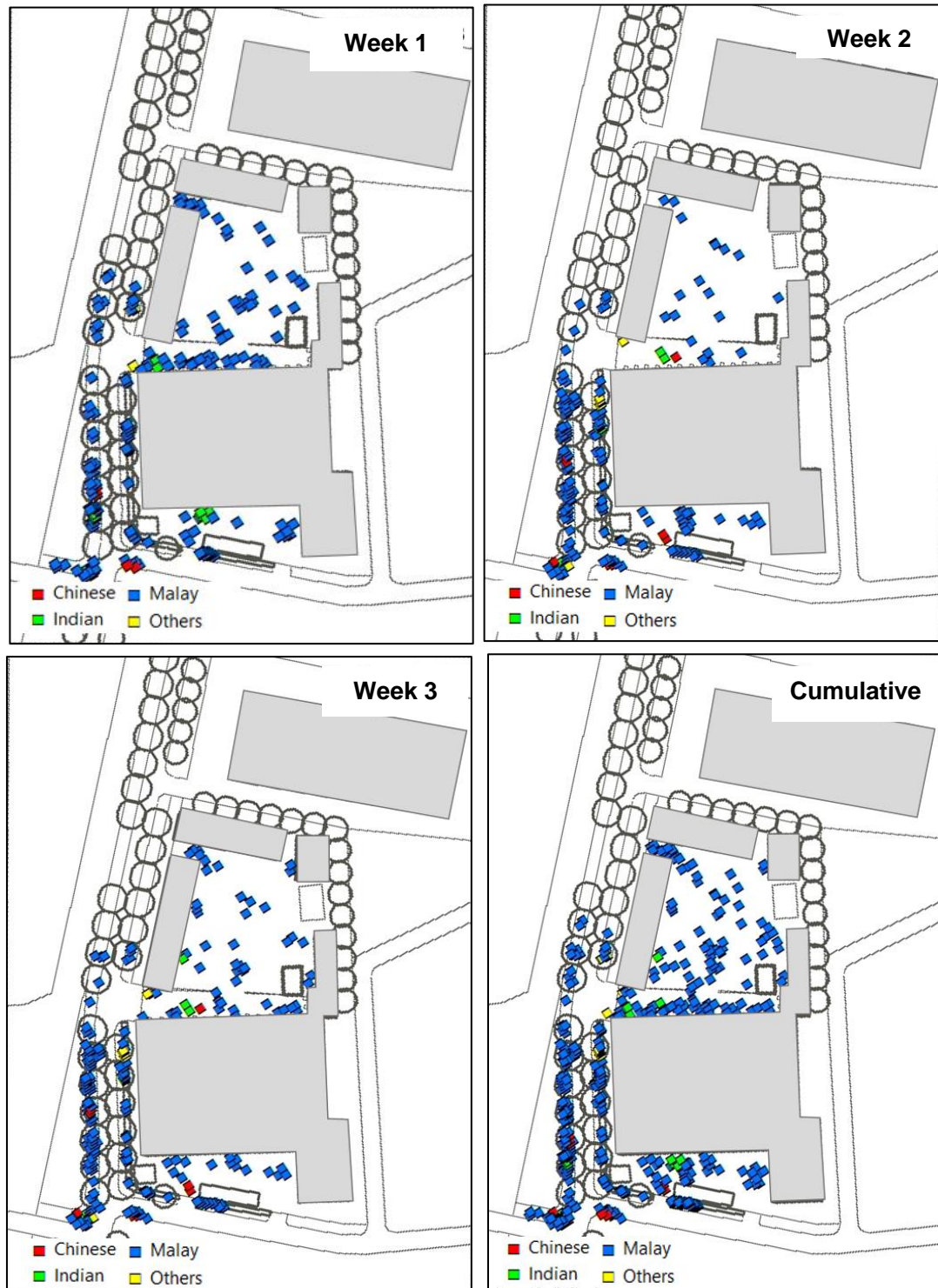


Figure 5.32: Daily and cumulative occupancies based on ethnicities on Fridays at Abu Ubaidah Al-Jarah Mosque open spaces.

5.3.9 Fridays: Activities

Figure 5.33 shows the patterns of activities that took place at Abu Ubaidah Al-Jarah Mosque open spaces during Fridays. There were few activities took place in all three spaces. Below are details of the activities undertaken on Fridays at the open spaces of Abu Ubaidah Al-Jarah Mosque:

- **Week one:** Based on the observations, it was found that some of the users in Space 1 were conversing to each other in Space 1. Space 2 received the highest intensity of use during Fridays, due to Friday bazaar organised in Space 2. It was observed that several activities took place within this space such as buying and selling foods, eating, as well as selling goods. Some other users were found standing and waiting in all spaces, but more were spotted in Space 3. A group of children were playing together in Space 3. Interestingly, the most frequent activity happened was walking.
- **Week two:** It was observed that users were seen walking, and few other users were talking with each other in Space 1. Similarly with the previous work, Space 2 received the highest intensity of use during Fridays, due to Friday bazaar organised in Space 2. It was observed that this space was occupied for activities such as buying and selling foods, eating, as well as selling goods. Whereas in Space 3, there were few users waiting for buses along the covered pedestrian walkway.
- **Week three:** Similar to the previous week, groups of users were in conversations, while the rest were found walking in and out. Similarly with the previous work, Space 2 received the highest intensity of use during Fridays, due to Friday bazaar organised in Space 2. A street food vendor opened a small snack booth under the covered walkway in Space 2. On the other hand, there were users seen walking together to the secondary entrance of the mosque in Space 3, and few users were found chatting together in a group.

- **Cumulative occupancies**: The most frequent activity happened in all spaces was walking. Most of the group conversations occurred in Space 1. Space 2 was largely occupied by various users on Fridays due to Friday bazaars.

ACTIVITIES

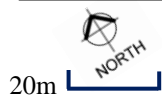
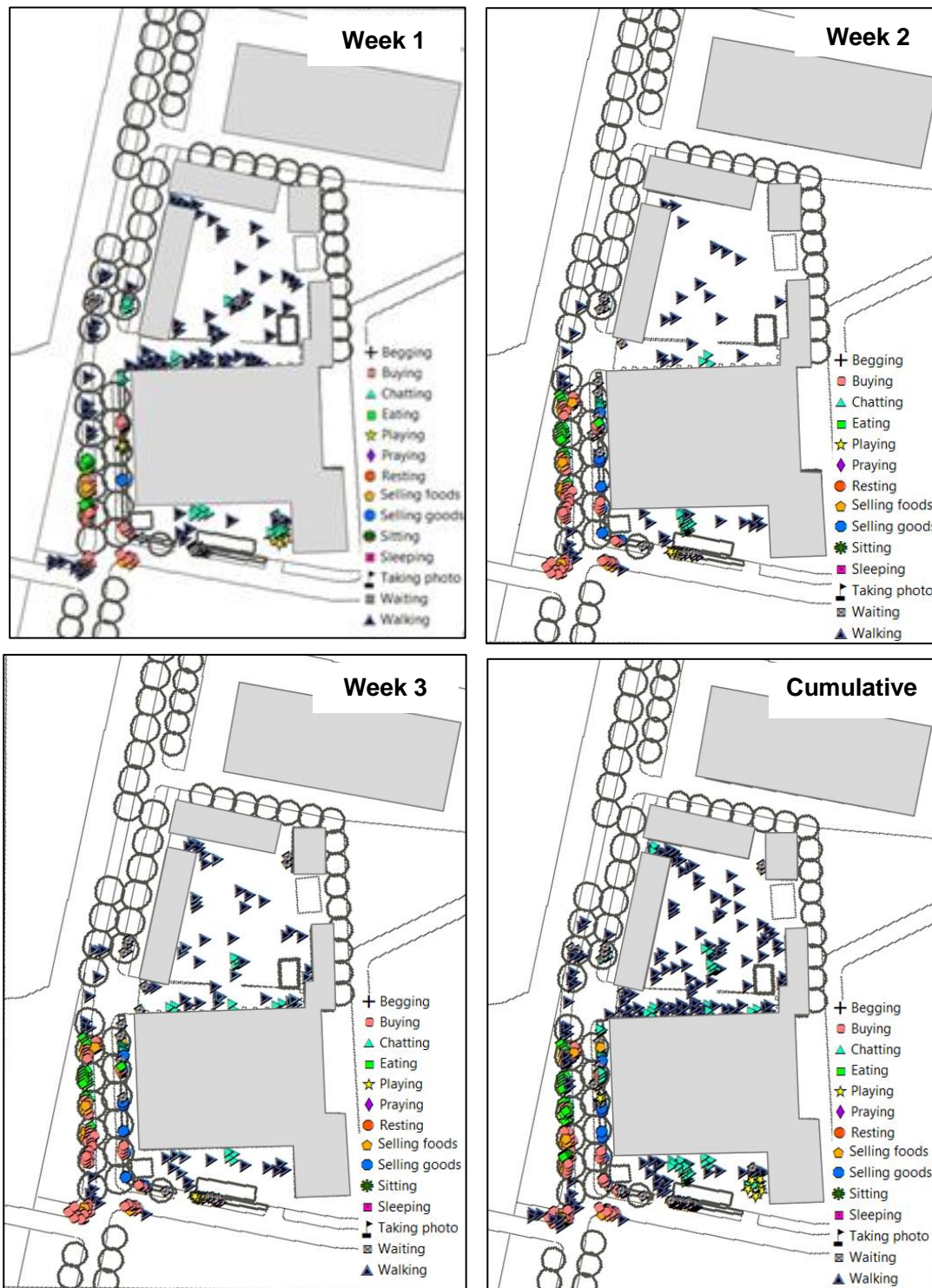


Figure 5.33: Daily and cumulative occupancies based on activities on Fridays at Abu Ubaidah Al-Jarah Mosque open spaces.

5.3.10 Selected weekends: Gender

Figure 5.34 shows the patterns of behavioural occupancies on selected weekends at Abu Ubaidah Al-Jarah Mosque open spaces based on gender attribute. With reference to the occupancy of the studied spaces, it can be seen not all spaces were accessed by both male and female users. Details on the presence of the different genders at Abu Ubaidah Al-Jarah Mosque open spaces on selected weekends are given below.

- **Week one:** Male users were the predominant users of all studied spaces. Six female users were identified occupying Spaces 1 and 2, whereas none was found in Space 3.
- **Week two:** In week two of the selected weekends, few female users were only present in Space 2, while the rest of the spaces were occupied by the male users.
- **Week three:** Interestingly, male users were found using Spaces 1 and 2 during this week. It was different from the previous week, female users were present only in Space 1. No users identified using Space 3 during this weekend.
- **Cumulative occupancies:** Cumulatively, throughout the selected weekends, male users was largely occupied Spaces 1 and 2, whereas the presence of female users was balanced in both spaces. Only a few male users identified using Space 3, with zero presence of female users.

GENDER

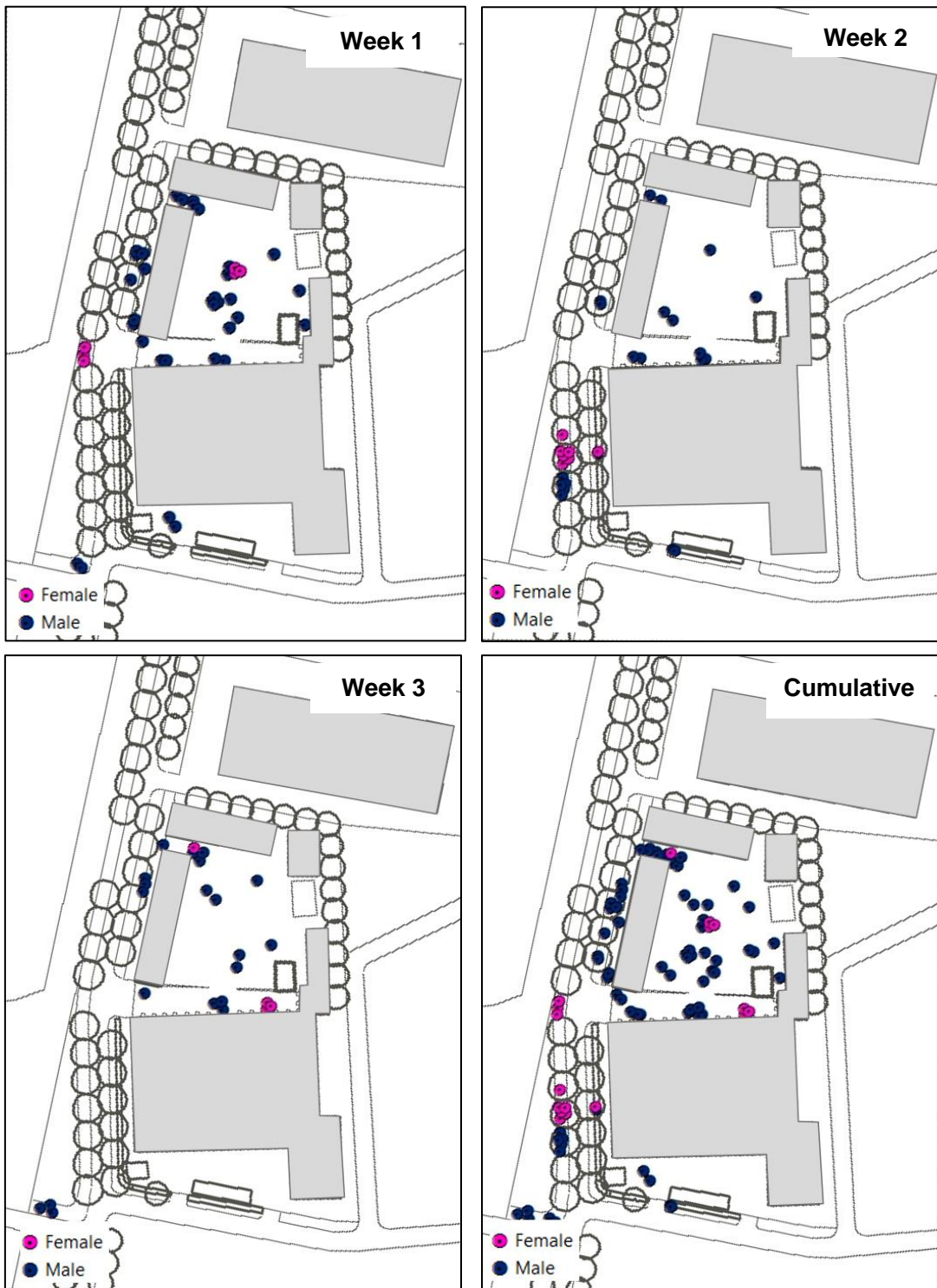


Figure 5.34: Daily and cumulative occupancies based on gender on selected weekends at Abu Ubaidah Al-Jarah Mosque open spaces.

5.3.11 Selected weekends: Age groups

Figure 5.35 shows the patterns of behavioural occupancies on selected weekends at Abu Ubaidah Al-Jarah Mosque open spaces based on the age groups attribute. The patterns for the selected weekends are different from the selected weekdays and Fridays. Details of user occupancy based on age group for the selected weekends at Abu Ubaidah Al-Jarah Mosque open spaces are given below:

- **Week one:** Spaces 1 and 2 were utilised highly by adults but very little by teenagers, children and the elderly. Space 3 was occupied by two teenagers.
- **Week two:** In this week, only two age groups were observed utilising the spaces. Space 1 was mainly used by adults, whereas teenagers were the major occupants in Space 2.
- **Week three:** Similar to week two, only two age groups were present at the studied spaces. Adults were observed in all the spaces except Space 3. Few teenagers were found using Space 1.
- **Cumulative occupancies:** Adults were the main users cumulatively at the open spaces of Abu Ubaidah Al-Jarah Mosque, especially for Spaces 1 and 2 throughout the observed weekends. However, there were groups of teenagers found in all spaces, but little presence of children and the elderly.

AGE GROUPS



Figure 5.35: Daily and cumulative occupancies based on age groups on selected weekends at Abu Ubaidah Al-Jarah Mosque open spaces.

5.3.12 Selected weekends: Ethnicities

Figure 5.36 illustrates the patterns of behavioural occupancies on the selected weekends at Abu Ubaidah Al-Jarah Mosque open spaces based on the ethnicities attribute. Multi-ethnic users were found occupying the studied spaces. Details of the users' occupancies based on ethnic groups on the selected weekends at the open spaces of Abu Ubaidah Al-Jarah Mosque are presented below:

- **Week one:** As usual, Malays were the predominant users in all the spaces. However, there were two Chinese users and two Indian users were seen occupying Space 2.
- **Week two:** During this week, there was an Indian user identified using Space 1 and few Chinese users were found in Space 2, mingling together with some Malay users.
- **Week three:** There was no presence of multi-ethnic users during this week. Only Malays seen were occupying Spaces 1 and 2.
- **Cumulative occupancies:** Cumulatively, all open spaces of Abu Ubaidah Al-Jarah Mosque were regularly occupied by Malays. There was a minimal presence of other ethnic groups, but there were few Chinese and Indian users present in Spaces 1 and 2.

ETHNICITIES



Figure 5.36: Daily and cumulative occupancies based on ethnicities on selected weekends at Abu Ubaidah Al-Jarah Mosque open spaces.

5.3.13 Selected weekends: Activities

Figure 5.37 shows the patterns of activities that took place at Abu Ubaidah Al-Jarah Mosque open spaces during selected weekends. There were few activities took place in all three spaces. Below are details of the activities undertaken on the selected weekends at the open spaces of Abu Ubaidah Al-Jarah Mosque:

- **Week one:** There were three activities happened at all the spaces – walking, chatting and waiting. It was found that few groups of users were conversing to each other in Spaces 1 and 2. On the other hand, few users were found walking in Space 1, three users were walking to the shoplots in Space 2. Two more users walked together to the mosque building through Space 3.
- **Week two:** The main activity performed by the users during this week was walking. Few users were found walking within Space 1 and two groups of users were walking together along the roadside in Space 2. There were two food street vendors selling their foods under the covered walkway in Space 2. Besides, two users were talking to each other under a shady tree in Space 2, and another two were found chatting in Space 3.
- **Week three:** Very minimal activities were performed during this week. Space 1 was meant for walking and chatting. As for Space 2, three users were waiting in front of the small restaurant, and another three were conversing with each other while walking at the mosque junction.
- **Cumulative occupancies:** Collectively, the activities throughout three selected weekends were relatively similar. Spaces 1 and 2 were used as transition space by the users. Group conversations among users were mostly took place in Spaces 1 and 2. During weekends, few street vendors were present particularly under the covered pedestrian walkway area (Space 2).

ACTIVITIES

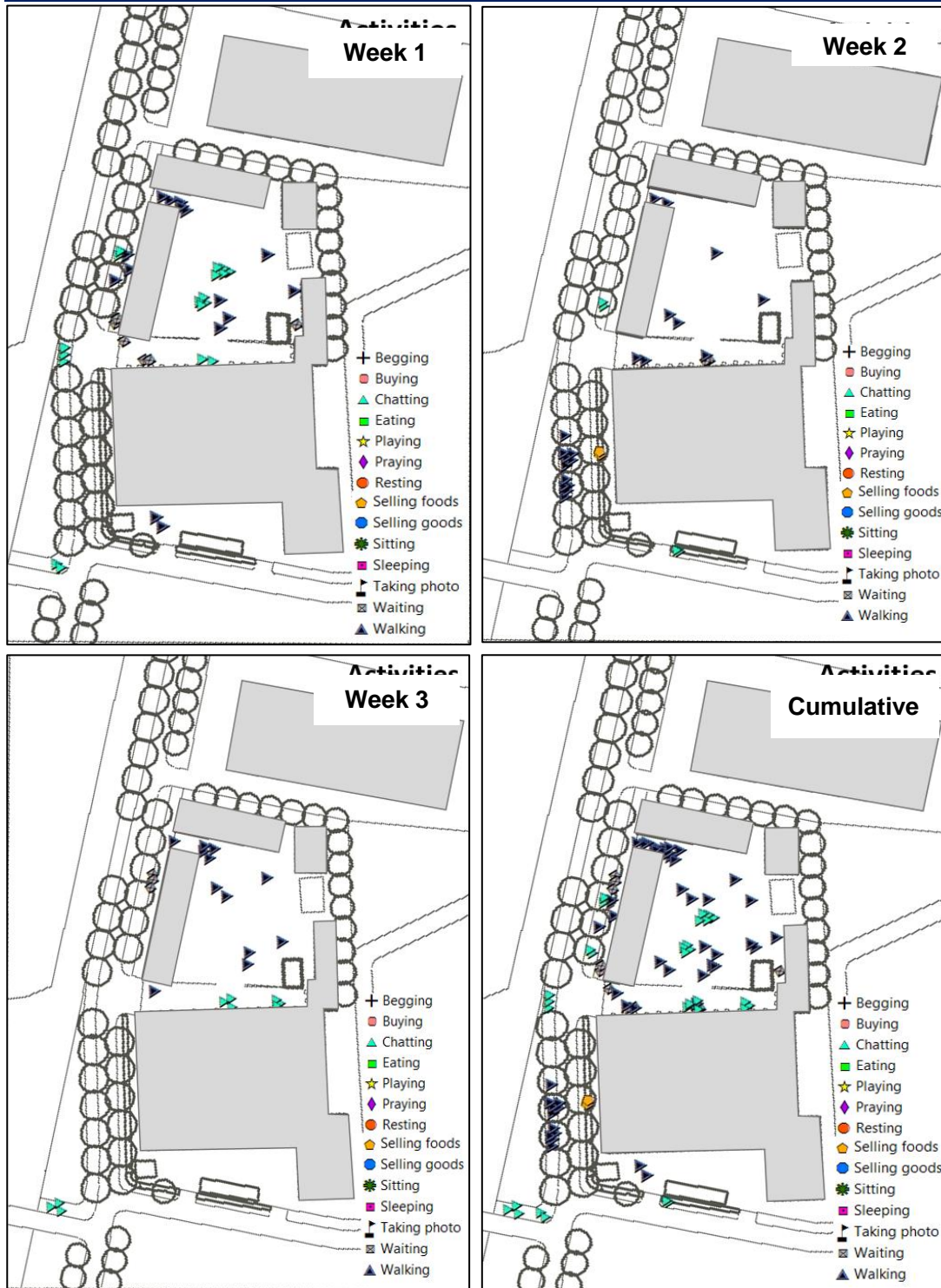


Figure 5.37: Daily and cumulative occupancies based on activities on selected weekends at Abu Ubaidah Al-Jarah Mosque open spaces.

5.3.14 Key findings from the whole observations at Abu Ubaidah Al-Jarah Mosque

Based on the whole observations conducted at Abu Ubaidah Mosque open spaces, there are several key findings that can be highlighted according to the attributes of gender, age groups, ethnicities and activities. Figure 5.38 shows that there were more male users present than female across the weeks. However, both male and female users were observed to use the mosque open spaces more on Fridays in comparison to during weekdays and weekends. The frequencies with which both genders occupied the mosque open spaces during the selected weekdays were higher than their frequencies during the selected weekends.

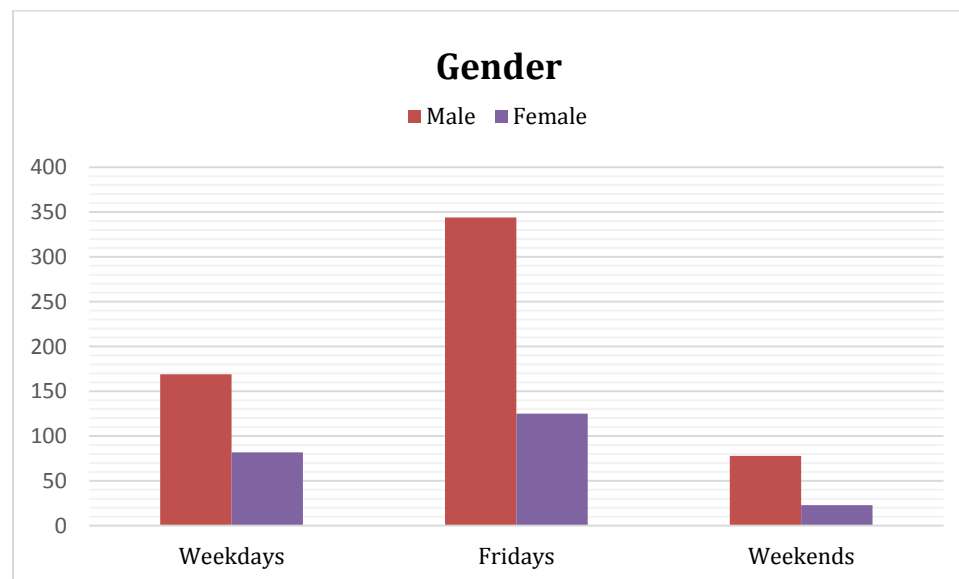


Figure 5.38: Gender attribute during selected weekdays, Fridays and selected weekends

With reference to the age groups attribute (see Figure 5.39), adults were the users most commonly seen at Abu Ubaidah Al-Jarah Mosque open spaces throughout the weeks as compared to children, teenagers and the elderly. Fridays marked the highest frequencies of adults, seen performing miscellaneous activities at the mosque open spaces. This pattern was roughly equivalent to that of the teenage and elderly users, who were seen more frequently on Fridays. In the case of younger users, it was found that more children used the mosque open spaces during the weekdays.

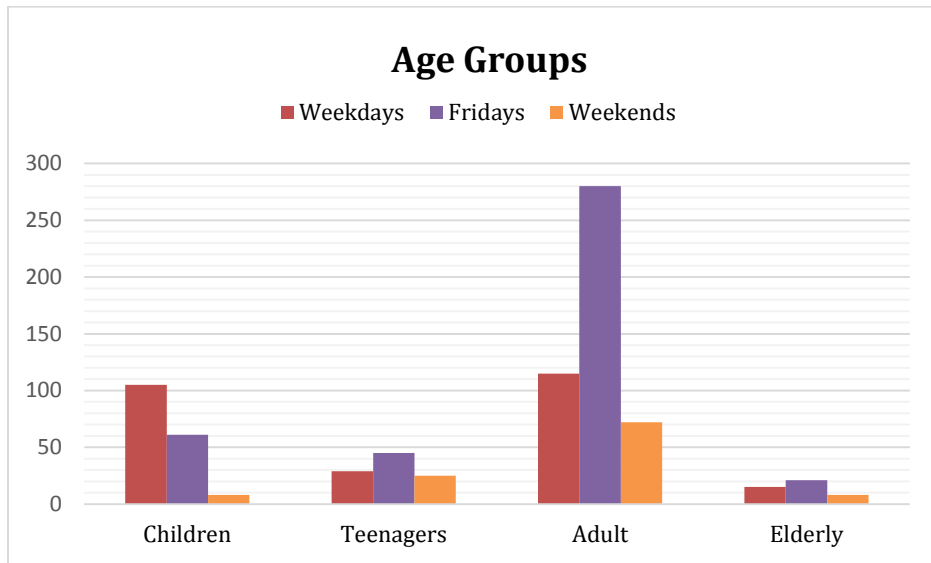


Figure 5.39: Age groups attribute during selected weekdays, Fridays and selected weekends

In terms of ethnic backgrounds (see Figure 5.40), it is evident that Malays were the major users of Abu Ubaidah Al-Jarah Mosque open spaces throughout the weeks in question, particularly on Fridays. The frequencies of users from different ethnic backgrounds such as Chinese, Indians and users from other background was relatively balanced, but similarly to Malay ethnic group, they were highly present at the open spaces on Fridays.

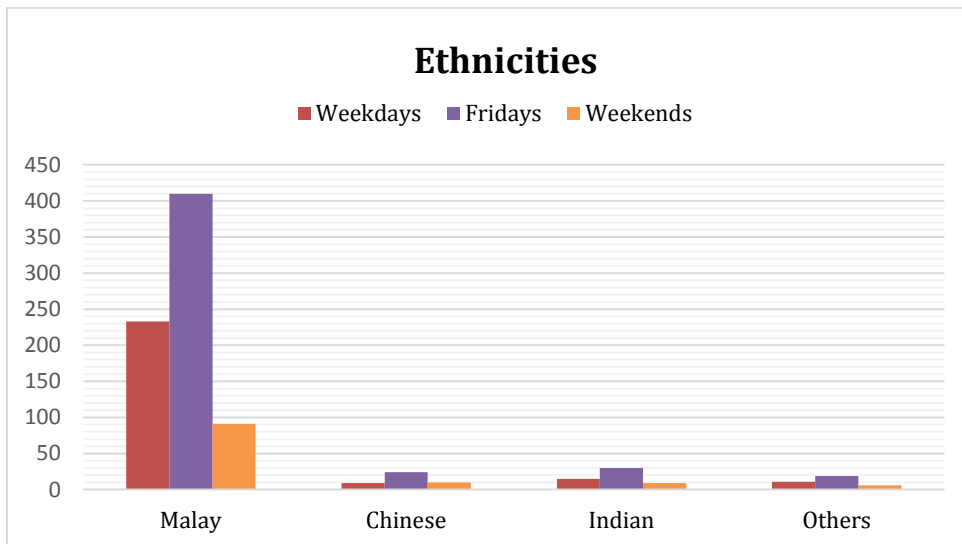


Figure 5.40: Ethnicities attribute during selected weekdays, Fridays and selected weekends

Walking, waiting and chatting were the activities performed most frequently by users. Based on Figure 5.41 below, it is evident that these activities were frequently conducted on Fridays, followed by during weekdays except for waiting. It was noticed that Abu Ubaidah Al-Jarah Mosque open spaces became a transition space to connect users to various other spaces or places. Buying activity was frequently conducted on Fridays, similarly to eating, selling foods and selling goods – due to Friday bazaar organised every Friday afternoon.

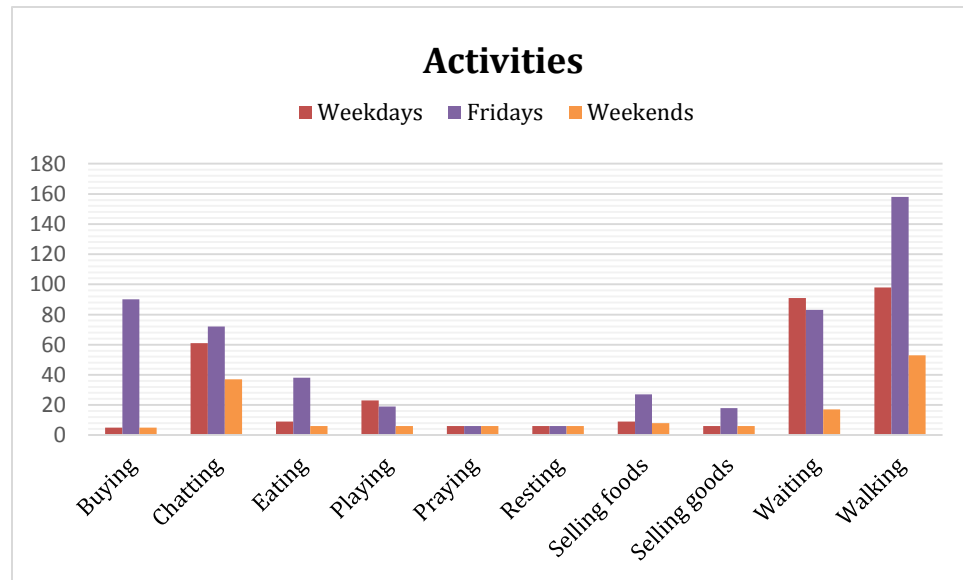


Figure 5.41: Activities attribute during selected weekdays, Fridays and selected weekends

5.4 Case Study 3: Al-Ghufran Mosque, Kuala Lumpur, Malaysia

5.4.1 Site and context appraisal



Figure 5.42: Macro site context – Al-Ghufran Mosque, Kuala Lumpur (aerial image source: Google Maps). The diagram above displays the location of the first case study area and its surrounding context and land uses.

Al-Ghufran Mosque is a sub-district mosque, located in a multi-ethnic neighbourhood of Pinggiran Taman Tun Dr. Ismail, Kuala Lumpur. Based on Figure 5.42, it can be seen

that this mosque is surrounded by diverse residential areas, as well as business and residential areas. This mosque is located slightly on a higher ground and it becomes a landmark for this particular neighbourhood area. This mosque is one of the most unique mosques in Kuala Lumpur because there is a traveller's hotel inside this mosque complex. Currently, this hotel only accommodates Muslim travellers and visitors. Figure 5.43 depicts the micro context of this mosque.

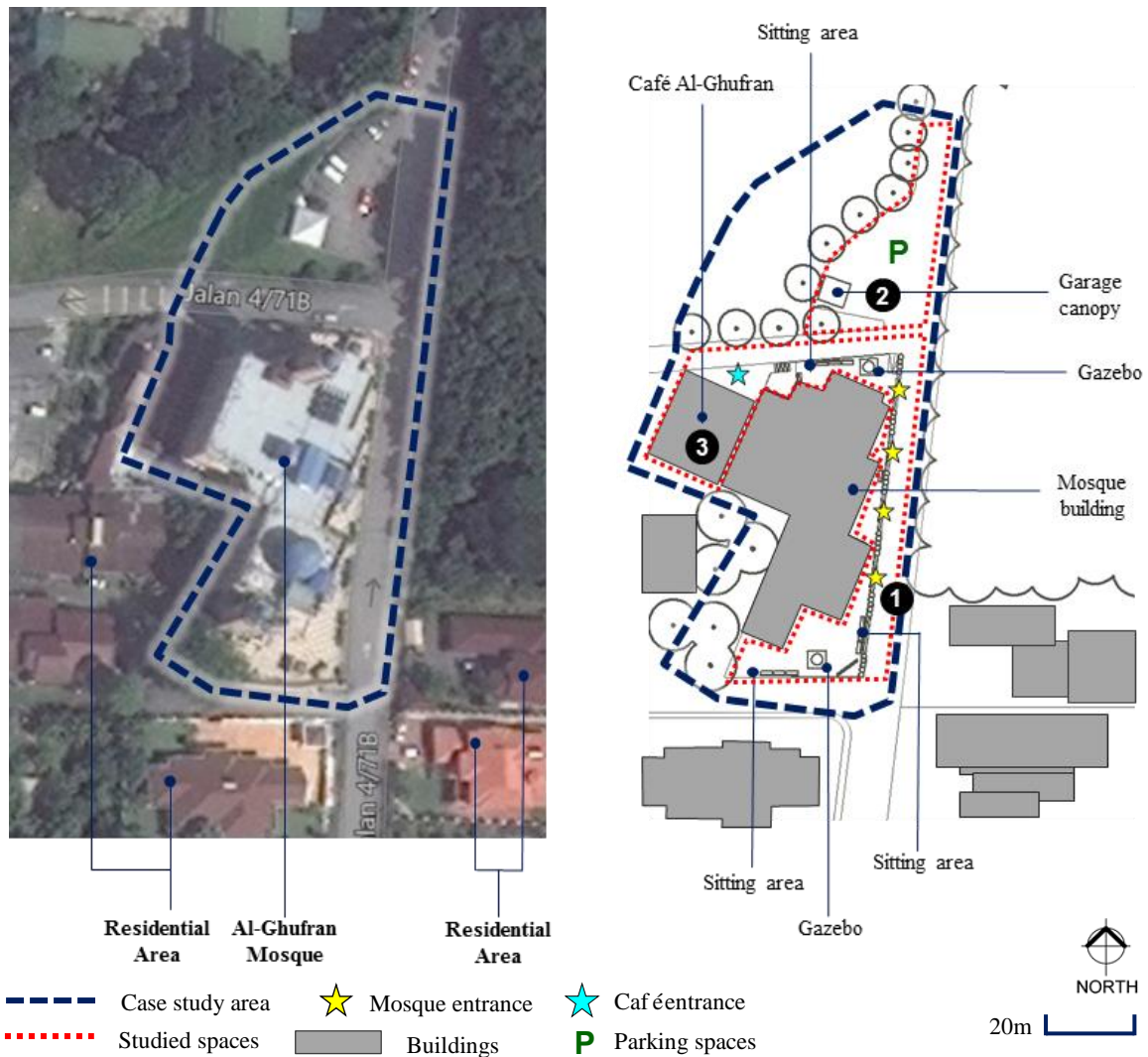


Figure 5.43: Micro site context – Al-Ghufran Mosque. Aerial image (left) shows the close-up view of the case study area (source: Google Maps). Base map (right) displays the existing physical features available around the mosque and the studied spaces. The numerical labels indicate the spaces studied during the systematic observation.

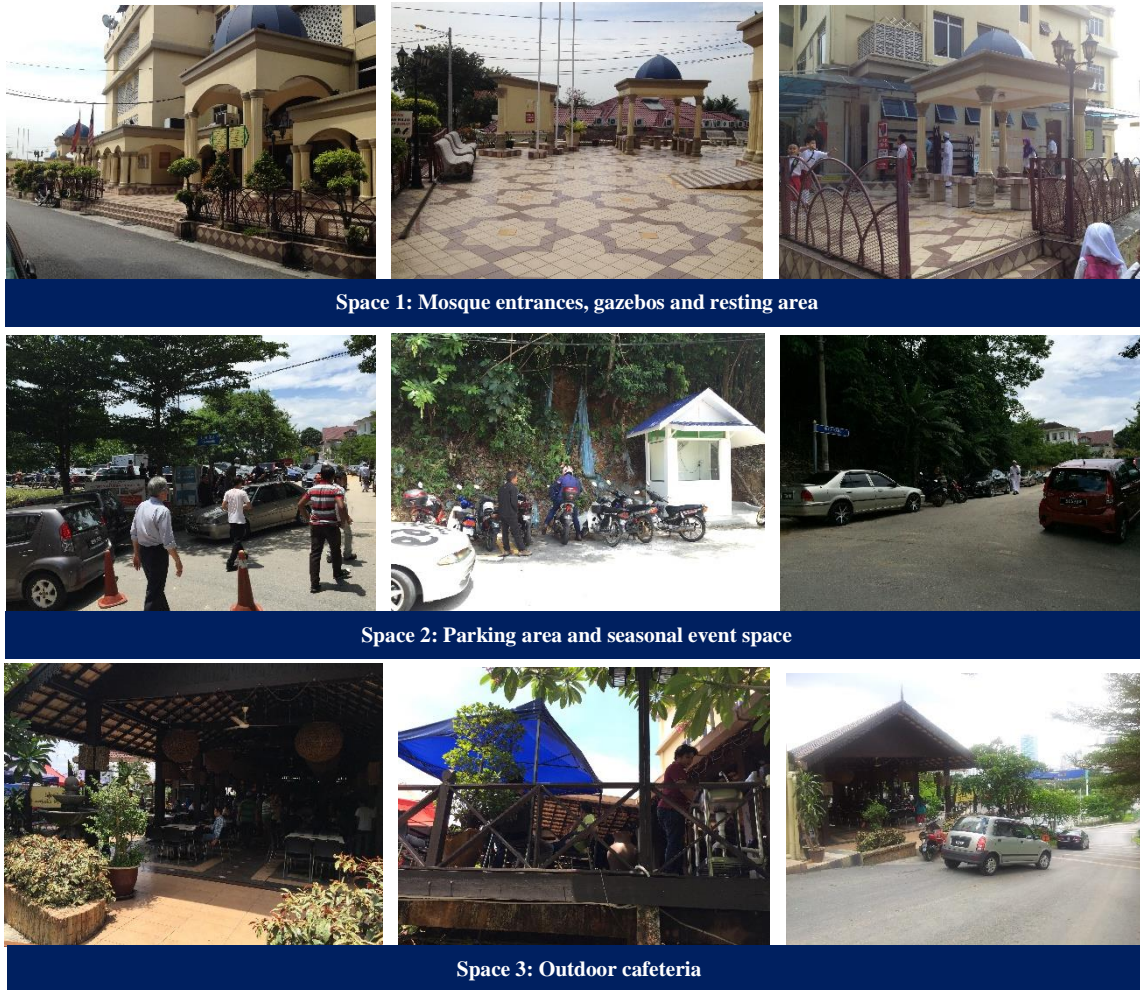


Figure 5.44: Images of the studied spaces at Al-Ghufran Mosque

In the micro context of Al-Ghufran Mosque (Figure 5.44), there were three spaces identified to be studied during the observations. Space 1 is the open spaces attached to the mosque building which are comprised of several facilities such as seatings and gazebo. There are four entrances to this mosque as indicated by the yellow stars. Space 2 is an open space which is used as parking spaces for the mosque staffs and visitors. A garage canopy is located within this space as indicated on the map. On the other hand, Space 3 is an outdoor cafeteria (Café Al-Ghufran) initiated by the mosque management. For the purpose of the observations, these spaces were observed on selected weekdays, Fridays and weekends. Therefore, the next section discussed the detailed findings obtained throughout systematic observations at Al-Ghufran Mosque on selected weekdays for three consecutive weeks in June 2014.

5.4.2 Selected weekdays: Gender

Figure 5.45 shows the patterns of behavioural occupancies on selected weekdays at Al-Ghufran Mosque open spaces based on gender attribute. With reference to the occupancy of the studied spaces, all of the spaces were seen utilised by both male and female users. Details on the presence of the different genders at Al-Ghufran Mosque open spaces on selected weekdays are given below.

- **Week one:** It can be seen that the frequency of male users was higher than the female users in Spaces 1, 2 and 3. However, the most preferred spot for both genders was the outdoor cafeteria (Space 3) as the frequency of both genders was higher in this space as compared to Space 1 and 2.
- **Week two:** In Space 1, male users were predominantly used the space except for three females who were found nearby the female praying area. Space 2 indicated zero presence of female users, whereas Space 3 were highly occupied by both genders.
- **Week three:** Similar to the previous weeks, Spaces 1 and 2 were utilised by more male users. However, during this week, Space 3 was largely occupied by female users.
- **Cumulative occupancies:** Cumulatively, throughout the selected weekdays, all studied spaces were highly used by the male users as compared to female users. Despite this, female users were found mostly present in Space 3, particularly at the outdoor cafeteria.

GENDER

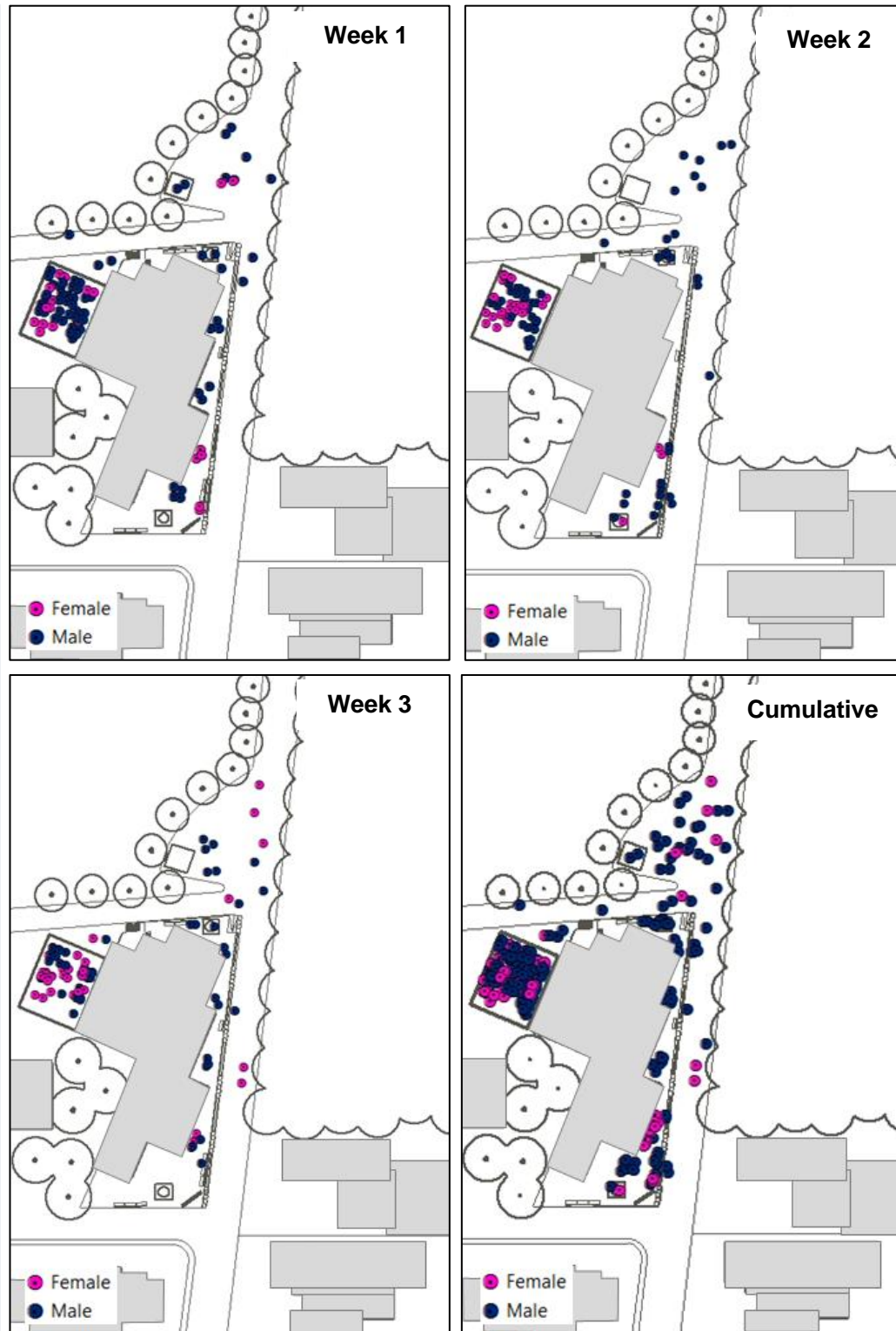


Figure 5.45: Daily and cumulative occupancies based on gender on selected weekdays at Al-Ghufran Mosque open spaces.

5.4.3 Selected weekdays: Age groups

Figure 5.46 shows the patterns of behavioural occupancies on selected weekdays at Al-Ghufran Mosque open spaces based on the age groups attribute. Overall, it can be seen that users from different age groups occupied all of the studied open spaces. Details of user occupancy based on age group for the selected weekdays at Al-Ghufran Mosque open spaces are given below:

- **Week one:** Based on the map, it is evident that all the studied spaces were used by users with diverse age groups. Entirely, adults were the major occupants in Spaces 1, 2 and 3. Besides adults, there were five children and a teenager identified in Space 1. Space 3 was entirely occupied by adults except for two children.
- **Week two:** Similar to week one, Spaces 1, 2 and 3 were highly occupied by adults. There were few children seen in Space 1, took place at the similar spot during the first week. Although, the cafeteria in Space 3 was highly occupied by adults, few teenagers, children and the elderly were observed utilising the space.
- **Week three:** Adults were observed as the major users in all the spaces. However, a gazebo in Space 1 was occupied by an elderly. A teenager was spotted present in Space 2, while there were two elderly and two children found in Space 3.
- **Cumulative occupancies:** Overall, it can be seen that the open spaces of Al-Ghufran Mosque have invited more adults to use the spaces. However, the multi-age group users can be found in Space 3, as the outdoor cafeteria was seen as the most favourite spots for many.

AGE GROUPS

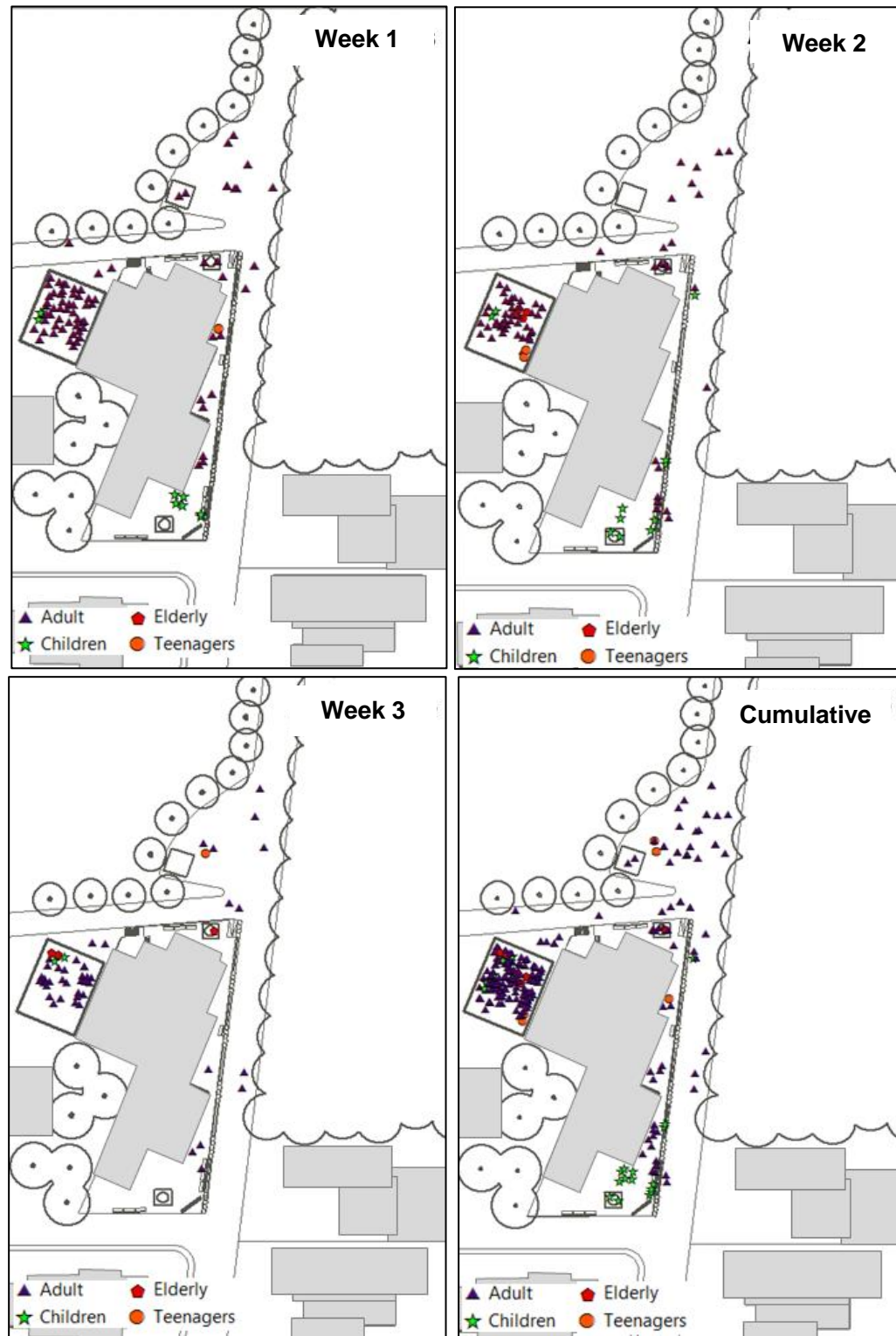


Figure 5.46: Daily and cumulative occupancies based on age groups on selected weekdays at Al-Ghufran Mosque open spaces.

5.4.4 Selected weekdays: Ethnicities

Figure 5.47 shows the patterns of behavioural occupancies on selected weekdays at Al-Ghufran Mosque open spaces based on the ethnicities attribute. Similar with Abu Ubaidah Al-Jarah Mosque, the presence of multi-ethnic users was very minimal at this mosque. Details of the users' occupancies based on ethnic groups on the selected weekdays at the open spaces of Al-Ghufran Mosque are presented below:

- **Week one:** All spaces were predominantly used by Malays. There were three users from different ethnicities (one Chinese and two Indians) seen enjoying meals together with other Malay users at the cafeteria (Space 3).
- **Week two:** Similar to the previous week, Malays were the predominant users of all spaces. Nevertheless, an Indian user were identified in Space 2 and a Chinese user was present at the cafeteria (Space 3) with Malay users.
- **Week three:** Similar to the previous weeks, Malay were the major occupants of Space 1, 2 and 3. During this week, few Indian users were identified present in Space 1.
- **Cumulative occupancies:** Overall, Malays were found to the most frequent users of all spaces. Few Indian users were appeared in Spaces 1, 2 and 3, while there were few Chinese users present in Space 3.

ETHNICITIES

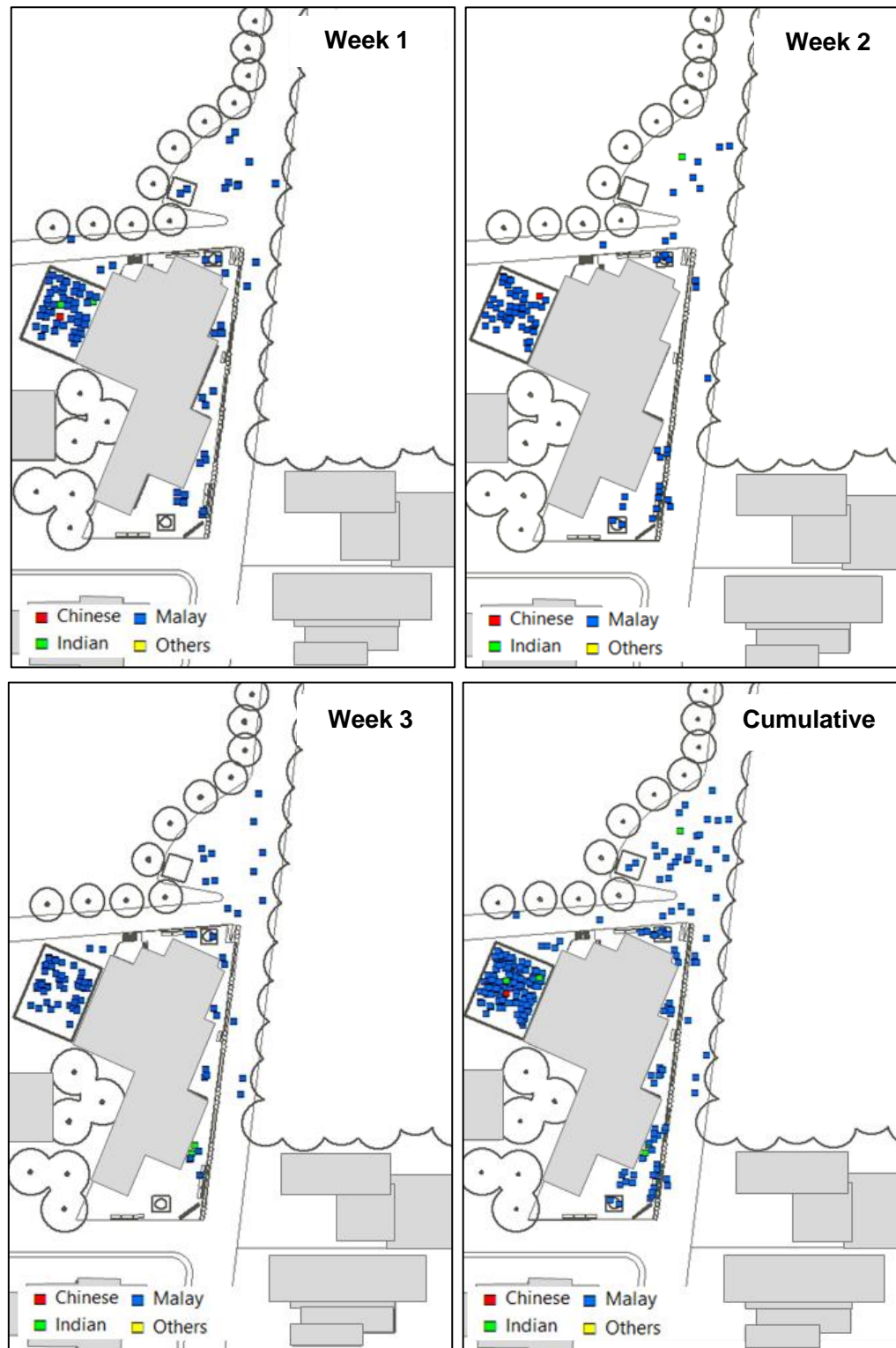


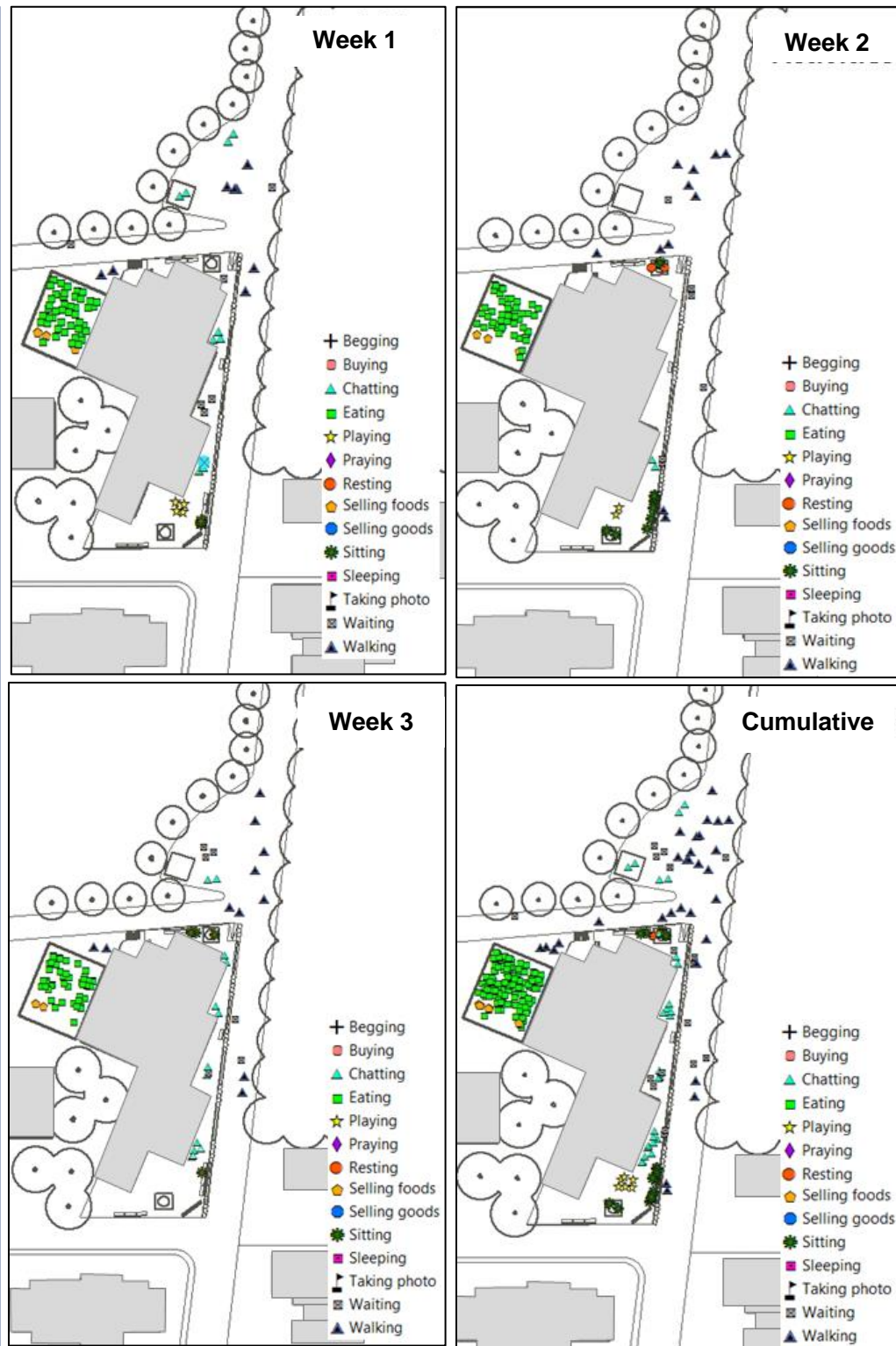
Figure 5.47: Daily and cumulative occupancies based on ethnicities on selected weekdays at Al-Ghufran Mosque open spaces.

5.4.5 Selected weekdays: Activities

Figure 5.48 shows the patterns of activities that took place at Al-Ghufran Mosque open spaces during selected weekdays. There were few activities took place in all three spaces. Below are details of the activities undertaken on the selected weekdays at the open spaces of Al-Ghufran Mosque:

- **Week one:** In Space 1, it can be identified that there were users who were sitting at the bench, waiting, having conversations and playing. Mostly in Space 2, the activities performed by the users were walking and chatting. Evidently, in Space 3, most of the users were found eating at the cafeteria.
- **Week two:** During this week, there were few users identified sitting together at the benches and resting at the gazebos provided in Space 1. Few children were spotted playing at this space. Similar to week one, Space 2 was used as a transition from the parking spaces to the mosques. Meanwhile, Space 3 was occupied for eating and selling foods.
- **Week three:** In this particular week, it was noticeable that there were few groups of users had their conservations in Space 1. Some of the users preferred to seat at the benches and gazebo in this space. It was observed that two users walked from Space 1 to Space 2. Few users were found walking towards the parking spaces (Space 2). Some of them were chatting and waiting at the nearby garage. Many users preferred to spend their times at the cafeteria (Space 3).
- **Cumulative occupancies:** In Space 1, many users were found having conversations with each other as well as sitting at the seating area provided there. Collectively, Space 2 was meant for walking, waiting and chatting activities. Cumulatively, eating was the most regular activity took place in Space 3 at Al-Ghufran Mosque.

ACTIVITIES



20m 

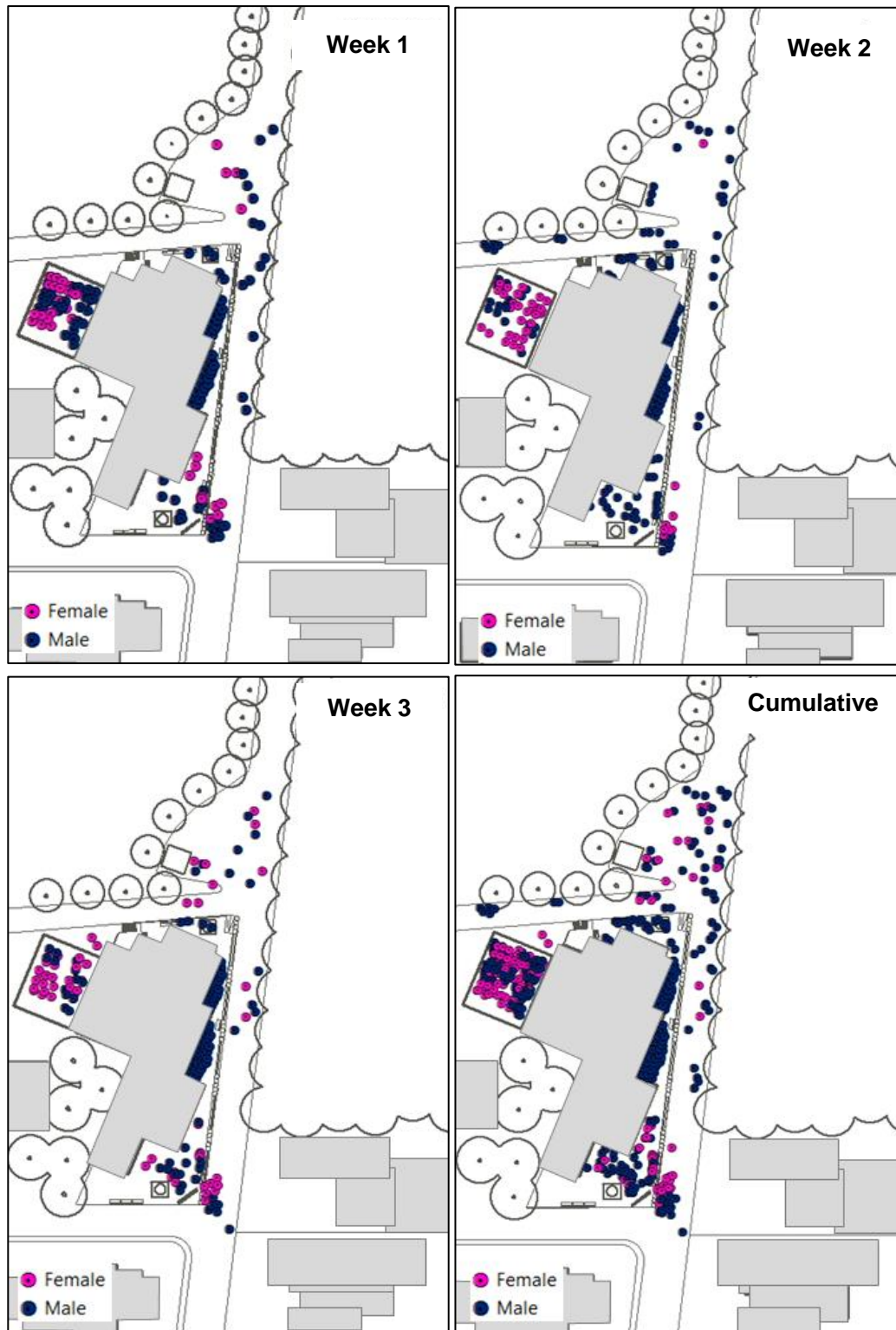
Figure 5.48: Daily and cumulative occupancies based on activities on selected weekdays at Al-Ghufran Mosque open spaces.

5.4.6 Fridays: Gender

Figure 5.49 shows the patterns of behavioural occupancies on Fridays at Al-Ghufran Mosque open spaces based on gender attribute. In terms of the occupancy of the studied spaces, it was noticeable that all of the spaces were utilised by both male and female users. Details on the presence of the different genders at Al-Ghufran Mosque open spaces on Fridays are given below:

- **Week one:** Frequency of male users was higher than the female users in Spaces 1, 2 and 3. It was observed that the frequency of male users was increased on Fridays in Space 1. The distribution of female users in Space 1 was more focused at the space near to female praying area. Four female users were seen walking in Space 2, and the rest were identified enjoying the meals in Space 3.
- **Week two:** Male users were predominantly used Spaces 1 and 2. Only one female users were present in Space 2. However, female users marked the highest frequency in Space 3.
- **Week three:** The numbers of female users were increased during this week. In Space 1, more female users were found at the similar area as mentioned in above in week one. However, male users were highly occupied this space. Spatial distribution of both genders was relatively equivalent. On the other hand, more female users were present in Space 3.
- **Cumulative occupancies:** It was evident that the male users predominantly occupied Spaces and 2 during Fridays. However, the spatial distribution of both male and female users was fairly balanced in Space 3.

GENDER



20m 

Figure 5.49: Daily and cumulative occupancies based on gender on Fridays at Al-Ghufran Mosque open spaces.

5.4.7 Fridays: Age groups

Figure 5.50 shows the patterns of behavioural occupancies on Fridays at Al-Ghufran Mosque open spaces based on the age groups attribute. Overall, it can be seen that users from different age groups occupied all of the studied open spaces. Details of user occupancy based on age group for the selected weekdays at Al-Ghufran Mosque open spaces are given below:

- **Week one:** In Space 1, adults appeared to be the major users, followed by teenagers and children. Space 2 was highly occupied by adults and very few teenagers. On the other hand, Space 3 was highly used by adults, but few children and teenagers were spotted in this space.
- **Week two:** Similar to previous week, Space 1 were mostly occupied by adults. However, quite a number of children and teenagers were present there. Two elderly were identified nearby the gazebo area. Space 2 was commonly occupied by adults but three teenagers were found there. Similar to week one, Space 3 was regularly used by adults, with the presence of few teenagers and children.
- **Week three:** All spaces were highly occupied by adults. As usual, children were regularly spotted in Space 1 together with numbers of teenagers. Space 2 was merely used by adults in this week. However, the frequency of users in Space 3 was decreased in this week. It was largely occupied by adults; but six teenagers, a child and two elderly were identified using the space.
- **Cumulative occupancies:** Collectively, the open spaces of Al-Ghufran Mosque have attracted more adults to use the spaces especially in Space 1. The presence of users with different age groups were higher during Fridays as compared to the selected weekdays. Adults were highly seen at the outdoor cafeteria (Space 3) but the presence of other age groups such as children and teenagers could be identified.

AGE GROUPS

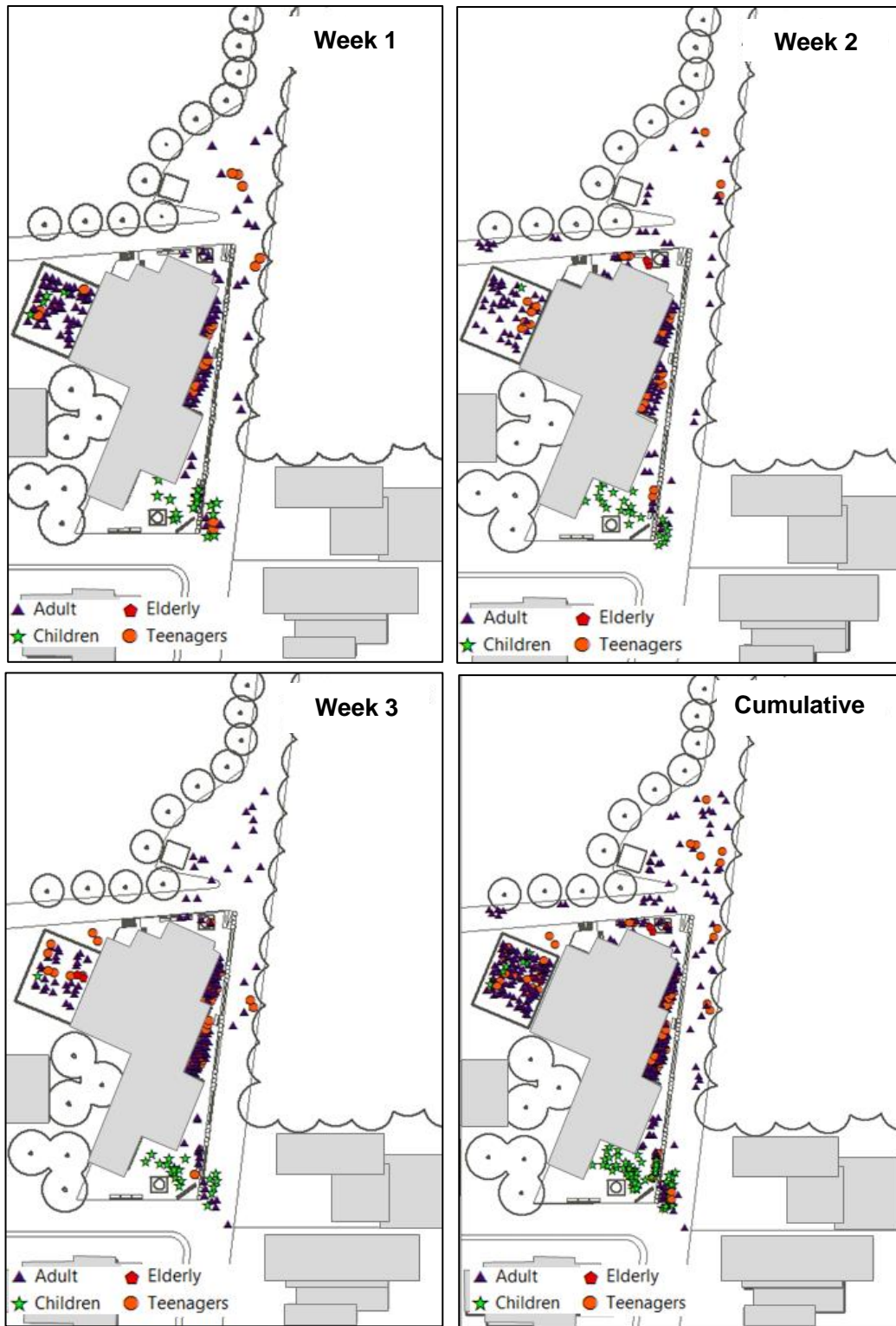


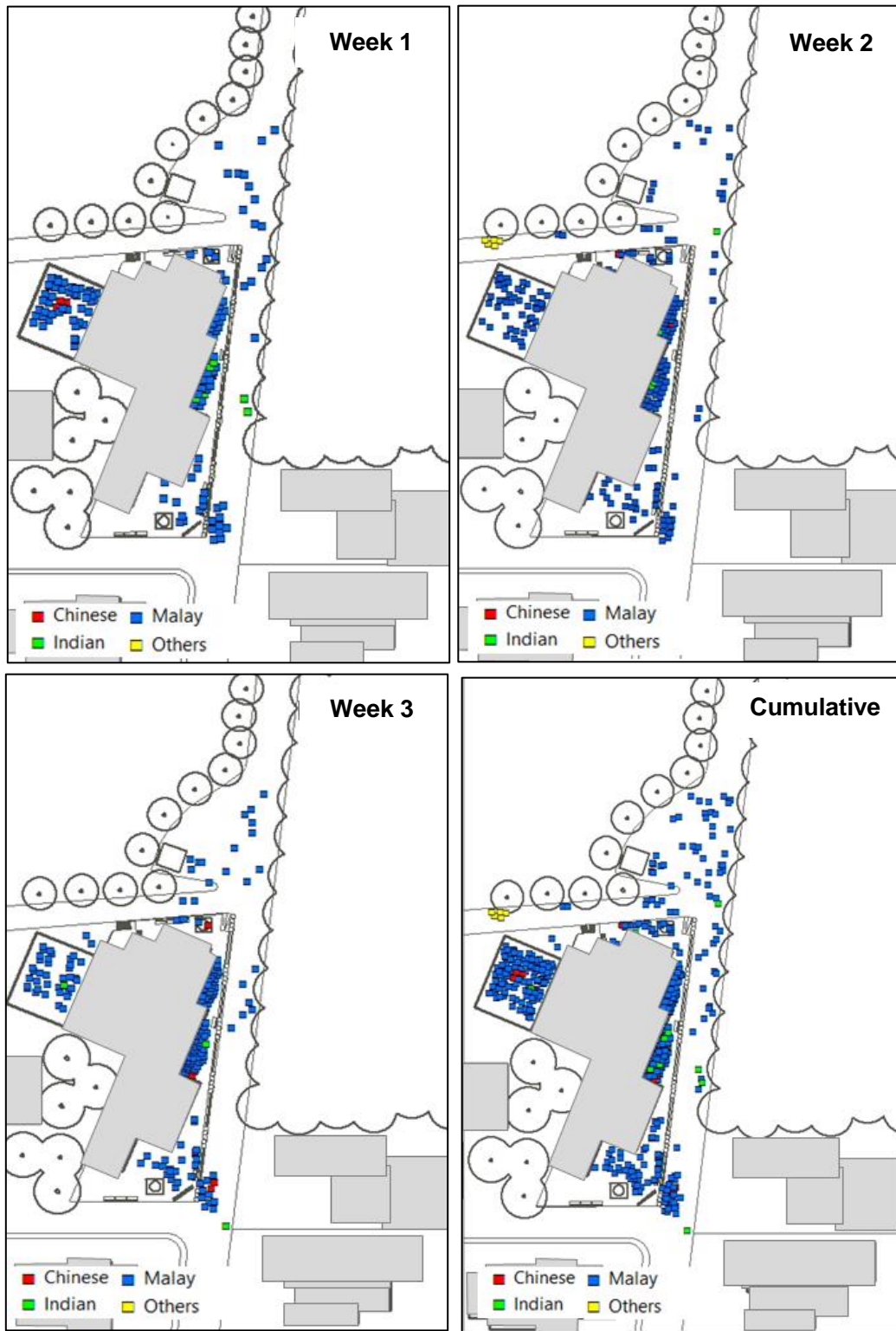
Figure 5.50: Daily and cumulative occupancies based on age groups on Fridays at Al-Ghufran Mosque open spaces.

5.4.8 Fridays: Ethnicities

Figure 5.51 illustrates the patterns of behavioural occupancies on Fridays at Al-Ghufran Mosque open spaces based on the ethnicities attribute. Multi-ethnic users were found occupying the studied spaces. Details of the users' occupancies based on ethnic groups on Fridays at the open spaces of Al-Ghufran Mosque are presented below:

- **Week one:** All spaces were primarily used by Malays. Nevertheless, there were few Indian users seen occupied Space 1, whereas few Chinese users were spotted at the outdoor cafeteria (Space 3).
- **Week two:** Similar to the previous week, Malays were the main users of all spaces. However, few Indian and Chinese users were identified within the large crowd of Malay users in Space 1. At the roadside opposite to the outdoor cafeteria (Space 3), there were a group of users from other backgrounds found standing there.
- **Week three:** Similar to the previous weeks, Malay were the major occupants of Space 1, 2 and 3. However, few Indian and Chinese users were spotted using Space 1 together with Malay users. One Indian user was present in Space 3, at the outdoor cafeteria.
- **Cumulative occupancies:** Cumulatively, Malays were found to be the most frequent users of all spaces. However, the presence of multicultural users can be seen highly present in Spaces 1 and 3.

ETHNICITIES



20m 

Figure 5.51: Daily and cumulative occupancies based on ethnicities on Fridays at Al-Ghufran Mosque open spaces.

5.4.9 Fridays: Activities

Figure 5.52 shows the patterns of activities that took place at Al-Ghufran Mosque open spaces on Fridays. There were few activities took place in all three spaces. Below are details of the activities undertaken on Fridays at the open spaces of Al-Ghufran Mosque:

- **Week one:** In Space 1, it can be identified that there were users who were sitting at the bench, waiting, having conversations and playing. However, during Fridays, Space 1 was largely occupied by the male users for the purpose of praying (Friday prayer). On the other hand, there were food vendors running their businesses in this space. Mostly in Space 2, the activities performed by the users were walking and chatting. Evidently, in Space 3, most of the users were found eating at the cafeteria.
- **Week two:** During this week, there were few users identified sitting together at the benches and resting at the gazebos provided in Space 1. Few children were spotted playing at this space. Again, Space 1 was immensely used by the males for the purpose of Friday prayer. . Similar to week one, Space 2 was used as a transition from the parking spaces to the mosques. Meanwhile, Space 3 was occupied for eating and selling foods.
- **Week three:** It was noticeable that there were few users preferred to seat at the benches and gazebo in Space 1. Children were seen playing at their regular spot within this space. Male users were largely occupying the space for praying. It was observed that two vendors were selling foods and some of the users were seen buying some foods. Few users were found walking towards the parking spaces (Space 2). Some of them were chatting and waiting at the nearby garage. Many users preferred to spend their times at the cafeteria (Space 3).
- **Cumulative occupancies:** In Space 1, many users were found having conversations with each other as well as sitting at the seating area provided there. It was also used for playing and praying. Collectively, Space 2 was meant for

walking, waiting and chatting activities. Cumulatively, eating was the most regular activity took place in Space 3 at Al-Ghufran Mosque

ACTIVITIES



Figure 5.52: Daily and cumulative occupancies based on activities on Fridays at Al-Ghufran Mosque open spaces.

5.4.10 Selected weekends: Gender

Figure 5.53 shows the patterns of behavioural occupancies on selected weekends at Al-Ghufran Mosque open spaces based on gender attribute. With reference to the occupancy of the studied spaces, all of the spaces were seen utilised by both male and female users. Details on the presence of the different genders at Al-Ghufran Mosque open spaces on selected weekends are given below.

- **Week one:** It can be seen that the frequency of male users was higher than the female users in Spaces 1, 2 and 3. However, the most preferred spot for both genders was the outdoor cafeteria (Space 3) and the spatial distribution between both genders was relatively balanced.
- **Week two:** During this week, the frequencies of both genders were decreased as compared to the previous week and their spatial distribution was fairly balanced in all spaces.
- **Week three:** Similar to the previous weeks, Spaces 1 and 2 were utilised by more male users. However, during this week, Space 3 was proportionally occupied by both genders.
- **Cumulative occupancies:** Cumulatively, throughout the selected weekdays, all studied spaces were highly used by the male users as compared to female users. Despite this, female users were found mostly present in Space 3, particularly at the outdoor cafeteria.

GENDER

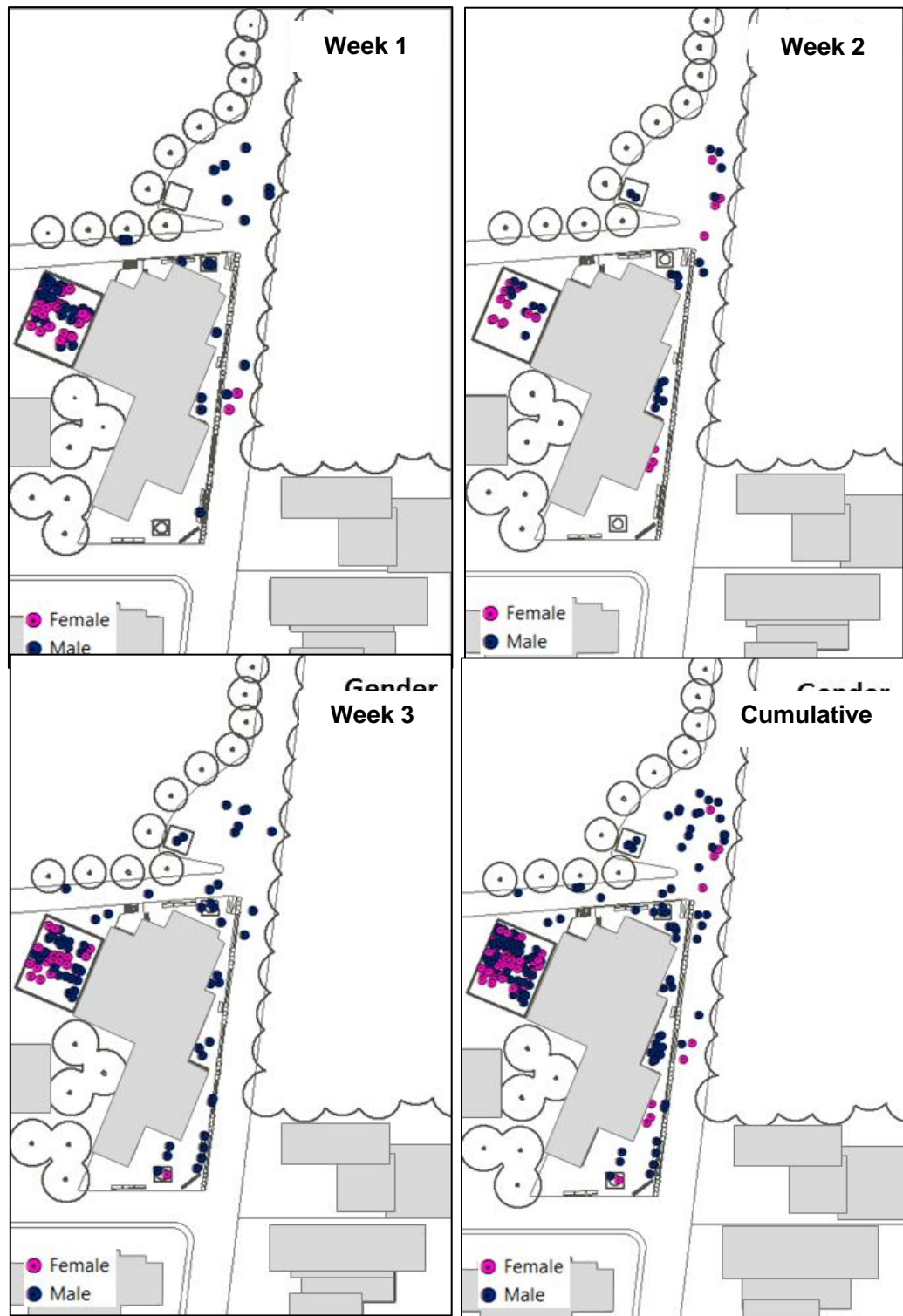


Figure 5.53: Daily and cumulative occupancies based on gender on selected weekends at Al-Ghufran Mosque open spaces.

5.4.11 Selected weekends: Age groups

Figure 5.54 shows the patterns of behavioural occupancies on selected weekends at Al-Ghufran Mosque open spaces based on the age groups attribute. Overall, it can be seen that users from different age groups occupied all of the studied open spaces. Details of user occupancy based on age group for the selected weekends at Al-Ghufran Mosque open spaces are given below:

- **Week one:** Entirely, adults were the major occupants in Spaces 1, 2 and 3. Besides adults, there were two teenagers identified in Space 2. Space 3 was hugely occupied by adults except for few children and teenagers.
- **Week two:** Similar to week one, Spaces 1, 2 and 3 were mostly occupied by adults. There was a teenage user seen in Space 1. Space 2 was entirely used by adults. Meanwhile an elderly and a kid was appeared at the cafeteria in Space 3, and the remainder were Malays.
- **Week three:** Adults were observed as the major users in all the spaces. However, there were few children and a teenager present in Space 1. Besides, there were two teenagers and two children found in Space 3.
- **Cumulative occupancies:** Overall, it can be seen that the open spaces of Al-Ghufran Mosque have invited more adults to use the spaces. However, the multi-age group users can be found in Space 3, the outdoor cafeteria.

AGE GROUPS

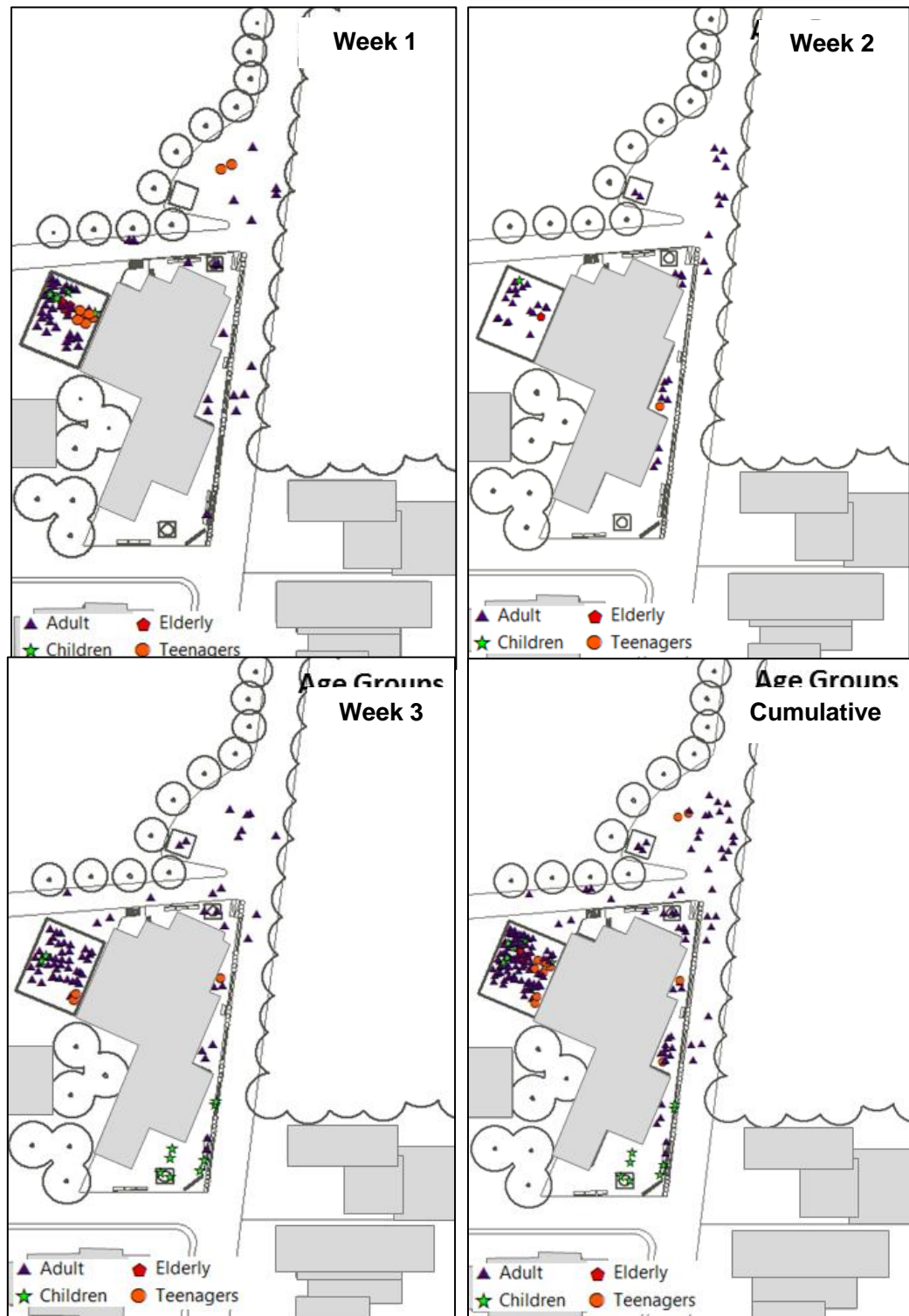


Figure 5.54: Daily and cumulative occupancies based on age groups on selected weekends at Al-Ghufran Mosque open spaces.

5.4.12 Selected weekends: Ethnicities

Figure 5.55 shows the patterns of behavioural occupancies on selected weekends at Al-Ghufran Mosque open spaces based on the ethnicities attribute. Similar with Abu Ubaidah Al-Jarah Mosque, the presence of multi-ethnic users was very minimal at this mosque. Details of the users' occupancies based on ethnic groups on the selected weekends at the open spaces of Al-Ghufran Mosque are presented below:

- **Week one:** All spaces were predominantly used by Malays. There were four Chinese and an Indian user seen enjoying meals together with other Malay users at the cafeteria (Space 3).
- **Week two:** Malays were the predominant users of all spaces. There was no presence of other ethnic groups.
- **Week three:** Similar to the previous weeks, Malay were the major occupants of Space 1, 2 and 3. During this week, an Indian user was identified present in Space 2, while a Chinese user seen in Space 3.
- **Cumulative occupancies:** Overall, Malays were found to be the most frequent users of all spaces. Few other multi-ethnic users were appeared in Spaces 1, 2 and 3.

ETHNICITIES

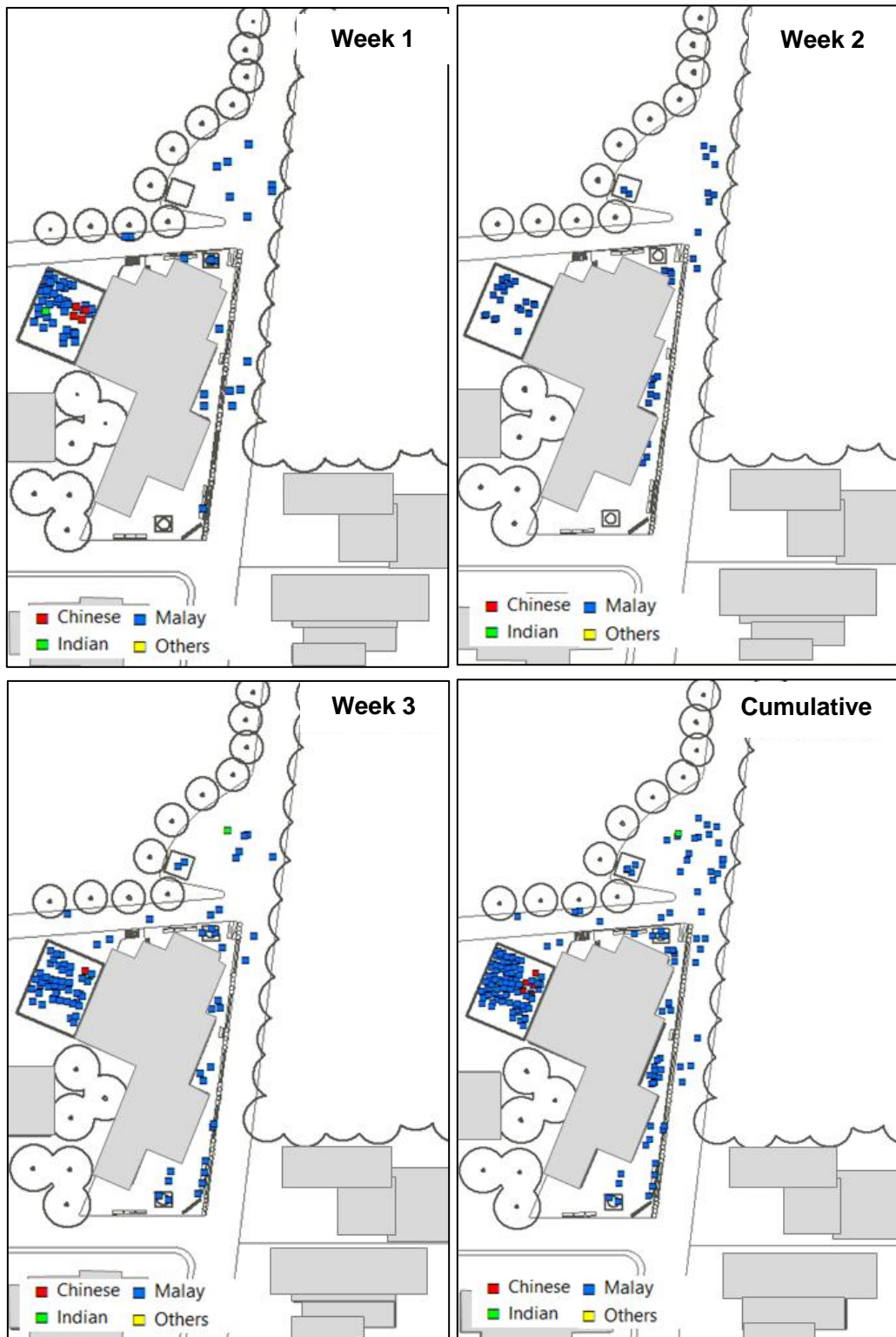


Figure 5.55: Daily and cumulative occupancies based on ethnicities on selected weekends at Al-Ghufran Mosque open spaces.

5.4.13 Selected weekends: Activities

Figure 5.56 shows the patterns of activities that took place at Al-Ghufran Mosque open spaces during selected weekends. There were few activities took place in all three spaces. Below are details of the activities undertaken on the selected weekends at the open spaces of Al-Ghufran Mosque:

- **Week one:** In Space 1, it can be identified that there were users who were sitting at the bench and at the gazebo area. Mostly in Space 2, walking was the only activity performed by the users. Evidently, in Space 3, most of the users were found eating at the cafeteria.
- **Week two:** During this week, there were few users identified sitting together at the benches and resting at the gazebos provided in Space 1. Similar to week one, Space 2 was used as a transition from the parking spaces to the mosques. The users were spotted conversing with each other while walking. Meanwhile, Space 3 was occupied for eating and selling foods.
- **Week three:** In this particular week, it was noticeable that there were a group of users had their conservations in Space 1. Some of the users preferred to seat at the benches and rest at the gazebo in this space. Few users were found walking towards the parking spaces (Space 2). Some of them were chatting and waiting at the nearby garage. Many users preferred to spend their times at the cafeteria (Space 3).
- **Cumulative occupancies:** In Space 1, many users were found having conversations with each other as well as sitting at the seating area provided there. Space 2 was meant for walking, waiting and chatting activities. Cumulatively, eating was the most regular activity took place in Space 3 at Al-Ghufran Mosque.

ACTIVITIES



Figure 5.56: Daily and cumulative occupancies based on activities on selected weekends at Al-Ghufran Mosque open spaces.

5.4.14 Key findings from the whole observations at Al-Ghufran Mosque

Based on the whole observations conducted at Al-Ghufran Mosque open spaces, there are several key findings that can be highlighted according to the attributes of gender, age groups, ethnicities and activities. Figure 5.57 shows that there were more male users present than female across the weeks. Both male and female users were observed to use the mosque open spaces more on Fridays in comparison to during weekdays and weekends. The frequencies with which both genders occupied the mosque open spaces during the selected weekdays were higher than their frequencies during the selected weekends.

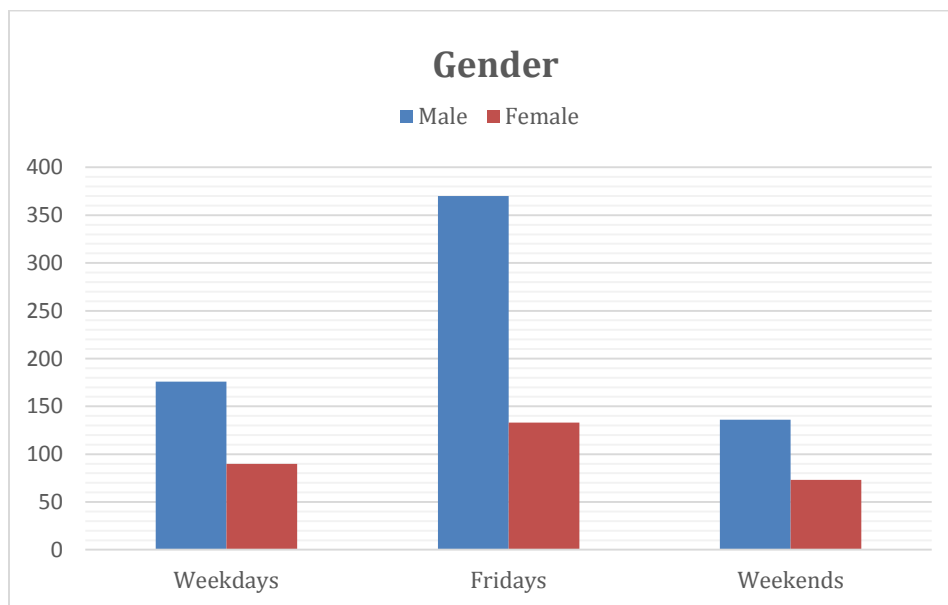


Figure 5.57: Gender attribute during selected weekdays, Fridays and selected weekends

In terms of age groups attribute (see Figure 5.58), adults were the users most commonly seen at Al-Ghufran Mosque open spaces throughout the weeks as compared to children, teenagers and the elderly. Fridays marked the highest frequencies of adults. This pattern was roughly equivalent to that of the teenage and elderly users, who were seen more frequently on Fridays. The elderly users were rarely seen occupying the spaces throughout the observations.

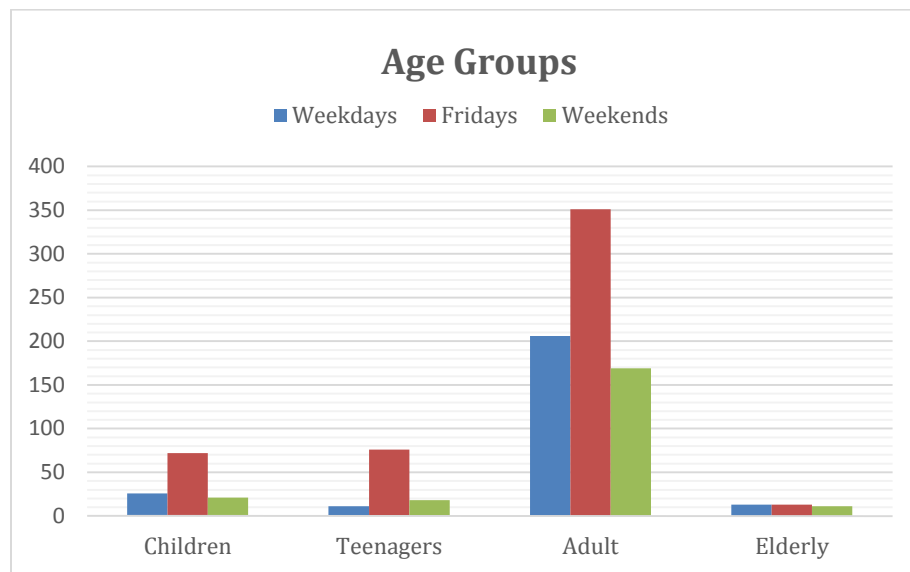


Figure 5.58: Age groups attribute during selected weekdays, Fridays and selected weekends

In terms of ethnic backgrounds (see Figure 5.59), it is evident that Malays were the major users of Al-Ghufran Mosque open spaces throughout the weeks, predominantly on Fridays. The frequencies of users from different ethnic backgrounds such as Chinese, Indians and users from other background was relatively balanced, but similarly to Malay ethnic group, they were highly present at the open spaces on Fridays.

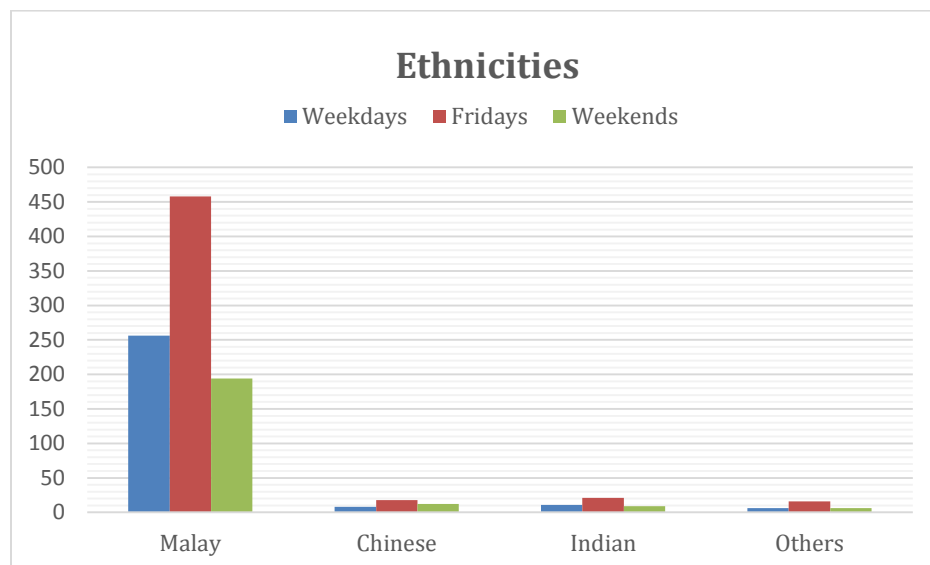


Figure 5.59: Ethnicities attribute during selected weekdays, Fridays and selected weekends

Eating, praying, resting, playing were the activities performed most frequently by users. Based on Figure 5.60 below, it is evident that these activities were frequently conducted on Fridays, followed by during weekdays except for eating.

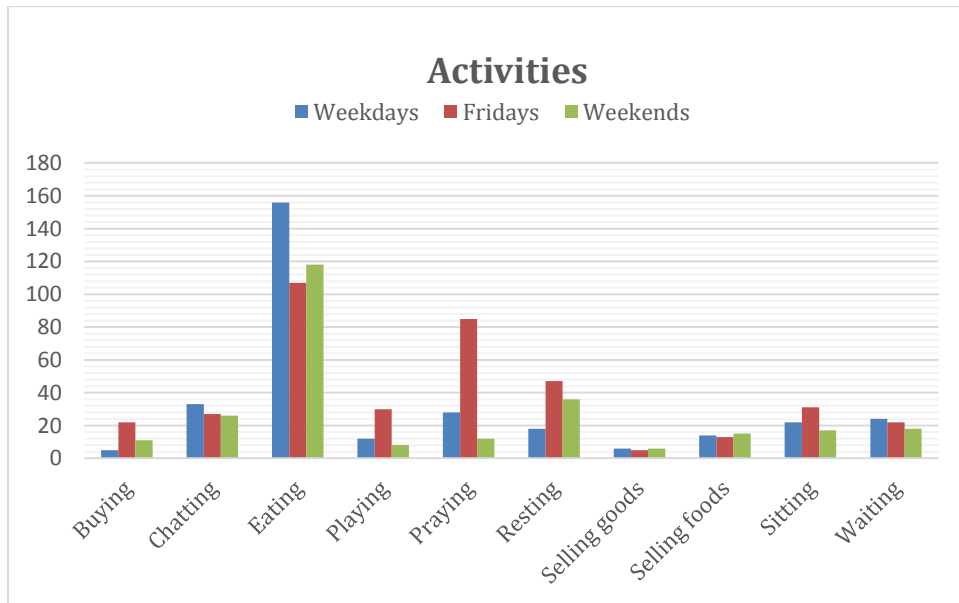


Figure 5.60: Activities attribute during selected weekdays, Fridays and selected weekends

CHAPTER 6

FINDINGS: FOCUS GROUP DISCUSSIONS

6.1 Introduction

The findings of the systematic observation with behaviour mapping presented in the previous chapter, had given insights on the quantitative and spatial aspects of this research. As mentioned in Chapter Four, focus group discussions were important to elicit qualitative information from three different target groups of the Malaysian community. This chapter presents the results and findings obtained using this method. They provided a means of listening to participants' opinions and experiences in order to obtain better understanding of the reasons and issues behind the utilisation of urban mosque open spaces in the Kuala Lumpur area. They also provided an opportunity to conduct an in-depth examination of other factors that might influence multicultural users' preferences in utilising urban mosque open spaces in Kuala Lumpur.

6.2 Profile of participants

A total of 48 participants were gathered in nine focus group discussions. Participants selected for the focus group discussions were from three different groups: (1) mosque managers, (2) the Muslim community and (3) the non-Muslim community. Details of the demographic information of participants are presented as follows (Table 6.1 on the next page). For the mosque managers group, 12 participants were recruited according to the selected case study mosques. The respective mosque administration chose their representatives to be interviewed by the researcher. There were four participants from the National Mosque, three participants from Abu Ubaidah Mosque and five participants from Al-Ghufran Mosque. Most of these participants were male, with only one female participant from the National Mosque. Furthermore, 12 Muslim participants and 24 non-Muslim participants were recruited for this study. The distribution of male and female participants for both groups recruited for the focus group discussions was quite balanced.

This was to ensure that the researcher obtained a balance of opinions, feedback and suggestions from both genders throughout the sessions.

Table 6.1: Profile of participants

Demographic Information	Category	Mosque Managers	Muslim	Non-Muslim
Gender	Male	11	6	13
	Female	1	6	11
Age	20-29 years	1	5	10
	30-39 years	5	2	6
	40-49 years	-	3	6
	50-59 years	1	2	2
	60 years and above	5	-	-
Nationality	Malaysian	12	12	24
	Other	-	-	-
Ethnicity	Malay	12	11	-
	Chinese	-	1	12
	Indian	-	-	12
	Other	-	-	-
Religion	Islam	12	12	-
	Buddha	-	-	9
	Hindu	-	-	8
	Christian	-	-	7
	Other	-	-	-
Total participants per group		12	12	24
Grand total		48		

Table 6.1 also shows that the majority of the Muslim participants in the focus group discussions were Malays. As elaborated in Chapter 2, Malay is the major ethnicity in Malaysia and all Malays are Muslims. With regard to the non-Muslim participants, the participants were equally distributed between Indians and Chinese. In terms of the religious backgrounds of the non-Muslim participants, there were followers of Buddhism, Hinduism and Christianity. For the purpose of analysis, all participants were labelled according to the groups as follows; mosque managers (MM1 – MM12), the Muslim community (MC1 – MC12) and the non-Muslim community (NMC1 – NMC24).

6.3 Structure of focus group discussions

The discussions were conducted based on three different sets of questions, developed for the previously mentioned groups. The questions were developed according to a structure comprising introductory questions, questions related to mosque open spaces and the community and questions related to the ideal design and characteristics of mosque open spaces from the perspectives of both mosque managers and users. The set of questions developed for the mosque managers differed slightly from that for the Muslim and non-Muslim communities (refer to Appendices K, L and M). This was due to the fact that the researcher anticipated this group's responses to be centred more around the aspects related to management of the mosques. On the other hand, the researcher expected responses from the Muslim and non-Muslim communities to be much more inclined towards the participants' individual experiences, needs and suggestions on the subject matter. As the discussions were moderated by the researcher, all the participants were invited to voice their opinions and, after analysing the data, the qualitative findings obtained through this method were gathered based under specific themes, as presented in Table 6.2 below:

Table 6.2: Themes emerging from the qualitative findings

Themes emerging from discussions with the mosque managers	Themes emerging from discussions with the Muslim and non-Muslim communities
1. Past and present background of the mosque	1. Favourite open or outdoor spaces
2. Current condition and design of the mosque open spaces	2. Outdoor activities preference
3. User groups	3. Feelings and experience
4. Attractions and sense of invitation at the mosque open spaces	4. Current functions and appearance of the mosque open spaces
5. Participation of the non-Muslim community	5. Public friendliness and social acceptance
6. Acceptance of and consideration for non-Muslims	6. Ideal functions and activities for urban mosque open spaces
7. Ideal design characteristics for mosque open spaces	7. Ideal design, layout and facilities for urban mosque open spaces
	8. Importance of promotion, publicity and education

The next sections presents the findings from the mosque managers, then the Muslim and then the non-Muslim communities.

6.4 Findings obtained from the mosque managers

6.4.1 Past and present background of the mosque

Focus group discussions with the mosque managers began with an introductory question about the general background and history of the selected case study urban mosques – the National Mosque (national level), Abu Ubaidah Al-Jarah Mosque (district level) and Al-Ghufran Mosque (sub-district level). In terms of the age of these three urban mosques, the National Mosque is the oldest (51 years old), followed by Abu Ubaidah Al-Jarah Mosque at 28 years old and Al-Ghufran Mosque at 22 years old. Based on the information given, it was confirmed that these three urban mosques are surrounded by multicultural or mixed-neighbourhood zones within the city of Kuala Lumpur. One manager from the National Mosque, stated that the National Mosque can be regarded as follows:

‘(...) can be put as a “multinational mosque” in the context which is surrounded by active commercial areas and tourism spots.’

(MM2: The National Mosque)

Furthermore, the roles and functions of the National Mosque itself have not changed since day one but there have been some changes over time, including to the landscape design aspect. This is fairly similar to the cases of the Abu Ubaidah Al-Jarah and Al-Ghufran Mosques, at which there have been gradual and ongoing improvement and upgrading works proposed by the mosque management in order to offer better services and facilities to the community.

‘The roles of the mosque remain the same from back in 1965 until now. It still serves the Muslims for their rituals and being one of the major tourist spots (...)’

(MM1: The National Mosque)

‘The landscaping has changed parallel with current development and people’s needs.’

(MM2: The National Mosque)

‘Not many changes have been done except for mosque upgrading works.’

(MM5: Abu Ubaidah Al-Jarah Mosque)

‘This mosque is now 22 years old. It has been upgraded from time to time until it becomes what it is now.’

(MM8: Al-Ghufran Mosque)

In addition to this valuable evidence, Al-Ghufran Mosque is unique compared to the other mosques because it has been upgraded with an outdoor cafeteria, a multipurpose hall and a travellers’ hotel. This has made Al-Ghufran Mosque the first mosque of its kind in Kuala Lumpur.

6.4.2 Current condition and design of the mosque open spaces

After gaining relevant information regarding the past and present backgrounds of the mosques, the mosque managers were asked about the current condition and design of their respective mosque open spaces. For the National Mosque, one of the managers described how this mosque and its whole complex (including the surrounding open spaces and plaza) were designed according to a specific theme and a design metaphor. This is different in the case of Abu Ubaidah Al-Jarah Mosque, which does not follow any specific design concept or intention. The Al-Ghufran Mosque managers informed the researcher that their mosque had been designed and developed more as a functional place rather than emphasising the aesthetic aspect of the mosque itself. They also elaborated that there may not be the same availability of open spaces around this mosque in comparison to other mosques in the territory of Kuala Lumpur.

‘The whole *masjid* has been designed with A “Malay-Village” theme which includes the concept of openness (welcoming the guests), it is raised on stilts as per Malay traditional houses. The open spaces have been turned into the “Garden of the Coconut Trees” resembling the coconut tree as a multi-use plant that is always being planted in the village.’

(MM2: The National Mosque)

‘There’s no specific design concept introduced since early development of this mosque. It is not compulsory because we do not have special agenda such as being a tourism-based mosque.’

(MM6: Abu Ubaidah Al-Jarah Mosque)

‘This mosque has aimed to be a “one-stop-centre” since the beginning.’

(MM9: Al-Ghufran Mosque)

In addition, another manager (MM3) from the National Mosque added that the mosque plaza and surrounding open spaces are currently equipped with facilities such as ATMs, public toilets, seating and also food stalls. On the other hand, a manager (MM7) from Abu Ubaidah Al-Jarah Mosque reported that the upgrading works for this mosque open space involved the expansion of parking spaces due to users’ demand, shop units to support nearby entrepreneurs (particularly neighbourhood residents), staff quarters and also a badminton court.

‘Hence, the open spaces that we have around the mosque are meant for facilities. We make our own initiatives based on the suitability.’

(MM7: Abu Ubaidah Al-Jarah Mosque)

This is also similar to the view of the Al-Ghufran Mosque manager, who stated that:

‘The open spaces here are large parking spaces and will be used for communal activities during weekends or special or seasonal occasions. It is upgraded from time to time based on the available funding.’

(MM11: Al-Ghufran Mosque)

6.4.3 User groups

The discussions were then moved to another area of enquiry in which the researcher asked the mosque managers about the user groups at these mosques and their open spaces, to obtain a clear picture of whether or not multicultural users have a presence at these three urban mosques. It was hoped to gain an insight about the types of users, as indicated by their general backgrounds, such as religion or ethnicity, as well as age groups. According to their responses, it can be recorded that there are several types of users present at these mosques (see Table 6.3).

Table 6.3: Types of users

Types of users		
The National Mosque	Abu Ubaidah Al-Jarah Mosque	Al-Ghufran Mosque
1. Muslims	1. Muslims	1. Muslims
2. Non-Muslims	2. Non-Muslim neighbours	2. Non-Muslims
3. ‘Touch-and-go’ visitors (come in, take photographs and go)	3. Children	3. Children
4. Groups of families and groups of foundations or schools	4. Teenagers	
5. Working tourists		
6. Homeless people		

There are certain similarities to be found in the cases of these respective mosques, as reported by the mosque managers:

- i) Muslims were categorised as the most frequent and active users, predominantly during the peak times of daily prayers and Friday noon prayer. For Al-Ghufran Mosque, as stated by MM8, Muslim users come not only from the nearby residential areas but also from other places within the radius of Kuala Lumpur city.
- ii) Non-Muslims were seen at these mosques; apparently every day at the National Mosque, while they were also seen many times for certain seasonal occasions at the other two mosques.

6.4.4 Attractions and sense of invitation in the mosque open spaces

After acknowledging the types of users present at these three mosques, the discussions became more interesting when the researcher probed the participants with the question 'what makes users interested in utilising the mosque open spaces?'. The question itself was a reflection on the existing attractions and activities organised within the mosque open spaces that may invite users to engage with and utilise the spaces. The answers from

the mosque managers were varied. The National Mosque managers stated that the open plaza of the National Mosque itself might have been the main element that attracted people, notably food and souvenirs vendors, charitable organisations or individuals, to utilise the space for various activities, such as temporary and seasonal markets as well as charity works. In addition, they also agreed that the provision of facilities at the National Mosque also plays an important role in enticing people to use the mosque open spaces. Moreover, one of the managers also stated that the National Mosque management and authority always work together to organise social activities that cater to all groups of the community. For example, the mosque management proposed many recreational activities such as treasure hunts, young people's boot camps and many more. All of the spaces around the mosques were used as checkpoints and stations for these activities. From the managers' perspective, this initiative was noteworthy as a way of developing social integration between members of the community and mosque personnel.

‘We used the plaza for mega bazaar with booths and stalls installation (...) It is different on Friday afternoon and during *Ramadhan* (fasting month) where the bazaars are located at the other side of the mosque, adjacent to the Methodist school.’

(MM4: The National Mosque)

‘(...) food giveaway for homeless and the needy were usually held at the plaza.’

(MM2: The National Mosque)

‘We have provided public facilities for visitors such as a mosque library and a few permanent food stalls at the rear side of the mosque (...).’

(MM1: The National Mosque)

In the case of Abu Ubaidah Al-Jarah Mosque, the mosque management attempted to optimise use of the mosque open spaces by organising various communal activities to encourage participation from both the Muslim and non-Muslim communities, particularly those coming from the neighbouring residential areas. Several activities and events held in this mosque's open spaces were also similar to those held at the National Mosque, such as a Friday afternoon bazaar, seasonal markets and recreational activities for the local community. On a separate note, one of the managers (MM6) mentioned that they

organised series of courses that were open to both Muslims and non-Muslims. These included courses in Islamic slaughter (according to Islamic law in producing *halal* poultry and meat) and a Malaysian *halal* cuisine or culinary course. *Halal* is an Arabic word meaning permissible or lawful and can be contextualised in various aspects of Islamic law and regulations. It is also reported that the local community take the opportunity to utilise the mosque open spaces for wedding receptions, particularly Malay weddings. Another physical attraction adjacent to the mosque is the Sri Rampai lake where people go fishing and to relax during their leisure time and at the weekend.

‘The open spaces are available for wedding events, a farmers’ market and recreational activities.’

(MM5: Abu Ubaidah Al-Jarah Mosque)

‘Friday afternoon bazaar during Friday prayer is one of the main attractions.’

(MM7: Abu Ubaidah Al-Jarah Mosque)

As for Al-Ghufran Mosque, the managers said that many activities were held on both weekly and monthly bases. The main physical attraction at this mosque is its outdoor cafeteria, which opens from morning until night-time. They also mentioned, however, that the open space dedicated to parking has been used seasonally for certain activities, including as an extension of the flea market, usually held at the cafeteria.

6.4.5 Participation of the non-Muslim community

Moving on to another aspect of the discussions, the researcher addressed several enquiries to the mosque managers regarding the participation of non-Muslims in the outdoor activities or events organised at the mosque open spaces, or even activities that they carry out independently. The National Mosque managers asserted that participation of the non-Muslim community is very high at the National Mosque. More than that, the managers found that the non-Muslim community engaged and interacted well with the Muslim community in the events organised by the mosque management at the mosque complex.

‘The non-Muslims together with the Muslims and new reverts have participated in our treasure hunt activity organised by a non-governmental organisation. They were socially integrated and used the mosque and its plaza as departure and arrival points.’

(MM1: The National Mosque)

However, it was also reported that some of the non-Muslims felt uncertain when carrying out their own acts, in terms of, for example, whether or not they were behaving appropriately in accordance with mosque regulations. The managers said that this is the point at which the role of the mosque volunteer becomes important, as someone with valuable insight about the mosque, in outreaching to non-Muslims.

‘Some of them would love to come but they have the “fear of unknown” in terms of what the mosque is all about. Therefore, our volunteers are working to explain to them everything about the mosque background and history, mosque architecture and spaces, as well as codes of conduct.’

(MM4: The National Mosque)

It is relatively different in the case of Abu Ubaidah Al-Jarah Mosque. The managers explained that they have seen some non-Muslims who live in the surrounding neighbourhood use the mosque open spaces for sports and fitness activities. Some have also entered the mosque compound and asked for the security guard’s consent to use the public toilets.

‘We have seen some Indian and Chinese residents were jogging and exercising in front of the mosque. Some of them also used the badminton court provided by the mosque to play badminton and also *sepak takraw* with their friends.’

(MM7: Abu Ubaidah Al-Jarah Mosque)

Sepak takraw is a Malay term to describe a game native to South East Asian regions such as Malaysia, Thailand and Philippines. Literally, *sepak takraw* can be translated in English as kick volleyball game. Besides using the mosque open spaces for sports and recreation, managers told the researcher that there were several events at the mosque in which non-Muslims participated. For example, there was a public gathering organised by

the mosque management for Members of Parliament (MPs) together with all of the religious leaders from the neighbourhood.

In the case of Al-Ghufran Mosque, managers agreed that the participation of non-Muslims at this mosque was promising. Similar to at the other mosques, non-Muslims had been observed participating in social programmes such as badminton and futsal tournaments, flea markets, car boot sales and many more. Moreover, non-Muslims also went to enjoy the Malaysian halal dishes prepared by the food caterer assigned by the mosque management.

‘There are many non-Muslims who love to eat at the cafeteria (...).’

(MM12: Al-Ghufran Mosque)

6.4.6 Acceptance of and consideration for non-Muslims using the mosque open spaces

In terms of acceptance of and consideration for non-Muslims using the mosque open spaces, all of the managers from these three mosques gave the same response – that non-Muslims are always welcomed and invited to visit the mosques and utilise the mosque open spaces. The only aspects that they need to observe and adhere to are the ethics and basic regulations of the mosque, such as the dress code.

‘They are most welcome as long as they comply to the basic regulations, if they want to enter the mosque.’

(MM3: The National Mosque)

‘No restrictions at all (...).’

(MM5: Abu Ubaidah Al-Jarah Mosque)

‘(...) they just need to dress properly. As far as we are concerned, none of them faced any problems at this mosque.’

(MM10: Al-Ghufran Mosque)

6.4.7 Ideal design characteristics for the mosque open spaces

After exploring the first two sections of the discussions – ice-breaking or introductory questions – the last section explored the ideal design and characteristics of mosque open

spaces from the mosque managers' perspectives. This section was vital to discovering how mosque open spaces should be planned and designed to fulfil the aspiration of them functioning as multicultural, community-friendly places. In the case of the National Mosque, the managers had generated some ideas as to what they would propose to improve the current condition of the open spaces. They mentioned that there is a limitation to expanding the existing mosque open spaces at the National Mosque, but upgrading and decorative enhancements can be made with the provision of dedicated relaxing or waiting areas for users. On a separate note, they also mentioned having a *souq* (bazaar or market) as an ideal physical element to attract more members of the multicultural community to actively come and visit and utilise the mosque open spaces. Another aspect that the National Mosque managers felt was vital to take into account was the security aspect of the mosque.

‘We cannot expand more, due to space limitation. However, we can beautify and upgrade it. We think it is necessary to have proper relaxation areas for the visitors.’

(MM1: The National Mosque)

‘The ideal idea would be a *souq* which is properly designed and installed with more authentic multinational cuisines and stuffs.’

(MM2: The National Mosque)

‘We also need to improve the security level (...).’

(MM3: The National Mosque)

The managers from Abu Ubaidah Al-Jarah Mosque also outlined some of their ideas and visions as to how they wished to see the mosque open spaces improved to serve the multicultural community well. They reached a consensus that they would like to see Abu Ubaidah Al-Jarah Mosque grow as a one-stop-centre (OSC). Additionally, they also wished to propose multipurpose facilities at the mosque compound which could be used by members of the community regardless of their religion and social background, as long as they complied with the basic regulations set out by the mosque management and authority.

‘We would like to be a “one-stop-centre” mosque which is complete with amenities and facilities for the local residents.’

(MM6: Abu Ubaidah Al-Jarah Mosque)

‘If we have a multipurpose hall in the future, non-Muslims are also welcome to rent the hall for their events as long as they follow the regulations.’

(MM7: Abu Ubaidah Al-Jarah Mosque)

In the case of Al-Ghufran Mosque, the managers wished to have more outdoor facilities for users in the future, such as seating and gazebos. They also mentioned that, as the mosque is now operating as an OSC, they were thinking of having a better landscape design to make the entire mosque complex more aesthetically appealing. Besides, they also considered that good publicity regarding the mosque and its events would influence people from the surrounding residential areas to join in with the activities, thereby enlivening the mosque open spaces. Hence, they considered it is important to have digital billboards outside the mosque.

‘We would like to have proper landscape design and more facilities in the future like the one we have in our cafeteria.’

(MM9: Al-Ghufran Mosque)

‘We would like to have digital billboards to announce our activities, so that the community is aware (...).’

(MM10: Al-Ghufran Mosque)

The next section describes the findings obtained from discussions with the Muslim and non-Muslim communities who live and work in the areas surrounding these selected case study mosques.

6.5 Findings obtained from the Muslim and non-Muslim communities

As mentioned in Section 6.3, eight broad themes emerged from analysis of the focus group discussions with the Muslim community (MC) and non-Muslim community (NMC). These themes are: favourite open or outdoor spaces; outdoor activities

preference; feelings and experience at the mosque and its open spaces; current functions and appearance of the mosque open spaces; public friendliness and social acceptance; ideal functions and activities for urban mosque open spaces; ideal design, layout and facilities for urban mosque open spaces; and the importance of promotion, publicity and education. Each of these themes will be discussed in the following subsections.

6.5.1 Favourite open or outdoor spaces

Prior to commencement of the real discussions, the researcher played her role as moderator to encourage every participant to feel comfortable with each other. Since many of the participants were not friends or acquaintances, and thus hardly knew each other, the researcher posed some simple icebreaker questions regarding their backgrounds and interests. Afterwards, discussions with both the Muslims and non-Muslims began with an introductory question: ‘could you please tell me what your favourite outdoor places are?’. This question was posed in order to elicit information on the types of open spaces that the participants liked. This question was important because it provided an initial insight with regard to what led participants to use urban mosque open spaces. According to their responses, participants identified several types of open spaces. In Table 6.4 below, along with the responses, the numbers in the adjacent columns indicate the frequency with which particular responses were mentioned throughout the discussions. Table 6.4 presents the Muslim and non-Muslim participants’ favourite open spaces:

Table 6.4: Participants' favourite open or outdoor spaces

Muslims	Frequency	Non-Muslims	Frequency
Outdoor eateries	8	Outdoor eateries	16
Public parks	6	Public parks	14
Recreational areas or parks	3	Nature reserves	8
Parks at shopping malls	3	Waterfalls and beaches	6
Highlands and islands	2	Pet-friendly parks or gardens	4
Markets or bazaars	2	Home yards	3
Historical spots	1	Forest	1

Referring to Table 6.4 above, outdoor eateries were the most preferred open or outdoor spaces for the Muslim participants. This was followed by a preference for public

parks, recreational parks and also parks at shopping malls. There were fewer participants who indicated a preference for enjoying more natural places such as highlands and islands. On the other hand, there were two participants (MC2 and MC12) who mentioned that they loved exploring from one outdoor market or bazaar to another, even at night time. Out of 12 participants, one participant mentioned 'historical places' as his favourite type of outdoor space.

As for the non-Muslim participants, the spaces mentioned most frequently, with 16 responses, were outdoor eateries, which happened to be akin to the Muslim participants' preference. They also preferred to go to public parks and also parks or gardens that allowed them to take their pets from home. In a similar way to the Muslim participants, some of the non-Muslim participants enjoyed being in natural settings such as nature reserves or sanctuaries. Six participants also indicated being by the sea, beaches and waterfalls as their preference. There was one participant (NMC3) who chose to discover natural forests, whilst others (NMC5, NMC9 and NMC10) preferred to spend their leisure time in their home yards.

Apart from the above-listed favourite open spaces, several other places were also mentioned by some of the Muslim and non-Muslim participants and which can be categorised as indoor spaces. These included places such as cinemas, shopping complexes and also bookstores. One of the non-Muslim participants did say that she might go out sometimes but that she preferred to stay at home. This kind of response shed some light on another kind of participants' favourite places.

NMC2 – 'I rarely go out and rather stay at home; but when I go out I will go to places like shopping malls and sometimes go to the shopping mall park like Kuala Lumpur Convention Centre (KLCC) Park.'

6.5.2 Outdoor activities preferences

Understanding participants' preferences for outdoor activities was also supplementary information that needed to be obtained from the discussions. After asking about their favourite outdoor places, participants were asked 'what do you do in such places?'. The

similarities and differences in responses between the Muslim and non-Muslim participants in relation to their favourite outdoor activities at the selected mosques were marginal. Most would rather spend a majority of their time outside for social activities such as relaxing, hanging around, eating, shopping and watching movies, either alone or with their friends and families during leisure times, weekends or after work. A number of participants did use a Malay slang word, '*lepak*', to indicate spending time aimlessly or leisurely. Recently, the word *lepak* had been accepted and included in the Oxford dictionary.

MC3 – '(...) walk around mindlessly, find food, socialise with friends and family, observe human behaviour and judge their lifestyle.'

MC6 – '(...) I need my "me time". I go for walking and sitting wherever I like. Yes, it would be better with an ice cream!'

MC8 – 'Going to the eateries where you can enjoy the food with friends and family after having a full working week (...)'

NMC4 – 'Spend my time alone. Good for self-reflection.'

NMC13 – '(...) *lepak* with family, friends and pets (...).'

On the other hand, some of the Muslim and non-Muslim participants expressed a preference for spending their time engaging in sports or fitness activities. These included exercising, diving and snorkelling, going for a walk or run, as well as hiking with groups of friend or hikers.

NMC7 – 'Jogging around the neighbourhood during weekend.'

6.5.3 Feelings and experiences at the urban mosque and its open spaces

After the respondents had answered the introductory questions as presented in the previous subsections, the researcher then moderated the discussions towards the questions that revolved around the urban mosque and its open spaces. This subsection describes the feelings and experiences that participants might encounter at the urban mosque and its open spaces. Since the researcher had anticipated that all Muslim

participants generally had an experience of going to the urban mosque, they were asked relatively few questions, as follows: ‘when do you usually go to the mosque?’, ‘which mosque do you prefer to go to?’, and ‘have you ever used the mosque open spaces for any activities or else?’.

As expected, all 12 Muslim participants had been to the mosque. Most of them stated that they usually go there in the afternoon, evening or even at night to perform prayers or attend events. Some, especially the male participants, reported also going to the mosque for Friday afternoon prayers. Furthermore, they also go to the mosque during grand festivals and celebrations such as *Eid Al-Fitr* and *Eid Al-Adha*. They also stated that they go to the mosque for special events such as religious talks, community activities and a lot more. In terms of their preference for urban mosques, one of the participants (MC5) revealed that he normally went to the National Mosque and even a few other large mosques near Kuala Lumpur such as Wilayah Mosque and Putra Mosque in Putrajaya. MC1 and MC3 informed the researcher that they preferred to go to mosques close to their residential areas, which in this case is Abu Ubaidah Al-Jarah Mosque in Taman Seri Rampai, Kuala Lumpur. MC3 also mentioned that he also prefers urban mosques with large parking spaces. MC11, who lives in the neighbourhood near to Al-Ghufran Mosque, mentioned that she prefers to go to the nearby mosque which is clean and well equipped with facilities such as air conditioning.

In terms of their experience related to the use of urban mosque open spaces, some participants reported that they had used the open spaces, but some had either not used or else seldom used the spaces. MC6 mentioned that sometimes during her lunch break, she would eat at the outdoor food stalls at the National Mosque. Another participant (MC7) mentioned that he went to the National Mosque plaza to take photographs for his photography assignments. MC9, MC10 and MC11 reported that they had joined some of the mosque-based activities such as *Eid* celebrations which were held around the compound of the Al-Ghufran Mosque.

Muslim participants were asked about their feelings and experiences in encountering the presence of non-Muslims within the urban mosque open spaces. Some said that they had seen non-Muslims in the urban mosque open spaces but the rest did not report seeing any.

MC1 – ‘It is a rare sight to see the spaces being utilised by other races other than Malay.’

MC5 – ‘Yes, if the mosque is an icon like the National Mosque, they will mingle and do some activities especially photography. We may interpret that they spend time for tourist place.’

MC10 – ‘Yes, I have seen many programmes being held at the compound such as blood donation and flea market. Some of the visitors were non-Muslims with different racial backgrounds.’

As for the non-Muslim participants, there were subtle differences in the questions asked to this group. Since the researcher did not know whether or not these non-Muslim participants had had any experiences at an urban mosque, they were asked ‘have you been to any mosque?’. There were 15 out of 24 non-Muslim participants who had never had any experience at an urban mosque and its open spaces. Subject to the positive responses by the remaining nine participants, namely NM3, NMC8, NC11, NMC14, NMC15, NMC16, NMC18, NMC21 and NMC23, the researcher then probed them further by asking ‘have you ever used the mosque open spaces for any activities?’ as well as ‘have you experienced anything including challenges when you were using the mosque open spaces?’. The responses were varied. Some participants, such as NMC18, expressed positive feelings, however NMC3 and NMC8 reported feeling discomfort when they were there and when using the urban mosque open spaces.

NMC3 – ‘Just to visit. Have to ensure clothing is appropriate. Even then, usually get weird stares from the Muslims there (...)’

NMC8 – ‘(...) it doesn’t seem multicultural at all. It is just single-cultured for the Muslims.’

NMC18 – ‘This is actually reflective of the community which runs the mosque. The compound of the nearest mosque to where I currently live is a great place for people of all faiths to mingle. There are banquets during *Eid Mubarak* during which all are invited.’

NMC21 – ‘No activities. Just pass-by or while waiting for friends fulfilling their religious requirements.’

However, there were two non-Muslim participants who lived near to Abu Ubaidah Al-Jarah Mosque and who had never been to an urban mosque open space and who were keen to inform the researcher of the reasons behind their experiences. One of them (NMC2) reported on the issue of accessibility at the mosque. According to him, the gate to the mosque is locked; thus, users do not feel invited to use the space. Another participant (NMC7) told the researcher that she wished to visit the mosque, use the open spaces and even join the activities organised there. Yet she felt cautious in doing so unless she had someone with her who was familiar with the place (e.g. a Muslim acquaintance), and who could show her around.

NMC2 – ‘No. Because it’s always locked. No idea who is having the key.’

NMC7 – ‘It’s interesting but I don’t have close Muslim friends to bring me in.’

6.5.4 Current functions and appearance of urban mosque open spaces

Besides eliciting the participants’ feelings and experiences at the urban mosque open spaces, all of them were requested to share their opinions on the current roles, functions and appearance of the urban mosque open spaces. Generally, there were eight functions of the urban mosque open spaces listed by both the Muslim and non-Muslim participants. Through their experience and observations, participants related that the urban mosque open spaces at the National Mosque, Abu Ubaidah Al-Jarah Mosque and Al-Ghufran Mosque functioned as spaces for various community activities such as mass gatherings, banquets, flea markets or bazaars, boot camps, talks, wedding receptions, kids’ and family activities as well as waiting, relaxing and transit spaces. One of the non-Muslim participants commented that the use of urban mosque open spaces should be inspired by

the national aspiration (i.e. One Malaysia). One Malaysia is an aspiration promoted by the current Prime Minister of Malaysia that emphasises diversity in unity. Nevertheless, there were four non-Muslim participants who reported having no idea or comment regarding the researcher's enquiry.

MC4 – 'A space or platform for people regardless of religion to congregate and mingle. Unlikely to witness such scene neither in the past nor at present.'

MC5 – '(...) can be a place where the mosque staff can open a booth to invite visitors to learn about mosque, or something similar to that.'

MC10 – '(...) organise kids' activities to invite kids and parents to the mosques such as colouring contest, play date, tele matches (...)'

NMC6 – 'It can be shared for any activities like gathering and relaxing.'

NMC11 – '(...) One Malaysia places but need to be more One Malaysia spirit and not just focused on racial or religious activities.'

NMC20 – 'It could be a good place to start engaging with people of other faiths whom I am sure would feel welcome and included. This should be reciprocated though. It would be great too if Muslims are open to visit the compounds and use the facilities of other houses of worship (temples, churches, etc.).'

NMC24 – 'Well-functional. My Muslim friends have no problems fulfilling their religious needs.'

With regard to the appearance and design of urban mosque open spaces, there were positive and negative responses from both the Muslim and non-Muslim participants. Some reported that the design of the urban mosque open spaces appeared fine to them but nearly half of the participants argued that they found the urban mosque open spaces unattractive, uninviting and requiring lots of improvement. Their responses are as follows:

MC2 – 'Attractive and moderate design which gives a warm welcome to each of its visitors.'

MC3 – ‘Need to be more attractive with more landscape décor. Plus, it should have basic public amenities (toilet, car park, Wi-Fi).’

MC4 – ‘(...) however, it is not attractive and very much uninviting.’

MC5 – ‘Mosque has become an icon or landmark for a particular area. It will reflect the mosques require high maintenance to preserve the overall space.’

MC8 – ‘Not functioning, sometimes dirty, not attractive, sometimes people don’t notice its presence.’

MC11 – ‘Nowadays, the designs of the mosques are varied which is good as it does not stick to dome and minaret only. A good design of the mosque today could invite more people.’

NMC6 – ‘Just to create a barrier to the non-Muslims.’

NMC11 – ‘Most of them are not unique in design (...)’

NMC17 – ‘I don’t know much about this but I think it is more important that a house of worship be more functional than attractive.’

NMC23 – ‘I think it’s okay.’

6.5.5 Public friendliness and social acceptance

In another aspect, the researcher also asked the Muslim participants specific questions in order to elicit their personal opinions regarding their acceptance and tolerance of urban mosque open spaces being used by the multicultural community, including the NMC. The researcher felt the need to address this enquiry because the mosque is primarily a religious institution for Muslims. It was found that all of the Muslim participants agreed that urban mosque open spaces should function as community-friendly spaces, particularly for non-Muslims. Their opinions were mostly very similar to the positive views of the mosque managers. For them, the most important aspects that people who live in a multicultural country should practise are accepting and respecting each other in a way that ensures harmonious living.

MC1 – ‘Yes, why not? They are not in any way posing harm to the Muslims. The space shouldn’t be exclusive to the Muslims. The Muslims should welcome them wholeheartedly (...).’

MC4 – ‘Yes, they can.’

MC5 – ‘Yes, mosque should be made as community-friendly and not only restricted for Muslims. This way, we can approach and educate the non-Muslims to know about mosque and Islam.’

MC7 – ‘Yes. Muslim to use the mosques and non-Muslim to get to know what is Islam and the function of the mosques. It could increase awareness to increase cultural and religion knowledge.’

MC9 – ‘Yes, but the programmes or activities must be monitored and approved to avoid any unnecessary situation.’

MC11 – ‘Yes, mosque should be made as community-friendly and not only restricted for Muslims.’

In addition to the above responses, the Muslim participants also elaborated on the challenges or opportunities that might arise when urban mosque open spaces are used by the multicultural community. Even though most believed that urban mosque open spaces should inspire multicultural use, at the same time they also perceived that some issues will arise, particularly with regard to the sensitivity of the MC and even the NMC. Besides, some of them also mentioned that this situation might involve the issue of consent and approval from authorities.

MC2 – ‘There is a chance that some of the narrow-minded Muslims opposing this as mosque is considered as a sacred place even the compound itself.’

MC6 – ‘Yes, sensitivity and approval from authorities.’

MC8 – ‘A good way to introduce Islam, might get rejection from non-Muslims outside.’

MC11 – ‘(...) it could trigger sensitivity for the Muslims.’

MC12 – ‘There is a chance that some of the narrow-minded Muslims opposing this as mosque is considered as a sacred place even the compound itself.’

However, we can use this situation to educate them and the non-Muslims about the roles of mosque and so on.’

6.5.6 Ideal functions and activities for urban mosque open spaces

Another theme that emerged through the discussions was that of ideal functions and activities for urban mosque open spaces. In an attempt to elicit more of the participants’ opinions regarding the urban mosque open spaces at the studied mosques, the researcher asked them ‘what makes you want to use the spaces?’ and ‘what kind of activities can be enjoyed by both the Muslim and non-Muslim community at the urban mosque open spaces?’. Their responses were recorded as follows (see Table 6.5):

Table 6.5: Functions and activities for mosque open spaces from the perspective of the participants

Muslims	Non-Muslims
1. Weekly sports, games and recreational activities	1. Communal banquets once a month
2. Eating area	2. Wedding receptions
3. Hawker stalls	3. Fundraising jumble sales
4. Place for vendors to run businesses such as a night market	4. Small events such as community meetings or birthday parties
5. Gatherings and banquets	5. Exercising
6. Social activities including charity	6. Relaxing
7. Appreciating Islamic architectural and landscape design	
8. Relaxing	

Based on Table 6.5, it can be seen that both Muslims and non-Muslims had similar preferences in terms of the ideal activities that would encourage them to utilise the open spaces at the studied mosques. The next subsection reveals more details on their views and opinions regarding the ideal design, layout and facilities for urban mosque open spaces.

6.5.7 Ideal design, layout and facilities for urban mosque open spaces

Besides getting an idea of what kinds of activities both Muslim and non-Muslim participants preferred to enjoy at the urban mosque open spaces at the studied mosques, participants were asked about their opinions of the ideal design, layout and facilities for the open spaces at the studied mosques. The participants wished that the urban mosque open spaces could be improved in many ways (refer to Table 6.6). They also remarked that if their suggestions were taken into consideration, the mosque open spaces would most probably attract more visitors and users in the future.

Table 6.6: Ideal design, layout and facilities for the urban mosque open spaces from the perspectives of the participants.

Aspects of improvement	Examples
Scale of the open spaces	- Larger spaces would accommodate more users and more activities
Landscape elements (softscapes and hardscapes)	- Water features, seating, plants and trees
Colour scheme	- Experiment with suitable and attractive colours
Facilities for all	- Cater to the needs of all age groups - ATMs, mini-mart, playground, recreation area, eating area, kids' area, hawkers and proper public toilets
Legibility	- Provide multi-language signage, not just Arabic signage
Accessibility	- It is better to have a non-gated mosque

MC1 – ‘A gloomy or dark or Gothic-looking mosque will never work. Neither Muslims nor non-Muslims will be attracted. Play with colours.’

MC3 – ‘Outstanding landscape design by adding the elements I said before. I believe mosque attraction will give balance.’

NMC4 – ‘Remove the fence. Use Malay words and signboards. Non-Muslims rarely know Arabic words.’

MC5 – ‘Whenever I go to a mosque, all I see is building and parking lot. No playground. They need more greens. More shades. Public park-looking space.’

MC8 – ‘Good facilities to be used by all. Disabled people, kids, mothers with infants. Add a playground.’

MC10 – ‘Enlarge the area and label it as an open area for anybody so that non-Muslims know that they can come to the mosque area as well and they are not prohibited from entering the space.’

NMC3 – ‘I would say a water element could give a charming ambience.’

NMC8 – ‘Just a sign that welcomes more people from other races and religions.’

NMC14 – ‘Benches to rest and free Internet for youngsters.’

NMC15 – ‘Facilities that everyone can use, not just for religious purposes.’

NMC21 – ‘We have to respect the sanctity of the mosque. It is not the same as a public park. I feel, however, that if we didn’t have fences, psychologically, the public would be more open to mosques and its functions.’

Based on Table 6.6 and the quotations above, it can be seen that the Muslim and non-Muslim participants hoped that urban mosque open spaces could be designed appropriately and attractively, to cater to the needs of potential users; not only for the use of multi-ethnic or multi-religious communities, but also for a wide range of people with different needs, such as disabled people, mothers with infants, pregnant women, children and also the elderly. In order to make the urban mosque open spaces noticeable and appreciated by the multicultural community, participants believed that the provision of good facilities, in addition to legible signage and accessible spaces, is essential.

6.5.8 Importance of promotion, publicity and education

The final theme to emerge from the focus group discussions with the Muslim and non-Muslim participants was the importance of promotion, publicity and education. Apart from the ideal activities and design of urban mosque open spaces, the Muslim participants expressed a view that it is vital for the mosque management and authority to dynamically promote and publicise the roles and uses of urban mosques in general, as well as their open spaces, to the community, especially to non-Muslims. Non-Muslim

users need to feel welcome to visit and use the spaces, hence, the MC should team up to welcome them.

Also, through good publicity and promotion of the mosque, members of the community will be aware of any communal activities and events to be held at the urban mosque. According to the participants, this improvement can be executed by providing billboards and advertisements at the mosque. On the other hand, the Muslim participants believed that if non-Muslims felt inspired to join in activities organised at the mosque open spaces, both of these communities may exchange knowledge and experience with each other. The mosque management are also responsible for managing non-Muslim visitors and for sharing as much knowledge about the mosque and its function as possible with the community as a whole.

MC4 – ‘(...) as a way of sharing and changing knowledge, experience and interests.’

MC6 – ‘(...) could increase awareness to increase cultural and religion knowledge.’

MC7 – ‘Make it more attractive with some billboards or advertisements which promote mosques as community place.’

MC10 – ‘Invite them for events. They won’t come unless invited.’

6.6 Summary

This chapter has presented the findings of the focus group discussions with three different groups of participants; namely, the mosque managers, the MC as well as the NMC. The focus group discussion method offered opportunities to engage with these groups and elicit valuable qualitative information based on their opinions and expressions related to their experience, feelings and recommendations in relation to multicultural use at the urban mosque open spaces studied in Kuala Lumpur, Malaysia. Even though this study focuses on three selected urban mosques, it is hoped that the findings from this chapter will be useful for general application to all mosques in Malaysia. These focus group

discussions also revealed some important common ground shared by the three groups of participants.

In general, the mosque managers and Muslim participants had similar views that the NMC is welcomed and encouraged to use urban mosque open spaces, to become engaged with the activities, events and even the community. In short, they agreed that the urban mosque open spaces should function as multicultural community-friendly spaces. As long as respect for the mosque complex is shown, the MC does not have any problem in sharing the spaces with non-Muslims for any social activities. On a positive note, the mosque managers and some of the Muslim participants had also noticed the presence of non-Muslims at the studied urban mosque open spaces. Even though a majority of the non-Muslim participants had never had any experience at the urban mosque open spaces for specific reasons such as accessibility and familiarity issues, they did express their interest in using the spaces if these issues could be resolved.

On the other hand, most of the participants perceived that ‘attractions’ have become one of the main essential factors needed to attract multicultural people to go to the urban mosques, utilise the mosque open spaces and to also potentially interact with each other. These ‘attractions’ are wide-ranging, from activities happening around the urban mosque open spaces, functional physical and visual landscape qualities, facilities and amenities, to a sense of sociability. For them, all of the aforementioned criteria would help to create a conducive and dynamic environment for intercultural interaction to occur between multicultural people at the urban mosque open spaces.

In addition, based on the themes emerged for the focus group discussions with the Muslim and non-Muslim community, there are a few significant themes that can be closely associated with transactional approach and cultural ecology theory presented in Chapter Three. For instance, the findings with regard to participants’ favourite open or outdoor spaces give us an insight that interface between people and environment is mutual. Each of the participants addressed different desires and preferences with regard to their physical environmental settings – be it man-made settings or natural settings.

Referring to cultural ecology perspective, the participants' preferences of outdoor spaces may be influenced by their customs, cultural beliefs and values. For example, outdoor eateries became the most preferred outdoor space by both the Muslim and the non-Muslim, which depicts that eating has been a 'plate culture' for Malaysians whenever they go out. So, this plate culture has shaped the participants' choices of their favourite open or outdoor spaces. On the other hand, there were several natural settings pointed out by the participants such as nature reserves, highlands and islands, waterfall and beaches as well as forests. Most probably, some of the participants love the ideas of being close to nature – in the sense that it provides them with sense of belonging to the place. For example, the natural setting might remind some of them of their origins – their hometowns surrounded by lush greeneries in rural area. Perhaps, some of them prefer natural settings due to their spiritual belief on nature (e.g: Chinese people believe in the concept of Feng Shui which has a close connection to nature). Two of the Muslim participants chose markets and bazaars as their favourite outdoor spaces. Islamic tradition of having outdoor bazaars and markets since the Prophet Muhammad era might have influenced them to love this kind of place. More than that, bazaars and markets can be perceived as nodes of focal point where people meet and interact – it can enhance social bonds amongst the members of the community and encourage multicultural or even intercultural engagement among them.

Referring to the findings with regard to ideal design of mosque open spaces, some of the participants addressed their perceptions in terms of attractiveness, safety, security, legibility, accessibility and many more. There is a relevant association with interpretive, evaluative and operative modes of transaction with these findings. The participants preferred urban mosque open spaces that possess good quality of wayfinding as well as functional, safe and inclusive spaces. These findings are also relevant to be interconnected with the idea of interplay between macro (spatial) and micro (sociocultural) factors that influence people's interaction with environment as suggested by Pol, Castrechini and Carrus (2017). Overall, the focus group discussions provided useful insights, especially in terms of understanding the real scenario related to utilisation

of the studied urban mosque open spaces. In addition to this, the findings help to support the evidence obtained from the systematic observations.

CHAPTER 7

FINDINGS: URBAN MOSQUE OPEN SPACES IN MALAYSIA THROUGH THE LENSE OF SOCIAL MEDIA

7.1 Introduction

The previous two chapters contained interesting findings based on the systematic observation and focus group discussion methods. Seeking to add further value to this study, this chapter draws on findings that the researcher obtained from an available social media source, the Facebook page of a Malaysian social activist, Syed Azmi Alhabshi. Syed Azmi is an active organiser of numerous charity events at different places, including the National Mosque, which is one of the areas examined in this study. Therefore, this chapter illuminates the findings on the activities and utilisation of open spaces as compiled and posted by Syed Azmi. His recent Facebook posts reveal that his activities have typically revolved around engaging with homeless people in the open spaces of the National Mosque, especially during the evening and night-time. It was found that these spaces, mainly the plaza, served as a ‘home’ or ‘shelter’ for a number of homeless people during the day. Azmi’s posts provided an insight into the types of activities that occurred here during the late evening and night-time (see Figure 7.1). Azmi has organised several activities, including a free night market (giveaway of goods), ‘street feeders’ and a mobile kitchen unit, plus a rescue team session. The evidence contained within his posts and photos is discussed in sections 7.2 and 7.3.



Figure 7.1: (Left) a close-up image of a homeless man sleeping; (middle) an image of a homeless mother with her daughter sleeping on the star-shaped seating area; (right) an image of a boy giving food to a homeless man at the main plaza (courtesy of Syed Azmi Alhabshi).

7.2 Free night market and street feeders

Syed Azmi's post on the free night market event revealed its main aim to be helping homeless people around the National Mosque by distributing goods such as clothing, bags, toiletries and packed foods as daily essentials. Two companies participated in the event to offer jobs for the homeless, something which was also supported by Wong (2015), author of the Malaysian Insider website, who interviewed Syed Azmi in regard to the event. A week prior to the event, Syed Azmi and his team went around the National Mosque plaza to speak with homeless people about their ideas for this event, in the hope that they would assist in spreading word of the event to other homeless people. Rather than referring to these people as homeless, Syed Azmi prefers the term 'street community' or 'street friends'. In order to invite more members of the community to join the event, he created 'hashtags' such as #freenightmarket and #projecttikar (which distributes mats to the needy). On the day of the event, many people from various multicultural backgrounds showed up and took part as contributors (see Figure 7.2). Syed Azmi mentioned in his post:

Our contributors, mostly first timers were very supportive. They set up the items beautifully and with dignity. I mean it! They understood the idea and the need of our street community here so they start packing items in easy to use and useful for them (...). Our contributors were also very excited to serve our street friends. (Syed Azmi Alhabshi)



Figure 7.2: Both images above illustrate how the free night market held at the National Mosque open plaza attracted the participation of multicultural society (courtesy of Syed Azmi Alhabshi).

Before the event began at 11 pm, Syed's team held a briefing session with the contributors as well as the street friends. Based on his sharing, the street friends were very approachable and willing to accept the instructions given to them by the team. During the giveaway session, contributors distributed items that the street friends had requested (Figures 7.3, 7.4 and 7.5). The cleanliness of the plaza was noted by the contributors due to the availability of rubbish bins around the open spaces. The free night market lasted for less than an hour, and there was minimal mess and rubbish left at the end as everyone was very cooperative.



Figure 7.3: Images taken during the giveaway session (i) - (courtesy of Syed Azmi Alhabshi).



Figure 7.4: Images taken during the giveaway session (ii) - (courtesy of Syed Azmi Alhabshi).



Figure 7.5: Images taken during the giveaway session (Wong, 2015) - (images courtesy of Ahmad Muslim, The Malaysian Insider)

Based on the above images taken by Syed Azmi Alhabshi and Ahmad Muslim from the Malaysian Insider website, the free night market held within the open spaces at the National Mosque appeared to be successful in engaging people from various backgrounds and social statuses. Syed Azmi expressed his view on the Malaysian Insider website on the need for open spaces to organise similar events in the future, as detailed by Wong (2015):

I would also like if more community centres get in touch with us, so we can have open spaces to have these free markets. (Wong, 2015)

Apart from the free night market, Syed Azmi also refers to another event known as the ‘mobile kitchen’. This is an initiative carried out by a compassionate team named the ‘Street Feeders of Kuala Lumpur’ (Figure 7.6). The mobile kitchen is a ‘mobile food distribution unit’ in which the Street Feeders travelled around Kuala Lumpur to distribute food to the homeless and poor. The journey began at the Central Market of Kuala Lumpur and took in various points, one of which was the National Mosque. The Street Feeders were very accommodating, as they not only distributed food but also spent time chatting with the needy and had taken along their pets to offer pet therapy. During the event, they generated new ideas around ‘how to make homeless people happy’. One such idea was a project to sponsor these street friends to go to the cinema to see a film. The sponsorship requested was in the form of monetary support to purchase cinema tickets, popcorn and drinks, plus transportation and meals.



Figure 7.6: (Left) the Street Feeders of Kuala Lumpur logo (courtesy of Street Feeders of KL); (right) an image of the Street Feeders team at the National Mosque Plaza (courtesy of Syed Azmi Alhabshi).

7.3 Rescue team

In addition to all the worthwhile initiatives carried out by Syed Azmi, his team and all the empathetic members of community, Syed also shared another of his experiences in dealing with the needy and homeless at the National Mosque. He was informed that a homeless family (a father and his children) were having issues sleeping on their usual street. The family had thus decided to sleep at the National Mosque plaza. When Syed Azmi and his friends learnt about this family, they decided to pay them a visit and offer their help (see Figure 7.7 (a)). After chatting with the father and children, Syed and friends generously booked a one-day stay at a small motel as a temporary shelter for the family. Syed also promised that he would deal with any responsible authority that could help them resolve their difficulties and issues. The next day, as promised, the *Bayt Al-Mal* (which means House of Finance) team came to the National Mosque to assist the family (see Figure 7.7 (b)). *Bayt Al-Mal* is responsible for the collection of funds from the Muslim community for charitable purposes. Following a negotiation, the family were offered a place to stay at the *Bayt Al-Mal* transit house, which was more comfortable, especially for the children.



Figure 7.7: (a) Syed Azmi and his friends approached the homeless family; (b) The *Bayt Al-Mal* team visited and assisted homeless people at the National Mosque plaza (courtesy of Syed Azmi Alhabshi)

Following the case of this homeless family, Syed Azmi made a request to the National Mosque administration to provide night shelter for the homeless under the roof of the mosque itself, from approximately 11 pm to 5 am. He added that it was understandable that it might be inappropriate and difficult to allow the homeless to sleep in the public space during the day; thus, providing them with a shelter at night, with proper dustbins (to encourage them to observe the cleanliness of the space) would be very much appreciated. Up to that point, he shared that he had written a proposal to the National Mosque administration which was supported by a Muslim legal expert from the Kuala Lumpur Federal Territory.

7.4 Summary

Collectively, from all the experiences shared by this activist, it can be presumed that urban mosque open spaces in Kuala Lumpur play an extended role as valuable ‘shelters’ for the poor and needy. It was found that the activist and his colleagues, comprising enthusiastic people from multicultural backgrounds, have used the National Mosque open spaces to organise a number of charitable events such as giveaway sessions for the needy, free night markets and the use of ‘street feeders’ who work with the ‘street community’. These kinds of activities help to strengthen the bonds among community members regardless of their social background. In summary, this chapter has provided us with valuable insight regarding the importance of the mosque open spaces in relation to the

community, particularly the multicultural community in Kuala Lumpur. The following section presents the final part of this thesis, discussion and conclusion.

CHAPTER 8

DISCUSSION AND CONCLUSION

8.1 Introduction

This final chapter presents the discussions of the research questions, recommendations as well as the conclusion. The findings which have been obtained through the systematic observations with behaviour mapping, the focus group discussions, as well as the accompanying findings from the social media, are discussed to answer the primary and sub-research questions (as presented in Chapter One). These findings were further supported by evidence from the literature review presented in Chapter Two and theoretical framework presented in Chapter Three. This chapter discusses several recommendations based on the three case studies. Also, this chapter demonstrates limitations of the research, recapitulation of the gist of the research and its contribution to the body of knowledge, as well as suggestions for future studies..

8.2 Discussion of research questions

Discussion of the findings based on the research questions are discussed as follows:

8.2.1 Answering research question one

Do urban mosque open spaces encourage multicultural use?

Based on the observational findings and behavioural mapping, it is clear that the urban mosque open spaces in this study did encourage multicultural use. Since each of the studied mosques is different in terms of levels of development (national, district and sub-district levels), each of them is unique in inviting and encouraging users from diverse sociocultural backgrounds (i.e., gender, age groups and ethnicities) to use the mosque open spaces. Among all case studies conducted at the three mosque open spaces, the behavioural patterns recorded during the systematic observations (see Chapter Five,

Section 5.2) showed that the National Mosque open spaces were found to be the most inviting and welcoming for the multicultural users. This finding may be explained by the fact that the National Mosque is the principal mosque of Malaysia that becomes one of the main tourist attractions in the heart of Kuala Lumpur city. Due to its strategic location which is close to other fascinating public spaces such as Kuala Lumpur Bird Park and Perdana Lake Gardens, as well as near to public transportation hubs such as Kuala Lumpur railway station and hop-on-hop-off (HOHO) bus stands; this factor has encouraged a greater multicultural use (including the presence of foreign travellers) at the National Mosque open spaces. Following the present findings, this is in line with the view of Omer (2013) who suggests that the mosque should be developed in a prime location regardless at any levels of development – be it city, residential or rural area. He further mentions that the location of the mosque itself should also be highly accessible by the users in encouraging its better use. The previous study by Stausberg (2011) has demonstrated that religious sites such as mosques, churches, monasteries, temples and etcetera serve not only followers but also local and foreign visitors due to various factors – one of them is the accessibility of the religious sites to the public transportation hubs. It is different in the case of Abu Ubaidah Al-Jarah Mosque and Al-Ghufran Mosque, where both of these mosques are located in the residential areas that possess limited public transportation access. Although these two urban mosques open spaces could cater for multicultural users, the existing public transportation networks (e.g. buses and trains) were comparatively poor, making access to the two mosques themselves limited. Therefore, the use of the urban mosque complexes is mostly confined to the residents and members of the community from the nearby areas.

Regarding the multicultural use of the urban mosque open spaces, the observational findings also correspond with the findings obtained from the focus group discussions with the mosque managers. Six user groups (see Chapter Six, Section 6.4.3) were observed present at the National Mosque open spaces as compared to four user groups at Abu Ubaidah Al-Jarah Mosque (district mosque) and three user groups at Al-Ghufran Mosque (sub-district mosque). They also corroborate the insights from Syed Azmi's Facebook posts who reported the activities happened at the National Mosque

open spaces (at different times from the observations of this study). The summary of the findings obtained is presented as follows:

Gender: Based on the observational findings, it is evident that both male and female users were present at the three urban mosque open spaces. Interestingly, the presence of male users was higher than female users in the open spaces of the three studied urban mosques. Some rationales can be associated with this finding – which can be divided into the religious rationale and non-religious rationale (Table 8.1):

Table 8.1: The religious and non-religious rational with regard to gender presence at the urban mosque open spaces.

Religious rationale
<p><u>Muslim men and women’s presence at mosques in Islam:</u></p> <ul style="list-style-type: none"> - As mentioned in Chapter Two, Islam is the most professed religion in Malaysia. In Islam, there are four schools of thought within Islamic jurisprudence – namely Shafii, Maliki, Hanbali and Hanafi. In the context of Islam in Malaysia, the Shafii’s school of thought is used by most Muslims. Therefore, this rationale is discussed based on this particular school of thought. - Concerning the men and women’s attendance at mosques in Islam, it can be said that it is very much related to the religious obligation to Muslim men and women’s attendance the mosques. According to the Shafii’s, the Muslim men are collectively obligated (or known as Fard Kifayah in Arabic) to perform congregational prayers at the mosque (including the obligatory Friday prayer as mentioned in Chapter One, Section 1.2). Whereas performing congregational prayers at the mosques is not mandatory or compulsory the Muslim women (Sayeed, 2001). The women are highly recommended to carry out their prayers at home due to protecting themselves from any unnecessary harms. However, they are always welcomed to go to the mosques if they wish to especially during special Islamic festival like Eids (Hossain, 1989). - Hence, this could be a possible explanation regarding the higher frequency of male users present at the studied mosque open spaces, as compared to the female users.
Non-religious rationale
<p><u>Safety issues for women:</u></p> <ul style="list-style-type: none"> - It can be acknowledged that safety could be a possible reason on why the numbers of the female users present at the mosque open spaces were lower as compared to the male users. For example, women or girls might feel unsafe to go out to the mosque alone or in a small group especially in the evening or at night time. This rationale fits with the view of Khameneh and Ebrahimipour (2014) who mention that safety and security of the urban spaces are among the factors influencing women and girls’ preferences to use the spaces.

In the case of the National Mosque open spaces, patterns of gender presence were different according to selected weekdays, Fridays and selected weekends. There were higher numbers of male users as compared to female users in Space 4 during the selected weekdays and weekends. Space 4 is located nearby the secondary entrance of the mosque which is less preferred to be accessed by the females as it is quite a distance from public view. Besides, it is easier to access the female praying and ablution spaces inside the mosque either from the entrances located in Space 1 or Space 2.

In the case of Abu Ubaidah Al-Jarah Mosque, patterns of user's occupancy based on gender attribute were different throughout the whole observations. Most of the time, the numbers of male users were higher than female users in Spaces 1 and 2. Based on the observations, it can be noticed that most of the male users came to the mosque for carrying out religious duties and also attending religious activities. The numbers of female users utilising Space 2 were increased on Fridays. The Friday bazaar has been the main attraction to the mosque in the afternoon (within Friday prayer time), where numerous street vendors and food hawkers were found running their businesses. Thus, it has attracted not only the male users who come to the mosque for the obligatory Friday prayer but also the female users who are staying or working in the nearby area. On top of that, Friday lunch break hour is longer by an hour and 45 minutes than the other days; hence this has given an opportunity for the users to have their lunch at the bazaar.

With regard to the gender presence at Al-Ghufran Mosque, the finding suggested that both male and female users were using all the three studied spaces. Interestingly, the presence of the male users in Space 1 was higher during Fridays. The open space nearby the male praying area had been a spillover space to accommodate users for Friday prayer. Spatial distribution of the female users was concentrated in Spaces 1 and 3 (cafeteria). In Space 1, females were more seen occupying certain areas which are easily accessible from the female praying space. Most probably, they might also felt comfortable to occupy these areas rather than other areas closer to the male praying space. It was observed that the female users comprised of mosque staffs, visitors who attended religious classes and seminars, as well as school children.

Age groups: Concerning the age groups, adults were found to be the major occupants at the open spaces of the studied urban mosques. In the case of the National Mosque, the adult users can be presumed as the tourists and visitors of the mosque, the mosque staffs, the users who work in the nearby area, as well as the homeless people. This finding complements the finding from the social media posted photos. The street feeders and the rescue team members who came to help the homeless people were all adults. The adults found in the Abu Ubaidah Al-Jarah Mosque open spaces were most probably the local residents from the nearby residential area as well as the visitors who came to perform religious prayers. This was also similar to the case of Al-Ghufran Mosque, in which most of the adults appeared at the open spaces were the mosque staffs, the mosque visitors and could also be the travellers who stayed at the traveller's hotel provided at the upper level of the mosque. Children were the second major occupants at all the mosques. Since all these three mosques are located near to schools, this explains the children's presence at these open spaces. The open spaces of the mosque became their playing area as well as waiting area. Some of them waited for their school buses at the mosque open spaces. On another note, only a few of old users were spotted throughout the observations for all the mosques.

Ethnicities:

In terms of ethnic groups, Malays were identified as the primary users at the studied urban mosque open spaces. This results fits to the idea that all Malay people are Muslims. Thus, this idea reflects the possible reason why this particular ethnic group were seen frequently at the mosque open spaces – they came to the mosque to perform daily prayers and at the same time, they took the opportunity to enjoy the open spaces after completing their religious obligations. With regard to other ethnic groups, Chinese users and users from other backgrounds (e.g Caucasians) were highly found in the National Mosque open spaces. This was due to the fact that the National Mosque is the principal mosque of Malaysia which is functioning as a tourism-based mosque. Hence, the National Mosque has become a touristic spot for foreign and international travellers. Referring to social media findings reported by Syed Azmi, it can be identified from the photos that the

presence of the multi-ethnic users was there at the National Mosque. Even the street feeders and the rescue team themselves were comprised of individuals from different ethnic and social backgrounds.

On the other hand, the frequencies and presence of different ethnic groups other than Malay ethnic at Abu Ubaidah Al-Jarah Mosque open spaces and Al-Ghufran Mosque open spaces were fairly balanced. Even though these two mosques are located in the multi-ethnic neighbourhood areas, the presence and participation of the multi-ethnic community at these two mosques open spaces was little. According to Tang and Khan, (2012) found that in the Malaysian context, different ethnic groups have different preferences for using public open spaces. This view suggests that users' preference for using public open spaces could be a factor influencing the use of urban mosque open spaces. Despite their little presence, there was well engagement of this multi-ethnic community while they were using the urban mosque open spaces. During the observations, the researcher found that users from different ethnic groups did engage with each other (in the form of conversation, asking directions and etcetera). Shinew, Glover and Parry (2004) suggest that intercultural interactions occurring in leisure settings have the potential to be more open compared to those that take place in formal settings. They further mention that it can also occur due to user's self-choice and determination. This is also

How are the urban mosque open spaces being used by the community?

8.2.2 Answering research question two

Based on the first research question, it is known that the multicultural users use the open spaces at the three studied urban mosques. Turning now to the second research question, it addresses the objective to investigate spatial occupancy and activity patterns, and also users' preferences regarding the use of urban mosque open spaces.

8.2.2.1 Spatial occupancy

The findings from the systematic observations showed various interesting patterns on how the multicultural users were using the open spaces at the three studied mosques. In the case of the National Mosque open spaces, the behaviour mapping findings suggested that all four spaces (Spaces 1, 2, 3 and 4) were regularly occupied throughout the weeks of the observations. However, it is interesting to note that Spaces 1 and 2 possessed the highest occupancies by the multicultural users be it during weekdays, Fridays or weekends. This finding is also parallel to the pictorial evidence from the social media (see Chapter Seven) which the central plaza in Space 1 had been used by the multicultural users for various activities even at night. Factors influencing the occupancy of these spaces are presented in Table 8.2 below:

Table 8.2: Factors influencing the occupancies of Spaces 1 and 2 at the National Mosque

Factors	Description
Location and proximity	<ul style="list-style-type: none">- Both of these spaces were perceived by the users as the ‘main open spaces’ or nodes at the National Mosque as compared to the remaining spaces. These two spaces are the first spaces to be encountered by most of the users and tourists when they come and visit the National Mosque.- One of the factors influencing this is the location of the main entrances which are situated in these spaces – which highly accessible to the registration and robe counters for the visitors are located.- Proximity and accessibility of these two spaces to other surrounding contexts – nearby to the main road, several offices and also public transportation network could be a supporting factor of why these spaces were being highly utilised. This factor is likely to be related to another function of this space - transit spaces which had invited many passers-by.
Space design and landscape features	<ul style="list-style-type: none">- Space 1 (main plaza and open courtyard) has the most attractive design as compared to other three spaces. This is in line with the focus group findings with the mosque managers (that this space is designed with an exclusive concept of ‘Gardens of Coconut Trees’ that incorporate the use of palm trees (to reflect the coconut tree plantings in the village).

	<p>However, the use of the palm trees can be perceived as not functional for the users. In the tropical climate of Malaysia (hot and humid throughout the year), the use of palm trees does not provide shades to the users.</p>
Influence of facilities	<ul style="list-style-type: none"> - Space 1 is facilitated with various facilities such as public toilets and ATMs which may have been a factor that encouraged the multicultural users to use these spaces regularly. - There are few concrete seatings provided at the main plaza which should be functional to the users. Not many users were keen to sit there due to lack of shades from the scorching hot weather especially in the noon and afternoon time as well as poor condition and design of the seatings themselves. - This finding also reflected why the user's occupancies were more concentrated at the shaded seating area in Space 2. The roadside large canopy trees provide shades and cooling effect to the users while they are enjoy using the spaces. Indirectly, this has also invited street food vendors to park their vehicles there to run their businesses. However, there were only a few benches provided at this area which limited the opportunity for more users to sit and relax there. - The observational and social media findings showed that the homeless people frequently used the seatings at the main plaza in Space 1. Most probably, squarish and large concrete seatings afford them for resting and sleeping.

Although Spaces 1 and 2 were the most utilised open spaces at the National Mosque, Space 3 has its uniqueness where the most preferred spot in this space was the food stalls area. These food stalls provided a proper eating area for the users as compared to other spaces. However, the condition of the stalls can be improved in order to attract more multicultural users to come and use the spaces.

8.2.2.2 Users' preferences

- Mosque functioned as spaces for various community activities such as mass gatherings, banquets, flea markets or bazaars, boot camps, talks, wedding receptions, kids' and family activities as well as waiting, relaxing and transit spaces.

- The use of urban mosque open spaces should be inspired by the national aspiration (i.e. One Malaysia). One Malaysia is an aspiration promoted by the current Prime Minister of Malaysia that emphasises diversity in unity. Nevertheless, there were four non-Muslim participants who reported having no idea or comment regarding the researcher's enquiry.

What leads multicultural users to use the urban mosque open spaces?

8.2.3 Answering research question three

Findings from the focus group discussions with the mosque managers and the members of the community help to answer this particular question for this study. The findings suggested that there are physical and social factors that may influence the use of the urban mosque open spaces by the multicultural users (Table 8.3):

Table 8.3: Physical and social factors that may influence the use of the urban mosque open spaces by the multicultural users

Physical factors
<ul style="list-style-type: none"> ▪ Attractive and functional elements/nodes/focal points at the urban mosque open spaces that could attract different user groups – (e.g. the main plaza at the National Mosque, Seri Rampai Lake near to Abu Ubaidah Al-Jarah Mosque as well as Al-Ghufran cafeteria at Al-Ghufran Mosque).
<ul style="list-style-type: none"> ▪ Influence of facilities provided at the urban mosque open spaces – according to Chen et al. (2016), facilities provision is one of the factors that affect the utilisation of the open spaces. This view is parallel to Omer (2013) who expresses that – the mosque should have good and adequate facilities and amenities in order to function as a lively community place.
<ul style="list-style-type: none"> ▪ Location of the mosque affect the user's preferences in using mosque open spaces – this finding is in line with the view of Ismail, Megat Abdullah and Ibrahim (2010) who assert that the location and setting of the mosque and the proximity of the mosque to the existing facilities are among the factors influencing the occupancy of the mosque open spaces. Besides, Omer (2013) also assert that planning and design

of the mosque should incorporate the factor of a strategic location for a better use.

- Proper condition and design of the mosque open spaces – nearly half of the focus group participants claimed that the the urban mosque open spaces unattractive, uninviting and requiring lots of improvement. Department of Urban and Rural Planning Peninsular Malaysia (2011) suggests that the design of the mosque open spaces should cater the needs of all user groups including physically disabled people.

Social factors

- Social activities that are suitable to all groups of community such as recreational activities, seasonal markets, weekly bazaar and etcetera.
- Educational activities such as courses that are open to both Muslims and non-Muslims, outreach programmes and etcetera.
- User's self-experience – engaging with mosque-based activities

8.2.4 Answering research question four

Does the use of the urban mosque open spaces by multicultural users present any possible opportunities or challenges?

Key findings from the focus group discussions with the mosque managers and the members of the community (the Muslims and the non-Muslims) aid to answer this research question. The findings suggested that there are several opportunities and challenges (Table 8.4) :

Table 8.4: Possible opportunities and challenges in relation to the multicultural use of the urban mosque open spaces

Opportunities	Challenges
<ul style="list-style-type: none">▪ Positive acceptance by the Muslims towards the non-Muslims in using the mosque open spaces. The non-Muslims are always welcomed and invited to visit the mosque and utilise	<ul style="list-style-type: none">▪ Some of the non-Muslims felt uncertain and discomfort when carrying out their own acts, in terms of, for example, whether or not they were behaving appropriately in accordance with

the open spaces. Most of the Muslim participants agreed that the mosque should be designed as the community-friendly mosque.	mosque regulations.
<ul style="list-style-type: none"> ▪ The role of the mosque volunteer becomes important, as someone with valuable insight about the mosque and its spaces, in outreaching to non-Muslims. 	<ul style="list-style-type: none"> ▪ Issue of sensitivity for both the Muslims and the non-Muslims, as well as the issue of consent and approval from authorities.
<ul style="list-style-type: none"> ▪ Well engagement and participation of the non-Muslims in various social activities and programmes organised by the mosque management. 	<ul style="list-style-type: none"> ▪ Issue of accessibility to the mosque – e.g. the gate to the mosque is locked, hence limiting the opportunity for the users to visit the mosque and use the open spaces.
	<ul style="list-style-type: none"> ▪ Familiarity to the mosque is perceived as one of the challenges by the non-Muslims. Some of them are unfamiliar with the mosque and wish to have anyone who are familiar with the place to show them around.

8.2.5 Answering research question five

What aspects of design support intercultural use and interaction at the urban mosque open spaces?

After discovering all the factors that influence the use of the urban mosque open spaces, it is important to make recommendations about how urban mosque open spaces should ideally be designed in order to make them suitable for the multicultural community. In order to answer this research question, there are several aspects of design that support intercultural use and interaction at the urban mosque open spaces suggested by the mosque managers and members of the community through the focus group discussions. The recommendations and suggestions from the participants are important for future

improvement of the urban mosque open spaces. Since it is evident that the use urban mosque open spaces is significant in the life of the multicultural community, landscape architects, designers, planners and policymakers should acknowledge its significance in future planning, design improvement as well as policymaking. The aspects of design that has been suggested by the participants were proper scale of open spaces, landscape elements, colour scheme, facilities, legibility and accessibility:

Aspects of improvement	Examples
Scale of the open spaces	- Larger spaces would accommodate more users and more activities
Landscape elements (softscapes and hardscapes)	- Water features, seating, plants and trees
Colour scheme	- Experiment with suitable and attractive colours
Facilities for all	- Cater to the needs of all age groups - ATMs, mini-mart, playground, recreation area, eating area, kids' area, hawkers and proper public toilets
Legibility	- Provide multi-language signage, not just Arabic signage
Accessibility	- It is better to have a non-gated mosque

There were some other recommendations made by the focus group participants which are:

- Upgrading and decorative enhancements can be made with the provision of dedicated relaxing or waiting areas for users;
- A *souq* (bazaar or market) as an ideal physical element to attract more members of the multicultural community to actively come and visit and utilise the mosque open spaces;
- Security aspect of the mosque should be catered, so that the users will feel safe and secured to use the mosque open spaces;
- Improve mosque function as as a One-Stop-Centre (OSC);

- Propose multipurpose facilities at the mosque compound which could be used by members of the community regardless of their religion and social background, as long as they complied with the basic regulations set out by the mosque management and authority;
- Propose a better landscape design to make the entire mosque complex more aesthetically appealing;
- Through good publicity and promotion of the mosque, members of the community will be aware of any communal activities and events to be held at the urban mosque. Improvement can be executed by providing billboards and advertisements at the mosque;
- Provision of more outdoor facilities for users in the future, such as seating and gazebos.

How do urban mosque open spaces encourage intercultural activities and interaction?

8.3 Summary: Main research question

Based on the discussion of the research questions, it is known that there are various factors that have influenced the multicultural use at the studied urban mosque open spaces; namely the National Mosque, Abu Ubaidah Al-Jarah Mosque and Al-Ghufran Mosque. Overall, this study has achieved its aim – to explore the spatial and sociocultural factors of urban mosque open spaces in order to ascertain the extent to which intercultural space exists within those areas. From the key findings of the three methods employed in this study, the spatial and sociocultural factors that encourage intercultural activities and interaction at the urban mosque open spaces are summarised as follows (Table 8.5):

Table 8.5: Summary of findings

New findings
<ul style="list-style-type: none"> ▪ The National Mosque plaza is a spot for the homeless people to ‘shelter’ – resting, sleeping, drying clothes even during the day. ▪ The ability of the sub-district mosque (Al-Ghufran Mosque) in accommodating various activities within smaller open spaces. ▪ The National Mosque plaza gives the sense of safety and freedom to a non-Muslim – feeling safe to walk at the plaza while chanting his prayer. ▪ Gated mosque is an issue of accessibility or perceived as a barrier by the non-Muslims to access the open spaces. ▪ Mosque signage design with Arabic letterings was perceived as an issue of legibility to the non-Muslims. ▪ Promotion and publicity of community events and the functions of the mosque could be an important factor to invite more multicultural users.
Expected findings
<ul style="list-style-type: none"> ▪ All the studied mosques open spaces were proven encouraged multicultural use. The National Mosque was expected to invite more users from diverse sociocultural backgrounds as compared to Abu Ubaidah Al-Jarah Mosque and Al-Ghufran Mosque.

- Malays are the major users of the open spaces at all the studied mosques. Malays are all Muslims.
- The positive acceptance of the Muslims towards the non-Muslims in visiting the mosques and occupying the open spaces.
- The uninviting condition and design of the open spaces of those mosques is one of the factor that leads to the less occupancy of the mosque open spaces.
- Little experience of the non-Muslims about mosque and its spaces.
- Any activities can be organised but some may subject to authorities' approvals.
- Issue of sensitivity of the community.
- Eateries, markets or bazaars were the main attractions to invite more multicultural users to use the mosque open spaces.

Expected findings which did not appeared

- Mosque management; in terms of funding - to improve the condition and design of the mosque and its surrounding areas as well to organise more social events that are suitable for multicultural community.

Recapitulating the discussions of research questions and answers posed from the beginning of this chapter, it is now possible to state that this study has overall achieved its main aim in exploring the spatial and sociocultural factors of urban mosque open spaces in order to ascertain the extent to which intercultural space exists within those areas. By answering all the questions, this study managed to uncover the spatial and sociocultural factors that influence the use of urban mosque open spaces by multicultural community in Kuala Lumpur. The influential spatial and sociocultural factors identified throughout this study can be concluded as follows (see Table 8.6):

Table 8.6: Summary of spatial and sociocultural factors that influence the use of urban mosque open spaces in Kuala Lumpur

Spatial factors	Sociocultural factors
<ul style="list-style-type: none"> ▪ Convenient location and proximity of the mosque (easy to be reached by users) 	<ul style="list-style-type: none"> ▪ Multicultural user's preferences towards communal activities at the mosque
<ul style="list-style-type: none"> ▪ Functional and safe space design as well as attractive landscape features provided at the mosque open spaces 	<ul style="list-style-type: none"> ▪ Suitable social and educational activities organised by the mosque management for all users

<ul style="list-style-type: none"> ▪ Proper accessibility, wayfinding and legibility to the mosque and its spaces. 	<ul style="list-style-type: none"> ▪ User's self-experience and perceptions in using mosque open spaces and engaging with the activities
<ul style="list-style-type: none"> ▪ Influence of facilities available at the mosque open spaces 	<ul style="list-style-type: none"> ▪ Protection of multicultural user's sensitivity as well as their acceptance and respect towards each other

Based on Table 8.6, this study conclusively revealed that there are four spatial and sociocultural factors that influence the use of urban mosques in Kuala Lumpur. In the spectrum of spatial factors, it is found that location can be considered as a primary factor affecting multicultural users to utilise the urban mosque open spaces. They believe that convenient or 'easy to reach' location will inspire people to visit the urban mosque and concurrently use its spaces. On the other hand, urban mosque open spaces must be functional and safe for the users – the physical settings of the urban mosque open space should generally cater the needs of the multicultural users regardless of their genders, religions, ethnicities, and age groups. In another perspective, good accessibility and wayfinding are also main concerns amongst the multicultural users. Signages should be practically designed to suit the needs of all users – the language used for the signages should be viable to be read by all, thus the use of primary languages in Malaysia should be applied. The availability of well-maintained facilities has also influenced the multicultural users to use the urban mosque open spaces. The users favoured the spaces that are sufficiently equipped with physical facilities such as benches, shelters, trash bins and etcetera; as well as good landscape design and features that will give them comfort while using the spaces.

Referring to sociocultural factors, user's preferences towards communal activities organised by the mosque management has an influence on the use of urban mosque open spaces. Some of the users suggested that the communal activities should encourage the participation by all sectors of community. Besides, suitable social and educational activities should be all-encompassing, so that the multicultural users (both Muslims and non-Muslims) can learn from each other especially about their culture, religion and customs. In addition, this study discovered that multicultural users' self-experience (e.g: familiarity to the place) and perceptions (e.g: pre-judgement about the place) about the urban mosque open spaces have also affected their use of the

spaces. Finally, user's sensitivity, acceptance and respect towards each other also play a significant role in inspiring multicultural user's to get engaged and interacted with each other at the urban mosque open spaces. Overall, this study has extends our knowledge in understanding the reasons that may inspire people from different cultural groups to appreciate and get engaged with urban spaces that are associated with sacred civic institutions such as urban mosques, particularly in the case of Kuala Lumpur, Malaysia.

8.4 Limitations

As mentioned in Chapter Four, this study faced several challenges during the systematic observations, the focus group discussions, as well as during the whole research process which had limited certain outcomes that could potentially be achieved through this study:

- One of the major challenges that the researcher had in conducting the observations at the mosque open spaces was difficulties in hiring more assistants to facilitate the observations at the three case study areas. Most probably, the observations can be performed in a more thorough manner within the predetermined time intervals if there are more than two assistants can be hired during the observations (especially at the National Mosque open spaces which comprised of larger open spaces).
- The unavailability of the assistants had also limited the researcher's opportunity to conduct night observation. Most of the potential assistants that had been approached by the researcher had other commitments which made doing fieldwork at night was quite difficult for them. Since the observations were not able to be conducted at night time, thus the night activities cannot be presented in this thesis.
- On another note, having to train the assistants to carry out the observations and mapping the activities at the same time was not easy. The researcher should ensure that the assistants possess familiarity and knowledge in the landscape architecture and design field, to produce a standardised quality of observational data (by the researcher and the assistants). For this study,

the researcher managed to hire two assistants with landscape architecture backgrounds, but it was better if there were more of them.

- Although the findings of the focus group discussions had enlightened us with various impressive views from the community, it would be better if more focus group discussions could be conducted to obtain more useful inputs from the perspectives of members of the community.

8.5 Areas for future research

Overall, this study had provided us with interesting insights into the factors influencing the use of urban mosque open spaces by the multicultural community, specifically in the city of Kuala Lumpur, Malaysia. Despite the fact that this study had also satisfied and answered the main and sub research enquiries addressed throughout the thesis, it has opened up and raised more queries that worth to be investigated in future research. The suggested areas for future research include:

- Since this study has focused on the mosques open spaces in the urban setting and at three different level of mosques (national, district and sub-district mosque), it is recommended that similar approach of research can be explored at a different development setting – e.g., mosque open spaces in the rural area. A study can also be done at a macro setting – different places or states in Malaysia.
- Besides exploring in the broad spectrum of the multicultural community context, a similar study can also be conducted in the context of a particular social or cultural group. For example, male and Malay users were found to be the most regular users at all the mosque open spaces in this study. Hence, further research can be performed to explore those cases based on a specific attribute like gender or ethnicity.
- Based on the observational and social media findings, it can be seen that the homeless people had regularly utilised the mosque open spaces at the National Mosque. Therefore, further investigation can be done by approaching this particular user group with the intention to understand their, preferences, experiences as well as challenges in occupying the urban mosque open spaces.

Besides, systematic observation with behaviour mapping method can also be employed to investigate the homeless people's behaviour at the mosque open spaces.

- Future research could focus too on the importance and roles of markets and bazaars (such as Friday bazaars) as well as its impact on the use of the mosque open spaces and also to the local community. Besides markets and bazaars, how the presence of the street vendors affects the use of the mosque open spaces is also worth to be discovered.
- In relation to the significance of social media method in landscape architecture research, future research could also adopt the similar approach to analyse tourists or users' behaviours at the mosque open spaces by using the social media posted photos. Photos with geo-tagged data (location of the users) can be collected through social networking sites such as Facebook to see which parts of the mosque open spaces are the users' most favourite spaces. More than that, social media can also be used to collect another primary data such as online survey, interviews and much more.

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APPENDIX A

Syed Azmi Manage + New Message

Conversation started October 26, 2015

**Hanis Diyana Nizar** 10/26, 8:45pm

Assalamualaikum Syed Azmi. I'm Hanis here. I'm doing a research on mosque open spaces in KL and I found your free night market project at the National Mosque posted on your FB page. I would like to ask for your consent, if I would like to use your photos and write-ups as part of my qualitative information?

**Hanis Diyana Nizar** 10/26, 8:46pm

This is very important to me since I'm looking a bit into social media recognition to the contemporary society and how it helps the designers to design the space.

Please do not hesitate to inform me about your verdict. Plus if you do have spare time, I would like to interview you perhaps via Skype or by email questionnaire (if this is much more convenient to you).

Thank you very much. I really appreciate your time reading this. May Allah bless you.

October 27, 2015

**Syed Azmi** 10/27, 1:23am

Shud not be a problem but with credit given on my photos or post used

**Hanis Diyana Nizar** 10/27, 1:25am

Thank you Syed Azmi. Yup sure, that's definitely understood. Thank you again for your consent

APPENDIX B

The University of Edinburgh

Edinburgh College of Art

RESEARCH, ETHICS AND KNOWLEDGE EXCHANGE COMMITTEE

Self-Audit Checklist for Level 1 Ethical Review

The audit should be carried out by the Principal Investigator, except as follows:

- *Postdoctoral Research Fellowships*: the applicant in collaboration with their mentor
- *Postgraduate Research (MSc, MScR and PhD)*: the student in collaboration with their first supervisor
- *Undergraduate dissertations and student projects*: the student in collaboration with their dissertation/project supervisor

Title of Project: Urban Mosque Outdoor Spaces as Intercultural Spaces

Funding Body (if applicable): -

Principal Investigator/Supervisor Name: Prof. Catharine Ward Thompson

Student Name and Matriculation Number: Norhanis Diyana Nizarudin (s1264984)

Type of Student: PhD

1. Protection of research subject confidentiality

Are there any issues of confidentiality which are not adequately handled by the normal tenets of ethical academic research?

NO

YES (If yes, Level 2 assessment required)

These include mutually understood agreements about

- Non attribution of individual responses- Individuals and organisations being anonymised in publications and presentations, if requested
- Feedback to collaborators, rights to edit responses, and intellectual property rights and publication

2. Data protection and consent

Are there issues of data handling and consent which are not adequately dealt with and compliant with academic procedures?

NO

YES (If yes, Level 2 assessment required)

These include well-established sets of undertakings for example, regarding

- Compliance with the University of Edinburgh's Data Protection procedures (www.recordsmanagement.ed.ac.uk)
- Respondents giving consent regarding the collection of personal data
- No special issues arising confidentiality/informed consent

3. Moral issues and Researcher/Institutional Conflicts of Interest

Are there any special moral issues/conflicts of interest?

NO

YES (If yes, Level 2 assessment required)

For example

- might the researcher compromise the research objectivity or independence in return for financial or non-financial benefit for themselves, a relative or friend?
- are there any particular moral issues or concerns which arise, for example, where the purposes of research are concealed, where respondents are unable to provide informed consent, or where research findings impinge negatively/differentially upon the interests of participants

4. Potential physical or psychological harm, discomfort or stress

Is there a significant foreseeable potential harm or stress for those involved in your research?

NO

YES (If yes, Level 2 assessment required)

Is there significant foreseeable potential for physical harm or stress for those involved in your research?

NO

YES (If yes, Level 2 assessment required)

Is there significant foreseeable risk to the researcher?

NO

YES (If yes, Level 2 assessment required)

5. Bringing the University into disrepute

Is there any aspect of the proposed research which might bring the University into disrepute?

NO

YES (If yes, Level 2 assessment required)

6. Vulnerable participants

Are any of the participants or interviewees in the research vulnerable, e.g. children and young people?

NO

YES (If yes, Level 2 assessment required)

Overall assessment

If all answers are No, the Self-assessment has been completed and confirms the absence of reasonably foreseeable ethical risks. The following text should be emailed to the relevant person below

Text ““I confirm that I have carried out the School Ethics self-audit in relation to my proposed research project [insert name and funding body] and that no reasonably foreseeable ethical risks have been identified.”

Research grants, Postgraduate Research and Undergraduate Research – PI should email the text to the School Research Office and provide either an electronic or paper copy of their completed form

If one or more answers are Yes, Level 2 assessments is required.

Signed 

NORHANIS DIYANA NIZARUDIN

Date **15th DECEMBER 2013**

APPENDIX C

TIME INTERVAL/ ACTIVITIES	Sitting	Resting	Chatting	Viewing	Waiting	Gathering	Playing	Passing by	Photogra- phy	Buying	Selling	Tourists
Morning Time: <hr/>												
Noon Time: <hr/>												
Afternoon Time: <hr/>												
Night Time: <hr/>												

APPENDIX D

Interview Consent Form

This consent form outlines my rights as a participant in the study of 'Urban Mosque Outdoor Spaces as Communal and Intercultural Spaces (Case Studies of Kuala Lumpur, Malaysia)' by Norhanis Diyana Nizarudin, a PhD student from Edinburgh School of Architecture and Landscape Architecture (ESALA), Edinburgh College of Art (ECA), The University of Edinburgh, United Kingdom.

I understand that:

1. Taking part in this study is entirely voluntary.
2. It is my right to decline to answer any question that I am asked.
3. I am free to end the interview at any time.
4. The interview may be recorded by the interviewer/researcher for the purpose of this study but I may request that the interview not to be recorded or to be turned off at any time.
5. My name and identity will remain confidential in any discussions or publications.
6. My name will not appear on any tapes or transcripts resulting from the interview.

I HAVE READ THIS CONSENT FORM. BY SIGNING THIS CONSENT FORM I CERTIFY THAT I AGREE TO THE TERMS OF THIS AGREEMENT.

(Signature of Interviewee)

(Date)

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(Participant Code)

Researcher's Note:

You may decline to participate in this study. You may end your participation in this study at any time. Maintaining your anonymity is a priority and every practical precaution will be taken to disguise your identity. There will not be any identifying information on recordings or transcripts of this interview. I will not allow anyone other than the research advisor to hear any recording of your voice or review a transcript of this interview. All materials generated from your interview will remain in my direct physical possession.

[ENGLISH VERSION]

APPENDIX E

Borang Persetujuan Untuk Sesi Wawancara

Saya sedia maklum bahawa borang persetujuan ini disediakan untuk menggariskan hak-hak saya sebagai peserta dalam kajian 'Rekabentuk dan Peranan Ruang Luar Masjid sebagai Ruang Interaksi Komuniti dan Antara Budaya (Kajian Kes di Kuala Lumpur, Malaysia)' oleh Norhanis Diyana Nizarudin, pelajar Ijazah Doktor Falsafah, Edinburgh School of Architecture and Landscape Architecture (ESALA), Edinburgh College of Art (ECA), The University of Edinburgh, United Kingdom.

Saya juga maklum bahawa:

1. Penyertaan saya di dalam wawancara ini adalah secara sukarela.
2. Saya berhak untuk menolak memberikan jawapan ke atas sebarang soalan yang diajukan.
3. Saya berhak untuk menamatkan wawancara ini mengikut kesesuaian masa saya.
4. Wawancara boleh direkodkan oleh pewawancara/penyelidik untuk tujuan kajian ini, tetapi saya boleh meminta wawancara saya untuk tidak direkodkan atau dihentikan pada bila-bila masa.
5. Nama dan identiti saya akan kekal sulit dalam mana-mana perbincangan atau penerbitan.
6. Nama saya tidak akan muncul di dalam rakaman atau transkrip yang dihasilkan daripada wawancara.

DENGAN MENANDATANGANI BORANG PERSETUJUAN INI SAYA MENGESAHKAN BAHAWA SAYA BERSETUJU DENGAN TERMA YANG TELAH DINYATAKAN.

(Tandatangan Peserta)

(Tarikh)

--	--	--	--

(Kod Peserta)

Nota Penyelidik:

Anda boleh menolak untuk mengambil bahagian dalam kajian ini. Anda boleh menamatkan penyertaan anda dalam kajian ini pada bila-bila masa. Menjaga privasi anda adalah keutamaan saya dan langkah pencegahan akan diambil untuk melindungi identiti anda. Sebarang maklumat yang diperolehi daripada rakaman atau transkrip wawancara tidak akan didedahkan. Saya tidak akan membiarkan orang lain selain daripada penasihat penyelidikan untuk mendengar apa-apa rakaman suara atau mengkaji semula transkrip wawancara ini. Semua bahan-bahan yang dihasilkan dari wawancara anda akan kekal dalam milik saya secara mutlak.

[MALAY VERSION]

APPENDIX F

Participant Card		Participant Code:			
		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Age: Birthplace: Gender: Profession: Nationality: Education: Ethnic: Religion:					
Signature: Date:					

Kad Peserta		Kod Peserta:			
		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Umur: Tempat Lahir: Jantina: Pekerjaan: Warganegara: Pendidikan: Bangsa: Agama:					
Tandatangan: Tarikh:					

APPENDIX G

Norhanis Diyana Binti Nizarudin
Pelajar Ijazah Doktor Falsafah (Seni Bina Landskap),
Edinburgh School of Architecture and Landscape Architecture,
Edinburgh College of Art, The University of Edinburgh,
EH3 9DF, Edinburgh, United Kingdom.

Untuk perhatian:
Pegawai Perhubungan Awam Masjid Negara,
Jalan Perdana, Tasik Perdana,
50480 Kuala Lumpur,
Wilayah Persekutuan Kuala Lumpur,
MALAYSIA

Tuan/Puan,

PERMOHONAN UNTUK MENJALANKAN SESI TEMU RAMAH BERSAMA PIHAK PENTADBIRAN DAN PENGURUSAN MASJID

Perkara di atas adalah dirujuk.

2. Saya seperti nama di atas ingin memohon kebenaran dan kerjasama pihak pentadbiran dan pengurusan Masjid Negara untuk menjalankan sesi temu ramah bersama kakitangan masjid sebagai penambahan maklumat ke atas kajian yang sedang saya jalankan. Untuk makluman pihak masjid, saya sedang melanjutkan pelajaran di peringkat Ijazah Doktor Falsafah (PhD) di University of Edinburgh, United Kingdom. Kajian yang sedang saya jalankan adalah berkisar tentang 'Rekabentuk dan Peranan Ruang/Kawasan Luar Masjid sebagai Ruang Interaksi Antara Komuniti dan Budaya'. Saya kini berada di Malaysia untuk menyiapkan kerja lapangan dan pengumpulan data sebelum saya pulang semula ke United Kingdom pada 3 Disember 2014.

3. Seperti kita sedia maklum, Malaysia merupakan sebuah negara berbilang budaya, bangsa dan agama. Secara umumnya, kita juga tahu bahawa masjid adalah sebuah institusi ibadah bagi komuniti Muslim. Jika diimbaskan kembali pada zaman Rasulullah SAW, masjid bukan sahaja menjadi tempat beribadah bagi orang-orang Muslim tetapi ia adalah sebuah pusat pembangunan masyarakat secara menyeluruh. Berbekalkan inspirasi daripada peranan unik masjid di zaman Rasulullah SAW, saya memfokuskan kajian saya terhadap penggunaan dan peranan kawasan luar masjid dalam pembangunan masyarakat setempat yang berbilang budaya.

4. Justeru, saya ingin mendapatkan pandangan pihak kakitangan masjid berdasarkan skop kajian yang telah saya nyatakan di atas. Untuk makluman tuan/puan, saya berhasrat

menjalankan sesi temu ramah secara berkumpulan atau secara istilahnya 'Focus Group Discussion'. Jadi, saya memerlukan sekurang-kurangnya tiga hingga enam orang kakitangan masjid untuk ditemu ramah dalam satu sesi yang akan memakan masa lebih kurang satu jam. Saya amat berharap sesi temu ramah ini dapat dijalankan bersama pihak masjid.

5. Tarikh yang saya ingin cadangkan adalah pada _____ atau _____ pada jam _____. Jika terdapat kesulitan bagi pihak masjid dengan tarikh dan masa yang dicadangkan, saya amat mengalu-alukan sebarang cadangan masa yang bersesuaian. Saya juga ingin memohon kebenaran untuk menggunakan salah sebuah ruang di Masjid Negara untuk menjalankan sesi temu ramah ini.

6. Kerjasama pihak Masjid Negara amatlah saya harapkan dalam menjayakan proses pengumpulan data dan kerja lapangan saya. Segala kerjasama saya dahulukan dengan ucapan terima kasih.

Sekian, terima kasih. Wassalam.

Yang benar,

.....
(NORHANIS DIYANA BINTI NIZARUDIN)
norhanisdiyana@gmail.com/s1264984@sms.ed.ac.uk
+60132762597/+447707731332

APPENDIX H

Norhanis Diyana Binti Nizarudin
Pelajar Ijazah Doktor Falsafah (Seni Bina Landskap),
Edinburgh School of Architecture and Landscape Architecture,
Edinburgh College of Art, The University of Edinburgh,
EH3 9DF, Edinburgh, United Kingdom.

Untuk perhatian:

Tuan Haji Abdullah bin Abdul Rahman,
Pengerusi Masjid Abu Ubaidah Al-Jarrah,
Jalan 1/26, Taman Sri Rampai,
Setapak, 53300 Kuala Lumpur
Wilayah Persekutuan Kuala Lumpur,
MALAYSIA

Assalamualaikum w.b.t,

Tuan,

PERMOHONAN UNTUK MENJALANKAN SESI TEMU RAMAH BERSAMA PIHAK PENTADBIRAN DAN PENGURUSAN MASJID

Perkara di atas adalah dirujuk.

2. Saya seperti nama di atas ingin memohon kebenaran dan kerjasama pihak pentadbiran dan pengurusan Masjid Abu Ubaidah Al-Jarrah untuk menjalankan sesi temu ramah bersama kakitangan masjid sebagai penambahan maklumat ke atas kajian yang sedang saya jalankan. Untuk makluman pihak masjid, saya sedang melanjutkan pelajaran di peringkat Ijazah Doktor Falsafah (PhD) di University of Edinburgh, United Kingdom. Kajian yang sedang saya jalankan adalah berkisar tentang 'Rekabentuk dan Peranan Ruang/Kawasan Luar Masjid sebagai Ruang Interaksi Antara Komuniti dan Budaya'. Saya kini berada di Malaysia untuk menyiapkan kerja lapangan dan pengumpulan data sebelum saya pulang semula ke United Kingdom pada 3 Disember 2014.

3. Seperti kita sedia maklum, Malaysia merupakan sebuah negara berbilang budaya, bangsa dan agama. Secara umumnya, kita juga tahu bahawa masjid adalah sebuah institusi ibadah bagi komuniti Muslim. Jika diimbaz kembali pada zaman Rasulullah SAW, masjid bukan sahaja menjadi tempat beribadah bagi orang-orang Muslim tetapi ia adalah sebuah pusat pembangunan masyarakat secara menyeluruh. Berbekalkan inspirasi daripada peranan unik masjid di zaman

Rasulullah SAW, saya memfokuskan kajian saya terhadap penggunaan dan peranan kawasan luar masjid dalam pembangunan masyarakat setempat yang berbilang budaya.

4. Justeru, saya ingin mendapatkan pandangan pihak kakitangan masjid berdasarkan skop kajian yang telah saya nyatakan di atas. Untuk makluman tuan/puan, saya berhasrat menjalankan sesi temu ramah secara berkumpulan atau secara istilahnya 'Focus Group Discussion'. Jadi, saya memerlukan sekurang-kurangnya tiga hingga enam orang kakitangan masjid untuk ditemu ramah dalam satu sesi yang akan memakan masa lebih kurang satu jam. Saya amat berharap sesi temu ramah ini dapat dijalankan bersama pihak masjid.

5. Tarikh yang saya ingin cadangkan adalah pada _____ atau _____ pada jam _____. Jika terdapat kesulitan bagi pihak masjid dengan tarikh dan masa yang dicadangkan, saya amat mengalu-alukan sebarang cadangan masa yang bersesuaian. Saya juga ingin memohon kebenaran untuk menggunakan salah sebuah ruang di Masjid Abu Ubaidah untuk menjalankan sesi temu ramah ini.

6. Kerjasama pihak Masjid Abu Ubaidah Al-Jarrah amatlah saya harapkan dalam menjayakan proses pengumpulan data dan kerja lapangan saya. Segala kerjasama saya dahulukan dengan ucapan terima kasih.

Sekian, terima kasih. Wassalam.

Yang benar,

.....
(NORHANIS DIYANA BINTI NIZARUDIN)
norhanisdiyana@gmail.com/s1264984@sms.ed.ac.uk
+60132762597/+447707731332

APPENDIX I

Norhanis Diyana Binti Nizarudin
Pelajar Ijazah Doktor Falsafah (Seni Bina Landskap),
Edinburgh School of Architecture and Landscape Architecture,
Edinburgh College of Art, The University of Edinburgh,
EH3 9DF, Edinburgh, United Kingdom.

Untuk perhatian:
Pihak Pentadbiran dan Pengurusan Masjid Al-Ghufran,
Jalan Burhanuddin Helmi, Taman Tun Dr Ismail,
60000 Kuala Lumpur,
Wilayah Persekutuan Kuala Lumpur,
MALAYSIA

Dato'/Datin/Tuan/Puan,

PERMOHONAN UNTUK MENJALANKAN SESI TEMU RAMAH BERSAMA PIHAK PENTADBIRAN DAN PENGURUSAN MASJID

Perkara di atas adalah dirujuk.

2. Saya seperti nama di atas ingin memohon kebenaran dan kerjasama pihak pentadbiran dan pengurusan Masjid Al-Ghufran untuk menjalankan sesi temu ramah bersama kakitangan masjid sebagai penambahan maklumat ke atas kajian yang sedang saya jalankan. Untuk makluman pihak masjid, saya sedang melanjutkan pelajaran di peringkat Ijazah Doktor Falsafah (PhD) di University of Edinburgh, United Kingdom. Kajian yang sedang saya jalankan adalah berkisar tentang 'Rekabentuk dan Peranan Ruang/Kawasan Luar Masjid sebagai Ruang Interaksi Antara Komuniti dan Budaya'. Saya kini berada di Malaysia untuk menyiapkan kerja lapangan dan pengumpulan data sebelum saya pulang semula ke United Kingdom pada 3 Disember 2014.

3. Seperti kita sedia maklum, Malaysia merupakan sebuah negara berbilang budaya, bangsa dan agama. Secara umumnya, kita juga tahu bahawa masjid adalah sebuah institusi ibadah bagi komuniti Muslim. Jika diimbaz kembali pada zaman Rasulullah SAW, masjid bukan sahaja menjadi tempat beribadah bagi orang-orang Muslim tetapi ia adalah sebuah pusat pembangunan masyarakat secara menyeluruh. Berbekalkan inspirasi daripada peranan unik masjid di zaman Rasulullah SAW, saya memfokuskan kajian saya terhadap penggunaan dan peranan kawasan luar masjid dalam pembangunan masyarakat setempat yang berbilang budaya.

4. Justeru, saya ingin mendapatkan pandangan pihak kakitangan masjid berdasarkan skop kajian yang telah saya nyatakan di atas. Untuk makluman tuan/puan, saya berhasrat menjalankan sesi temu ramah secara berkumpulan atau secara istilahnya 'Focus Group Discussion'. Jadi, saya memerlukan sekurang-kurangnya tiga hingga enam orang kakitangan masjid untuk ditemu ramah dalam satu sesi yang akan memakan masa lebih kurang satu jam. Saya amat berharap sesi temu ramah ini dapat dijalankan bersama pihak masjid.

5. Tarikh yang saya ingin cadangkan adalah pada _____ atau _____ pada jam _____. Jika terdapat kesulitan bagi pihak masjid dengan tarikh dan masa yang dicadangkan, saya amat mengalu-alukan sebarang cadangan masa yang bersesuaian. Saya juga ingin memohon kebenaran untuk menggunakan salah sebuah ruang di Masjid Negara untuk menjalankan sesi temu ramah ini.

6. Kerjasama pihak Masjid Al-Ghufran amatlah saya harapkan dalam menjayakan proses pengumpulan data dan kerja lapangan saya. Segala kerjasama saya dahulukan dengan ucapan terima kasih.

Sekian, terima kasih. Wassalam.

Yang benar,

.....
(NORHANIS DIYANA BINTI NIZARUDIN)
norhanisdiyana@gmail.com/s1264984@sms.ed.ac.uk
+60132762597/+447707731332

APPENDIX J

Norhanis Diyana Binti Nizarudin
Pelajar Ijazah Doktor Falsafah (Seni Bina Landskap),
Edinburgh School of Architecture and Landscape Architecture,
Edinburgh College of Art, The University of Edinburgh,
EH3 9DF, Edinburgh, United Kingdom.

Untuk perhatian:
Pihak Pentadbiran dan Pengurusan,
Ibu Pejabat Kongres Indian Muslim Malaysia (KIMMA),
77-1, Tingkat 1, Medan Sri Bunus,
Off Jalan Masjid India,
50100 Kuala Lumpur,
MALAYSIA

Assalamualaikum w.b.t,

Tuan/Puan,

PERMOHONAN UNTUK MENJALANKAN SESI TEMU RAMAH BERSAMA PIHAK KIMMA

Perkara di atas adalah dirujuk.

2. Saya seperti nama di atas ingin memohon kebenaran dan kerjasama pihak pentadbiran dan pengurusan KIMMA untuk menjalankan sesi temu ramah bersama kakitangan KIMMA sebagai penambahan maklumat ke atas kajian yang sedang saya jalankan. Untuk makluman pihak KIMMA, saya sedang melanjutkan pelajaran di peringkat Ijazah Doktor Falsafah (PhD) di University of Edinburgh, United Kingdom. Kajian yang sedang saya jalankan adalah berkisar tentang 'Rekabentuk dan Peranan Ruang/Kawasan Luar Masjid sebagai Ruang Interaksi Antara Komuniti dan Budaya'. Saya kini berada di Malaysia untuk menyiapkan kerja lapangan dan pengumpulan data sebelum saya pulang semula ke United Kingdom pada 3 Disember 2014.

3. Seperti kita sedia maklum, Malaysia merupakan sebuah negara berbilang budaya, bangsa dan agama. Secara umumnya, kita juga tahu bahawa masjid adalah sebuah institusi ibadah bagi komuniti Muslim. Jika diimbaz kembali pada zaman Rasulullah SAW, masjid bukan sahaja menjadi tempat beribadah bagi umat Islam tetapi ia adalah sebuah pusat pembangunan masyarakat secara menyeluruh. Berbekalkan inspirasi daripada peranan unik masjid di zaman Rasulullah SAW, saya memfokuskan kajian saya terhadap penggunaan dan peranan kawasan luar masjid dalam pembangunan masyarakat setempat yang berbilang budaya.

4. Justeru, saya ingin mendapatkan pandangan pihak kakitangan KIMMA berdasarkan skop kajian yang telah saya nyatakan di atas. Saya memilih pihak KIMMA untuk turut serta menyumbang idea kerana pendapat komuniti India Muslim juga memainkan peranan yang amat penting di dalam kajian saya ini. Untuk makluman tuan/puan, saya berhasrat menjalankan sesi temu ramah secara berkumpulan atau secara istilahnya 'Focus Group Discussion'. Jadi, saya memerlukan sekurang-kurangnya tiga hingga enam orang kakitangan KIMMA untuk ditemu ramah dalam satu sesi yang akan memakan masa lebih kurang satu jam. Saya amat berharap sesi temu ramah ini dapat dijalankan bersama pihak KIMMA.

5. Tarikh yang saya ingin cadangkan adalah pada _____ atau _____ pada jam _____. Jika terdapat kesulitan bagi pihak KIMMA dengan tarikh dan masa yang dicadangkan, saya amat mengalu-alukan sebarang cadangan masa yang bersesuaian. Saya juga ingin memohon kebenaran untuk menggunakan salah sebuah ruang di pejabat KIMMA untuk menjalankan sesi temu ramah ini.

6. Kerjasama pihak KIMMA amatlah saya harapkan dalam menjayakan proses pengumpulan data dan kerja lapangan saya. Segala kerjasama saya dahulukan dengan ucapan terima kasih.

Sekian, terima kasih. Wassalam.

Yang benar,

.....
(NORHANIS DIYANA BINTI NIZARUDIN)
norhanisdiyana@gmail.com/s1264984@sms.ed.ac.uk
+60132762597/+447707731332

APPENDIX K

MOSQUE COMMITTEES (Focus Group Discussions Guide)

Part 1: Introductory questions

1. Could you please tell me briefly the background of this mosque and its surrounding neighbourhood?
 - Who are the frequent users?
 - Facilities: Quarters? Shops (Muslims or non-Muslims)? Adjacent lake?
 - Any difference between past and present?
2. We know that the idea and concept of the mosque itself as a social development institution. As the mosque committees - How about the roles of mosque open spaces themselves in inviting social integration within community?

Part 2: Mosque open space and community

1. What do you think of the open space provided at this mosque?
 - What do you think of the current design?
 - Does it allow any multicultural use? Are there any non-Muslim users/visitors?
 - What if the open spaces around the mosque are used by the whole society, not only Muslims? Any challenges or opportunities?
2. What makes the users interested to utilise the mosque open spaces?
 - How about the outdoor activities organized by the mosque committee? What kind of activities had been organized?
 - Were there any non-Muslims have ever joined the activities with the Muslims?
3. Would you consider if the non-Muslims would like to use the open space for any of their festivals?
 - If yes/no, why?
 - Are there are regulations/code of conduct that they need to follow?

Part 3: Design and characteristics

1. What would be the ideal design characteristics of the mosque open space to make it more multicultural/community-friendly?
 - What would you like to improve/propose/have?
 - As the mosque committee - what do you think that the users/visitors (Muslims and non-Muslims) would prefer to have?
2. How would you suggest in inviting and promoting the whole community to use the mosque open spaces?
 - Muslims?
 - Non-Muslims?

Thank you very much for your time and effort. Is there anything you would like to add to this interview?

APPENDIX L

MUSLIM USERS (Focus Group Discussions Guide)

Part 1: Introductory questions

1. Could you please tell me what are your favourite outdoor places?
2. What do you do in such places?
3. When do you usually go to mosque? Which mosque do you prefer? (Nearby mosque, large-scale mosque or else?)
4. Have you ever used the mosque open spaces for any activities? (Self-activities/mosque social activities).

Part 2: Mosque open spaces and community

1. What do you think of the roles of open space at the mosque for the community?
2. What do you think of the mosque open spaces nowadays?
 - What do you think about the design? (In terms of functions, attractiveness, and sense of invitation).
 - In your opinion, do the mosque open spaces nowadays show any multicultural use within the community?
 - Have you ever seen any non-Muslims use/visit the mosque open space? If yes, what they do?
3. As a Muslims, would you consider if the mosque open spaces are used by the whole community, including the non-Muslims?
 - If yes/no, why?
 - Are there any challenges or opportunities which may arise from this?

Part 3: Design and characteristics

1. In your personal opinion, what do you wish to have around the mosque open spaces? (to make it as your favourite places).
2. What would be the ideal design characteristics of the mosque open space to make it more multicultural/community-friendly?
 - What would you like to improve/propose/have?
 - What kind of activities do you think suit to be enjoyed by both Muslims and non-Muslims at the mosque open spaces?
 - As the Muslim users - what do you think that the non-Muslim users/visitors would prefer to have for them to enjoy the space?

Thank you very much for your time and effort. Is there anything you would like to add to this interview?

APPENDIX M

NON-MUSLIM USERS (Focus Group Discussions Guide)

Section 1: Introductory questions

1. Could you please tell me what are your favourite outdoor places?
2. What do you do in such places?
3. Have you been to any mosque in Malaysia?
4. If yes, have you ever used the mosque open spaces (mosque open compounds) for any activities; self-activities or mosque-based activities? Have you experienced any challenges using the mosque open spaces?

Section 2: Mosque open spaces and community

1. As a member of the community, what do you think of the roles of open spaces at the mosque for the community?
2. What do you think of the mosque open spaces nowadays? Answer to the sub-questions below:
 - i) What do you think about the design? In terms of :
 - Functions?
 - Attractiveness?
 - ii) In your opinion, do the mosque open spaces nowadays show any multicultural use within the community? How?

Section 3: Design and characteristics

1. As a user/future user/visitor, what do you wish to have around the mosque open spaces that would attract public to come and use the spaces?
2. What would be the ideal design characteristics of the mosque open space to make it more multicultural/community-friendly?
 - i) What would you like to improve/propose/have? (Physical elements such as any kind of facilities? Or perhaps good landscape design?)
 - ii) What kind of activities do you think suit to be enjoyed by both Muslims and non-Muslims at the mosque open spaces?

Thank you very much for your time and effort. Is there anything you would like to add to this interview?