Motivation and Attachment in the Use of Public Open Spaces in Jeddah, Saudi Arabia

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DEDICATION

I dedicate my thesis to my family.

A special feeling of gratitude to my loving parents, Nidal and Fayzah whose words of encouragement led me to this success.

My sisters Sara and Rawabi have never left my side and are very special and supported me in to the last.

This thesis is dedicated to my son Yousef.

I am sorry for being away from you for a long time but you will be proud of your father forever.

I Love You All.

Finally this work is dedicated to Jeddah especially and to Saudi Arabia.
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ABSTRACT

This research investigates how the residents of the city of Jeddah perceive, use and experience open spaces within an urban context, including unplanned and peri-urban natural areas. It highlights the patterns of use of open spaces and compares these with research findings from North America and European countries.

The specific cultural and historical context of Arabic countries means that key factors in use of public space are the segregation of gender and importance of religious practice. However, Jeddah is also a multicultural city, with a high proportion of migrant residents, so also provides a research context for critiquing transnational practices and attachments. The research strategy was developed from two key methodological principles. The first develops investigation of place as an integration of form, fabric and cultural practice, allowing the research to link social patterns with the physical design of the public realm. The second foregrounds storytelling methods to elicit complexity of place attachment, enabling investigation of intangible influences, such as social norms, gender norms, religion and ethnicity. A qualitative case study approach was used to investigate users’ cultural practices and experiences of public spaces. The methods used in this research were a review of maps and documents, car surveys, observations and on-site interviews. It was important to develop an open space typology to meet the diversity of use in a case study selection specific to a Gulf region context.

One key finding of this research indicates that Saudi and non-Saudi users visit designed open spaces and incidental spaces that meet their perceived needs, and positive experiences by women using public open spaces implies a broad desire to undertake more outdoor physical activity. The factor of gender is also shown to significantly influence how places are used in terms of temporal and spatial dimensions, as women and men made adaptations to their use of public open spaces to conform to cultural norms. Another key finding of this research suggests people seek out meaningful places that are primarily defined by social connections or by restorative experience. The final key finding of this research shows that public open spaces often fail to meet the identified needs of a diverse range of users, the findings indicate concerns about poor maintenance of public open spaces, and there are insufficient opportunities for users to share their needs with decision makers. Therefore, this research enhances knowledge of patterns of usage and place attachment for public open spaces in an Arab country that follows Islamic law, but also found similarities of patterns of place attachment when comparing Western studies, which suggests that this theory has cross-cultural relevance.
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CHAPTER ONE
AIMS & RESEARCH SCOPE
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1.1 Introduction
This research looks at place attachment and the ways in which people feel an emotional bond with places (Altman and Low, 1992). It examines the concept of place attachment in outdoor public spaces within the urban context of Jeddah in Saudi Arabia and outside the city boundaries. This study gives an insight into how and why open spaces are used in Jeddah from interview conducted with users at the selected sites and observations. It investigates Saudi and non-Saudi users and their motivations and ways of using open spaces in groups and individuals, and for males and females. In addition, the analysis of the findings contributes to the discussion of value and the perceptions of the quality of the open spaces in Jeddah by presenting participants’ responses and the knowledge and experience of the researcher as a landscape architect.

1.2 The research aims and objectives
This research observes how the residents of the city of Jeddah perceive, use and experience open spaces within the city urban context, including unplanned and peri-urban natural areas. It highlights the differences in the pattern of using open spaces that contrast with research findings from North America and European countries.

The aims of this study are as follows:

1. To investigate how and why residents use designed and incidental public spaces in the Saudi Arabian urban context.
2. To address dimensions of place attachment in shaping the values and meanings of public open space across diverse axes of identity.
3. To identify some of the implications for improved planning and design of public open spaces to meet the requirements of local and migrants users within the Saudi Arabian urban context.

To gain a better understanding of the concept of place attachment and how users apply meanings to specific open spaces within the context of Jeddah, it is important to identify what factors influence these. Place attachment will be associated with the types of open spaces that are available, as these would include designed and non-designed open
spaces across the city. In addition, the culture and traditions of Jeddah and the significant number of migrant workers from other countries and cultures are associated with demographic factors that play a critical role in understanding place attachment and meanings applied to certain open spaces. To meet these aims of the research the following objectives need to be understood:

a) Identify typologies of the urban public spaces that are commonly used by residents.
b) Record activities and use across demographic factors on different days, and at different times of the year in selected case study locations.
c) Investigate the ways that people develop place attachment, share meaning and develop responses to specific places and, in particular, the differences in usage between Saudi Arabian and migrant users.
d) Record and critique current professional practice regarding the planning, design and management of open spaces in Saudi Arabia, with specific focus on social requirements.
e) Formulate implications for the landscape architecture profession, working on the planning, design and management of open spaces in Saudi Arabia.

1.3 The Context
The country of Saudi Arabia is commonly misunderstood in many respects (Al-Rasheed, 2002). It is a country with dry seasonal valleys, beaches, dramatic mountains and beautiful oases. There are many shops, restaurants and cafes in its cities, and a range of cultural activities and nightlife. The main cities in Saudi Arabia, such as Riyadh and Jeddah, have many amenities and these are usually of a high standard. The state is based upon the Islamic religion in its policy and laws, with adherence to customs and traditions that have continued for generations. Aspects of the country’s cultural practices are changing more in line with developments, such as the use of technology, the quality of and access to education, and commercial developments that are improving for many people. However, some traditional aspects of life remain, such as the principle of segregation of gender, approaches to women’s dress and many other aspects.

Some aspects of public provision in the Kingdom are neglected. Research shows that in most of the development indicators for Saudi Arabia, there is a lack of policy and environmental planning for open spaces in most of the cities. Clear open space system strategies could be a solution to a number of issues, and particularly to ease concerns
about pollution, and environmental, educational and social issues. Making more open spaces available would provide opportunities for more contact between community members, as well as enhancing facilities for adults and children. The creation of these open spaces will offer great benefits if planned and designed according to users’ needs and based upon the standards and design process for public open spaces.

There are a number of key areas in which it is necessary to develop approaches to open space design and planning specific to Arab countries, and Saudi cities should take into account key areas of difference with Western countries. Most studies regarding people’s responses to open spaces are based on Western culture, and mostly European and North American based; for example, Rishbeth (2001) studied the use of open spaces by local residents in cities, and although residents that were migrant workers and ethnic minorities were identified and how they responded to open green spaces, there was insufficient regard for the customs and traditions of these groups in local communities.

Jeddah’s total population is estimated to be around 3.4 million and by 1450 (2029) it is expected to have grown to over 5 million. The total population is currently made up of 52% Saudi nationals and 48% non-Saudi nationals. This is considered as a challenge for decision makers who are responsible for the planning and design of open spaces, because there are a variety of users of these open spaces in the city. Based on the demographics of these users, their needs and the benefits of using open spaces will be different.

There are a variety of open spaces within Saudi Arabian cities, but decision makers have failed to take account people’s needs, or have a relevant background in planning...
and design that is necessary to understand the environment and the impact that the provision of open spaces has upon society. Poor planning and distribution of open space are current problems facing the city of Jeddah. Although there are many open spaces in the city, a large proportion of these spaces are poor in design and difficult to use. However, there are also examples of distinctive design and quality, but the proportion of these spaces, when compared to the area of the city, is very limited.

Many of the neighbourhoods have no planned or designed open spaces, and there are many left over plots, but the city contains a variety of public parks and open spaces. Some of the open spaces have been transformed by residents of the city into gardens with family gatherings and where children can play on the grass. The Municipality of Jeddah has added children’s playgrounds in these areas and made provision for public services such as kiosks and other facilities. However, this is the exception rather than the rule and most outdoor spaces that are appropriate for recreational use have no design intentions beyond being only leftover spaces, but people want and need to use open spaces.

The population of the city needs open spaces that can be used even in hot and humid weather, and people adapt their customs and traditions without giving rise to conflict. As well as regular use of open spaces in Jeddah, there are a range of seasonal celebrations that residents can identify with public open spaces, such as during Ramadan, Eid, the National Day and many other public festivals. The most specific celebration is people gathering during Ramadan, which is the most significant month of the year for most Arab and Muslim countries.

Much of the green space that is associated with leisure and benefits research is based upon European and North American contexts, and there is a pressing need for research to address the Saudi Arabian and Middle Eastern context. This is because there are many factors, such as rapid urban expansion, the involvement of Western landscape architecture firms and the growth of the landscape profession. This research is currently one of the few studies of open spaces in Jeddah, which will fill an existing gap in the knowledge base for landscape architecture and planning of public open spaces, as this issue has not been recognised as being sufficiently important. The significance of this study is that it will examine the approach of place attachment that will lead to an
understanding of users’ needs, and will explore how the residents of Jeddah use these spaces.

1.4 Research methodology

Thomas (2003, p2) describes inductive research methodology as a systematic procedure to analyse qualitative data where specific objectives guide the process, and the use of open spaces and users’ behaviour will be analysed to attempt to reveal what factors influence these within the context of Jeddah. The inductive approach is also valuable in supporting the outcomes of the research on the basis of the real evidence.

According to Gorman and Clayton (2005), qualitative research can be defined as the process related to inquiry in which data is drawn from the context of their occurrence, so that occurrences can be described. The strength of qualitative research is that it can provide complex textual descriptions of how people experience and interact with public urban spaces in Jeddah. The meanings of events are determined by participants' experience and their own perceptions, and the analysis of the findings by the researcher. Place attachment that can be sometimes contradictory behaviours, opinions, beliefs, emotions and relationships between individuals that are revealed by these findings, but contributes to developing and informing existing theories of place attachment. In addition, there is a need to understand that place attachment includes issues of opinion and value, sense and perception of places. Qualitative methods are also effective in identifying nuanced factors, such as social norms, socioeconomic status, gender roles, and practices related to ethnicity and religion, which will be relevant to the research.

The methods applied in this study should help to meet the objectives of the research and lead to meeting the aims of this thesis. The researcher has developed innovative means of data collection that are appropriate for the context of Saudi Arabia. Effective recording techniques were required, because current data for open spaces are very limited. The methodology examines practices relating to demographic values, and links the data from social research into the practice of landscape architecture in Saudi Arabia. The observations of different public open spaces that are used by the public will help to identify the most popular places that people use. The intention is to select case studies from a variety of locations in the city of Jeddah to compare different residential contexts. This is followed by on-site semi-structured interviews with the users of these
selected sites. The sampling reflects the demographic profile (age, nationality, gender) of site users in any given location.

The responses from interviews and from observations obtained were used to inform understanding of the relationship between the open spaces in Jeddah and its people, so that recommendations can be made to improve the quality of these open spaces for users. It is anticipated that the findings and recommendations from this research could support those responsible for making planning decisions in Jeddah to recognise the importance of these open spaces, as well as to suggest other pathways for research into improving the design of open spaces. The conclusions discuss how the development of neighbourhood design could contribute to social interaction and cultural sharing, together with the creation of a sense of community and urban integration within open spaces.

This research study focuses on the concept of place attachment, because the researcher believes that this has been insufficiently considered within the context of landscape design and planning in Jeddah, Saudi Arabia, as many citizens wish to use public open spaces, but these facilities often fail to meet the needs of individuals and groups who use them regularly. Therefore, promoting a better understanding of place attachment should fill the gap in knowledge in current landscape design and planning, and attempt to meet the needs of users of public open spaces better.

The researcher has enhanced his knowledge and understanding of place attachment, and its relevance to landscape design and planning to meet the needs of users of public open spaces, as the review of literature on the subject and the findings from this research study should contribute to promoting wider understanding of the importance of place attachment within design and planning for urban spaces. Therefore, the quality and features of landscape design and planning could be improved significantly, and specifically in Jeddah, Saudi Arabia, when designers and planners have a better understanding of the factors that contribute to the bonds that people create with specific public open spaces, which enhance their quality of life and also meet their identified needs.
1.5 The Structure of the Thesis

This thesis consists of nine chapters.

Chapter One introduces the main concept and theme of this research. This chapter also highlights the gap in knowledge with regard to the use of open spaces in Jeddah and how these spaces are used.

Chapter Two presents the geographical context of the research. This chapter discusses current use of recreational open spaces in Saudi Arabia. It also presents daily life in Saudi Arabia and how this affects the use of open spaces in terms of demography, climate and urban development policies that are applied in Jeddah. This chapter also provides a focus on everyday life and the context of shared outdoor activities that should introduce the reader to the culture and traditions of the people of Jeddah, as well as understanding the structure of the city better.

Chapter Three presents the review of literature, which reveals and identifies key theoretical contexts to the subject of this research. This study draws on research from a range of disciplines that have evaluated urban areas, recreation and place attachment, which have already recognised the importance of meanings associated with specific places by users, as well as the concept of place attachment for residents and migrants.

Chapter Four presents the approach and methods used. It outlines the survey and the data collection methods. An overview of the pilot study and the fieldwork that took place in Jeddah is also presented. It includes case study briefs of the selected sites, observations, and semi-structured interviews that apply to each site. It also identifies the structure of sampling size according to participants’ different gender, age and nationality, and explains how ethical considerations were applied.

Chapter Five is the first of three chapters presenting the research findings. It is based on the observations of open spaces, car surveys of the city and a review of maps and documents. It introduces how the typology of public open spaces in Jeddah was identified. It presents each of the selected sites in detail, and supported by illustrations, maps, photos and general information about each site.
Chapter Six explores findings in relation to patterns of use for open spaces in Jeddah. The findings of this chapter are primarily based upon interviews with participants and observations of how people behave and interact. This presents who users are, why and how they use spaces, and when they use each of the selected sites. In addition, this chapter presents the quality, design, problems and frustrations of the study sites. It also presents findings from interviews and open space professionals.

Chapter Seven discusses place attachment and participants’ perceptions towards open spaces, as well as their psychological, personal and community values that contribute to emotional attachment to specific open spaces. This chapter looks more broadly at attachment to open spaces, and highlights the affective bonds between some of the users and certain open spaces across Jeddah.

Chapter Eight discusses the findings of this research. It presents and discusses the key findings from the last three chapters, and explores the essence of the research aims, according to the findings. It links these findings to the literature and suggests how these findings can be applied to improve the open spaces in Jeddah to meet peoples’ needs and desires. This section introduces the key findings in relation to patterns of using open spaces, the key findings with regard to place attachment and the planning and design of open spaces. All of these findings are linked with the review of literature.

Chapter Nine is the conclusion of this research. It highlights the contributions, as well as the limitations of this research. It also includes a summary and suggestions for future research.

Outline summary
This chapter has introduced the concept of place attachment within public open spaces in Jeddah, and outlined how groups and individuals use these for many purposes, as well as explain the cultural differences in Saudi Arabia when compared to Western countries in terms of the segregation of gender in public spaces. The aims and objectives for this research study have also been explained.

The following chapter will highlight the use of public open spaces and the patterns of daily life for people living in Jeddah, Saudi Arabia to place this research into a geographical context, and identify the specific culture and traditions of this society.
CHAPTER TWO

CONTEXT OF THE RESEARCH LOCATION
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2.1 Saudi Arabia

Around one hundred years ago, Saudi Arabia was an isolated desert country with settlements of Riyadh and the port of Jeddah that were originally small commercial centres. Since that period, the country has rapidly transformed from an underdeveloped agriculture-based economy to a Kingdom state with an oil revenue-based economy that has contributed to its cities having modern infrastructure with high levels of urbanisation and development. Saudi Arabia is the world’s largest oil exporter, and is also considered to have the world’s largest oil reserves.

Within the region of the Middle East, Saudi Arabia is the largest country, and when compared to Arab countries it is the third largest in terms of land area (2,149,690 square kilometres). The Red Sea lies to the west and the Persian Gulf lies to the north east, and according to 2010 statistics (Central Department of Statistics and Information, 2010), the population is estimated to be 29,994,272, and the number of non-Saudi residents are estimated to be 9,723,214.

The Arab tribal culture is still demonstrated in the attitudes of people living in the country, so that in terms of social and cultural issues, Saudi Arabia presents a conservative image. Therefore, dress and behaviour are enforced strictly by social norms, as Islam is applied in everyday life, but progress and development are not completely resisted. There are no organised labour unions or political parties to give...
citizens a public forum, and individual opinions about social or political matters cannot be expressed easily.

Society in Saudi Arabia is entirely based on Islam in all parts of everyday life, which requires the separation of males and females in community activities. Although the status of females in Saudi Arabia has changed from the early tribal societies, attitudes towards their roles in society are varied. The King of Saudi Arabia has strongly supported enhanced roles for females in the country, so that as well as the roles of wife and mother to care for families and children, females are increasingly being employed as consultants, researchers, engineers, teachers and doctors. The ability for females to gain their rights was approved by King Abdullah and the Shura Council in 2013 despite the criticisms of conservative groups in the country that challenge the work of women in the Saudi community.

Saudi Arabia mostly has a desert climate, apart from the south west of the country, so that day temperatures are high (around 36°C) during the spring, summer and autumn, and moderately high (around 17°C) during the winter. Temperatures at night are low across the country. However, in the south west of the country to the north of the border with Yemen the climatic conditions are humid with mild temperatures due to the effect of monsoons from the Indian Ocean. The ecology of Saudi Arabia is defined by this desert climate, so that plant life includes shrubs and small herbs that need small amounts of water, although the south west of the country has small areas of trees and grass cover. Wild birds include falcons, eagles and hawks, and wild animals include wolves, hyenas and sand rats.

2.2 Jeddah

The Municipality of Jeddah is located within the Makkah (Mecca) region, which is on the central western coast of Saudi Arabia. This is an area of 5,460 sq km and situated on the Red Sea coast, which stretches from the settlement of Thuwal in the north, to near Mastabah in the south and covers a distance of approximately 160km. Jeddah City is the main settlement of the Governorate, and this is situated 65km west of Makkah, with which it has been historically linked as the gateway to the Two Holy Mosques for over 1300 years. The aim of this section is to ascertain how much Jeddah has transformed and how much it has improved.
2.3 Growth and development

Jeddah has long been a centre for traders and sailors and was first inhabited about 2,500 years ago. The city was already an established port for spice trading when Caliph Osman Ibn Affan declared it as the official port for Muslim pilgrims travelling to the Holy Cities of Makkah and Madinah in 647 AD. This declaration of the city was a turning point in Jeddah’s future. Not only were there increased possibilities for business, but also the arrival of pilgrims from all over the world, many of whom stayed in the city, formed the beginnings of a cosmopolitan city.

During their expansion into the Middle East in the early 900s (1500s) the Ottoman’s conquered Jeddah and built a stone wall around the city, which was intended to withstand attacks from the Portuguese and it remained a fortified city until Turkish rule was relinquished in 1866. The city walls were taken down in 1366 (1947) and the city’s population increased rapidly, largely due to immigration. Between 1366 (1947) and 1407 (1987) the population grew by an average of 9.5% each year.

Saudi Arabia depends economically on the export of oil and then on industry and agriculture. There is also a reliance on religious tourism that contributes to the economy of the country during the months of Hajj and Umrah. The enormous increase in the kingdom's wealth caused a rapid growth of the population and urban expansion in the last four decades in the large cities in the country, such as Jeddah. This growth and expansion occurred without sufficient consideration of planning regulations and strategic approaches to the city of Jeddah. This resulted in part of the city growing beyond the capacity of its infrastructure. This growth led to reliance on the private car and large numbers of unplanned land spaces and slum neighbourhoods.

2.4 Demographics: structure

The population of Saudi Arabia has a high percentage (39.92%) of people aged 15 years and younger, and this significant youth population is also reflected in Jeddah, but with a slightly smaller percentage (32.2%). This pattern of a large youth population (aged 15 years and younger) of the country has remained broadly similar since the National Census of 1974 (CDS 1992; 2004; 2007).

In addition, many immigrants make up the population structure of Jeddah from around the country, as well as from other countries. Jeddah Municipality in 2002 reported that
Jeddah had an older population when compared to other Saudi Arabian cities due to the large number of mainly middle-aged foreign immigrants, in addition to Jeddah’s lower birth when compared with other Saudi cities. Therefore, the male population of Jeddah has historically risen faster than for females (Mandeli, 2011); however, these population differences have never been substantial, because the families of immigrant workers tend to join them at a later time.

2.5 Demographics: growth

The population of Jeddah has grown more than 115 times between the unification of the country in 1932 and 2014. Jeddah’s concentration of power, together with an accumulation of wealth has attracted many newcomers to the city, and increased its population. The national census has revealed that Jeddah’s population has risen from 2.8 million in 2004 to 3.98 million in 2014 (CDS 2004; 2010).

Jeddah’s strategic coastal location, together with its special status as the entry point for pilgrims, makes the city both a major trading centre as well as a diplomatic centre selected by the country’s political elite. Jeddah has characteristics that are similar to other cities in Saudi Arabia, which includes substantial migration, rapid growth and a high percentage of young people (aged 15 years and younger). Saudi Arabia has been one of the fastest growing countries in the world, as urbanisation has been associated with oil revenues that have contributed to the country’s economic prosperity.

Fakeeh (2009) explains that due to the global financial crisis, financial markets of most countries significantly declined, but due to surplus liquidity and increased government spending, there was limited impact on Saudi Arabia. Although the invasion of Iraq interrupted the growth of the economy, Saudi Arabia’s financial situation was stabilised by these factors mentioned above. Spending has promoted economic growth in the country from the income created by oil.

According to Behrendt, Hag et al. (2009), Jeddah is the largest commercial and business centre in this part of Saudi Arabia with effective services and infrastructure developed with significant public and private investments. Developing job opportunities have increased the number of migrant workers that has provided Jeddah with further economic benefits.
The Central Department of Statistics and Information reports that the current level of unemployment across the country is about 5.50%, but the IMF reports that over the previous four years non-Saudis were employed in 1.5 million new jobs, compared to 500,000 Saudis gaining new jobs. Therefore, the unemployment rate for Saudis is 12%, but the unemployment levels for specific groups of Saudis is much higher, such as those under the age of 50 (30%) and females (35%) (IMF, 2013).

2.6 Immigration

In 1938, when oil was discovered, workers migrated from across Saudi Arabia, as well as foreign migrants, and this phenomenon of workers seeking better work opportunities continued (Mandeli, 2011). According to a report by Jeddah Municipality (2004), between 1971 and 1974, foreign workers increased to become around 37% of the population of the city. This percentage of migrant workers remained broadly similar and in 2002 this had decreased slightly to around 30%. The number of Saudi citizens in the total Jeddah population increased rapidly from 47.7% in 1978 to 70.6% in 2002 (Jeddah-Municipality 2004). However, the percentage of internal immigration declined and the numbers of foreign workers increased over the period from 1978-2002 (Mandeli, 2011).

Saudi nationals were unable to provide the skills and expertise that expatriate workers were able to offer since the economic boom of the 1970s, so their numbers continued to grow due mostly to a heavy reliance upon the work of expatriates that was essential for Saudi economic development (Mandeli, 2011). Statistics from the General Census of Population and Housing for the year 2010 reveal that the total number of international immigrants increased from 0.7 to 1.73 million between 2002 and 2010, with a 11.9% annual rate of growth. During the same period, their proportion to the total population also increased from 29.4% to 50% (CDS 2004; 2010). The distribution of the population in neighbourhoods by nationality is varied (figure 2-3). In some neighbourhoods of Jeddah, such as Al-Sabeel and Al-Nuzlah in the south of the city, the proportion of ethnic groups outnumbers native Saudis (CDS 2004; figure 2-3).

Migrant workers in Saudi Arabia come from Egypt, Lebanon, Philippines, Indonesia and other developing countries, and Western countries, such as the USA and the UK. Migrant workers from developing countries that offer specific skills needed in the labour force of Saudi Arabia, and mostly used in the construction industry, but also
bring new ideas and experiences from their society and culture. This differs from migrant workers from Western countries, as these are usually skilled specialists that offer knowledge and experience for various new technology fields, and particularly for the oil industry, but non-Muslim migrant workers usually live in protected communities and have less social interaction with local residents. Therefore, migrant workers in Saudi Arabia come from diverse countries of origin and often with different cultural, social and religious backgrounds.

The national background often plays a significant role in the distribution of immigrants, and especially low-skilled workers. Immigrants representing different nationalities may be found living together in a particular area, which is similar for highly skilled professionals from western countries that are often isolated within gated communities (Mandeli, 2011). There are other examples of expatriates living in communities based on their class status, or living in communities based on their economic status.

![The General Census of Population 1431 (2010)](image)
Figure 2 - 2: The distribution of Jeddah population in residential neighbourhoods: by nationality
2.7 Immigration challenges

Some immigrants attempt to maintain their cultural identity by opening clothing stalls, food shops and restaurants that cater for their special needs (Mandeli, 2011). Such immigrants have been uprooted from their origins and create new social worlds, practising some elements of their previous way of life. However, these immigrants cannot be described as integrating within the community, due to different ethno-national origins, clans and languages. Huo states that immigrants play a critical role in shaping the city’s planning and landscape as they create new cultures within neighbourhoods and within the city urban context (Huo, 2013).

Jeddah has a population structure based on many different nationalities, as many foreign migrant workers move for employment opportunities. Although there has been a traditional acceptance and tolerance of foreigners living and working in the city, over recent years, a perception has developed by some residents that there are too many foreign migrant workers, which has exposed increased feelings of uncertainty, anxiety and insecurity (Mandeli, 2011).

Society has been seen to change in response to foreign migrant workers who have made their homes in various residential areas of Jeddah. However, these immigrant workers have brought with them new ideas, skills and practices from their home cultures, which add to the new urban cultures in Jeddah. Migrant workers from other Arab and Middle East countries, as well as those from the Philippines, India, Pakistan and Indonesia, travel to Saudi Arabia for work opportunities often not available in their country of origin, or because they are able to earn more money to send to their families. This has helped to create a culturally vibrant and cosmopolitan urban environment (Mandeli, 2011).

The different ethnic origins of people living in Jeddah have contributed to shaping the attitudes of its citizens, so that various forms of exclusion are used against immigrants, such as avoidance, unwillingness to communicate, segregation and discrimination. However, as anti immigrant attitudes and social exclusion have become more prominent, Islamic norms have reduced visible discrimination in the city. In addition, Saudi nationals have become concerned about diminishing national and regional identities, as well as an increased awareness of the potential threats caused by too many international immigrants. Residents are often concerned about their personal safety.
from migrant workers that have lost their jobs or who have entered the country illegally, and often turn to crime to meet their basic needs of food and accommodation. In addition, some migrants come to Saudi Arabia for specific purposes, such as young children from Indonesia who work as camel jockeys, but as they grow too old to continue this, they often cannot afford to return to their home country. Therefore, many migrant workers come to Saudi Arabia to earn money and fulfil workforce needs in the country, but often socialise with those from the same country or cultural background (Mandeli, 2011).

Negative attitudes towards foreign migrant workers and the consequent racial discrimination reflect citizens’ desires to remove the source of threat and competition (Yamni 2000). Berry (2008) suggests that attitudes towards foreigners can differ, according to the status of the incomers, such as whether they are asylum seekers or refugees, as well as others who are foreign migrant workers in Jeddah. Attitudes towards immigrants differ according to the status of citizens, as well as their social and religious inclinations.

Research by Al-Gabbani and Alhusein (2005) also confirms changing attitudes of residents to the acceptance of foreign migrant workers. This is often linked with employment concerns by citizens, and especially young people, as foreign migrant workers become residents in the country. Although Islam condemns discrimination and encourages pro-social behaviour, some citizens feel that their cultural identity and economy is threatened.

Citizens who have foreign-born parents or grandparents and have been assimilated into Jeddah society tend to have neutral attitudes towards immigrants. Mutual acceptance and harmony between ethno-cultural groups has been encouraged by these people who have possessed citizenship for many years. Although immigration has contributed to the development of the city of Jeddah, attitudes of these citizens towards migrant workers can vary according to the status of ethnic group members, their professional skills, or if the foreigners are required for work (Yamni, 2000, 2009).

Traditionalist groups, who originally moved from the surrounding rural areas to settle in the city and became a majority group, tend to have more negative attitudes towards immigrants. This is unlike most of Jeddah’s native residents, whose ancestors came
from outside the Arabian Peninsula. Traditionalist groups consider themselves to be superior citizens due to their tribal origins and nativist sentiments. They support the concept of hierarchies among Saudi nationals and often express prejudice against others in order to maintain their social dominance, Guimond, Oliveira et al. (2010) and Esses and Wagner et al. (2006) comment that traditionalists create damage to existing group-based social hierarchy, because as they view those native residents who have historical origins outside the Kingdom as second class citizens.

Most citizens who have negative attitudes towards immigrants believe that expatriates take available work and economic opportunities away from nationals, who are unable to find work. Saudi nationals, such as the traditionalists, consider the presence of low-skilled foreign workers, especially from Africa, Pakistan and India, to be the main cause of Saudi unemployment, as well as the main cause of crime, moral corruption and serious social divisions. Concerns about anti-social behaviour and changing social norms have contributed to more negative attitudes towards expatriates, which are often xenophobic (Yamni, 2000; Fakeeh, 2009).

2.8 Family and social life
The traditional Saudi family structure has to some degree changed from extended to nuclear, but differs from industrialised countries, because of the high number of children in Saudi families when compared with nuclear Western families (Khalifa, 2001; Al-Omari, 1984; Altorki, 1991). Litwak (1965) suggests that families in Jeddah and other similar cities should be considered to be a modified extended family structure (Allan, 1985).

Government policies are the main reason for the emergence of nuclear families, with most of the ambitious social and urban development programmes focussed upon major urban centres, such as Jeddah. Such programmes have transformed Saudi lifestyle from one of small village dwellers and nomads to one of predominantly city dwellers. The large cities now have a concentration of both employment opportunities and educational facilities, which encourages citizens to take up employment in government services. This has led to an abandonment of communities, families and traditional livelihoods, as well as the dynamics of daily life (Fakeeh, 2009).
The changing economic base and lifestyle of metropolitan societies has encouraged the involvement of women in education and the labour force in order to improve their living standards and social status. This has led families of the new generation being smaller in size, since generally it is believed that it is not possible to attain a higher class status with large families and many children (Mandeli, 2011).

Housing policies in the country have encouraged small housing units, which encourage urban dwellers to limit the size of their families and their kin relations in order to avoid rapidly increasing residential land prices and high building construction costs. As a result, the population is now more mobile and allows them to have greater advantages with both income and job opportunities.

International migrants are often young individuals and couples who are attracted to the large cities, which have increased the number of nuclear families in modern Saudi society. The housing policy is another reason that has encouraged newly married couples to live in housing away from their parents, which breaks the traditional extended family and reduces the size of family gatherings (Mandeli, 2011).

Although there has been rapid change in Saudi Arabia, family and kinship remain important as a supporting network for all residents to overcome the economic hardships of immigration and unemployment. This is due to three main factors, which includes the Islamic beliefs and principles concerning cultural patterns and personal status, such as marriage and the role of women and so on. Secondly, uncertainty, anxiety and insecurity relating to crime and moral corruption, emphasise blood ties as the strongest social network that people can rely upon. Thirdly, family honour, in the eyes of society, brings all family members together and encourages individual loyalty that keeps the family together (Al-Nowaiser, 1996).

The family, as a social institution, remains the main meeting place for family members. Even in cities, such as Jeddah, where there are plentiful options for recreation, sport and religious support, the ties with family members remain of high importance (Adas, 2001).

Mixed public contact is forbidden by Islamic values and social norms, and women are treated differently from men. Most positions in both public, and private sectors,
continue to be held by men, with women being excluded from playing active roles in work and civic life (Alshaya, 2005). The segregation of gender is strictly applied in all public spheres in Jeddah, as well as elsewhere in the country, with the main role being to maintain the structure of the family.

The separation of women from men is traditionally accepted as a moral imperative in religious terms, and has authority to impose social restrictions on women’s dress and their movement in public places (Yamani, 1996). Public places, such as restaurants and mosques, maintain separate sections for families and females, respectively. The law prevents women from driving cars, riding a bicycle or travelling inside or outside the country without written consent from their male guardian. Male family members are expected to ensure that women comply with these social restrictions.

2.9 Attitudes toward women
New feminist movements in Saudi Arabia emerged in the new millennium, which gained a momentum inspired by the pressure applied by Western countries on Arab states to ensure human rights and gender equality (Khalifa, 2001). As a result, thousands of young women have been allowed to study overseas, within the programme of the Custodian of the Two Holy Mosques. Opportunities that were previously only for the daughters of the wealthy to travel abroad and experience the wider world have been extended to many women from low-income families.

This research is related to the presence of women in open spaces in some respects, but it is important to identify the role of women in ancient times, such as during the era of the Prophet Muhammad, peace be upon him. Women had a prominent role in everyday life within ancient Islamic society, such as in trade and nursing between villages and cities by using different means of transportation, such as camels and horses. In addition, women had a significant role in the wars and invasions that are immortalised in the history of Islam. There was no intolerance that existed then, contrary to what is currently taking place in some Arab countries, which requires the suppression of women and prevents their presence in various spheres of life. The King's support for the social presence of women in all aspects of life and within the context of Saudi Arabian society is evidence that Saudi Arabia is moving in the right direction in respecting women’s rights.
The modernisation of the Saudi economy, which aimed at providing a higher standard of living for the public, has led to an increase in women’s involvement in economic, academic and social activities. Attitudes towards women’s education and occupations have also changed. Different factors, such as the mass media have encouraged the growing role of women in civic life. In addition, national educational policies may be considered to be highly significant for the emergence of the Saudi feminist phenomenon (Khalifa, 2001).

Today’s women have greater control over the arrangement of marriages and the decision making about their lives; this has also increased the presence of women in public places and among the society as teacher, doctor and engineer (Alajmi, 2001; Ali Qahis, 2008). It is important to note that there was a belief that a woman’s future prospects and happiness are dependent on marriage in Saudi society (Al-Suwaigh, 1989). Education and employment have provided new opportunities for women that remain unmarried, as well as giving women greater freedom to express their opinions regarding their choice of husband.

Over recent years, women in Saudi Arabia have organised campaigns for increased freedom and to change existing laws and customs that place many restrictions on women, such as the right to drive a car, the wearing of a veil, the need for a male relative’s permission to take a job or to travel and the separation of males and females in society generally. Islamic clerics apply these restrictions on women in Society that are supported by conservative groups across the country, but greater freedoms for women have been encouraged by the Royal Family.

2.10 Planning Issues
The last four decades have seen rapid growth in both natural and migratory populations, which has coincided with the Kingdom’s rapid increase in wealth. As a result, Jeddah city has grown physically and at a very rapid rate, which was partly because of the limited success of regulatory frameworks and spatial planning that tried to restrict development to certain parts of the city. Consequently, the urban areas of Jeddah grew beyond the capacity of its infrastructure (Khalil, 1994; Eben-Saleh, 1997).
Jeddah has a unique role because of the city’s history and location in relation to Hajj, which is one of the world’s largest migration destinations, and this has contributed to creating and developing its demographic profile and urban form. Jeddah continues to attract pilgrims and migrant workers from the Islamic world, and is seen as a place of opportunity and work.

The lack of a strategic and coordinated approach has led to structural problems with roads, sewerage and water supply, leaving the city to face a number of structural challenges that included an overdependence upon using private cars, as well as large areas of empty land (Mandeli, 2011). A lack of affordable housing has also resulted in over one-third of the city’s population, over one million people, living in settlements that are unplanned.

2.11 Open spaces: Social attitudes

According to Mandeli (2011) the demands of new markets, together with associated planning processes that were designed to re-shape society have resulted in a sharp break with the traditional urban environment. It was assumed that the vitality and health of the economy and social transition could not be maintained without changing the shape of the built environment, and to create a context that would support a range of modern economic activities (Mandeli, 2011). However, gardens are important in Islamic countries, and Muslims are encouraged to create, maintain and visit gardens, as these enable them to reflect about the afterlife and paradise, as well as suitable places for daily prayers. Al-Nassan (2008) explains that the names of gardens that have been established over many years in Saudi Arabia had several different names, such as Al-Rawdah and Al-Bustan (Orchard), although some gardens have maintained their original names (Al-Nassan, 2008).

The government wished to centralise the county’s economic activities in large cities, such as Jeddah, as well as modernising society through a collection of development strategies. In addition, the Saudi economic system has been integrated with Western economies, together with a way of life modelled on modern Western luxury lifestyles (Mandeli, 2011). Large revenues from the Saudi oil industry started in the 1950s, and are the main reason for the country’s rapid economic growth. Such changes have modified the physical characteristics of cities and altered the nature of the urban and suburban life. However, rapid expansion has also contributed to fewer public open
spaces and insufficient maintenance that was also recognised in Cairo, Egypt with similar climate, cultural and religious factors, and resulted in the construction of a new garden in Cairo that was financed by the Aga Khan Foundation. Salahuddin (2004) explains that this Azhar Park demonstrates a revival of the Al-Bustan concept that is a common pattern in gardens in Islamic countries (Orchard).

These initiatives have transformed society, whilst transforming integrated communities into dispersed populations through development to implement housing and transportation projects, which contributed to rapid expansion of major cities, such as Jeddah. Large-scale development projects, such as large blocks, substantial buildings, and wide streets were imposed for the redevelopment of the old city and the creation of new residential areas, creating a new modern lifestyle (Al Nowaiser, 1982; Alharbi, 1989). The functional classification of land use regulation has been enforced by both central and local authorities to ensure physical uniformity and maximising economic productivity (Mandeli, 2011). According to Al-Madhadji (2010), Islamic countries often base legislation for the environment on Islamic law, which would include aesthetic considerations when constructing new buildings, acoustic privacy, visual privacy, removing public waste and maintaining public places at a high level of cleanliness, as all these factors can negatively affect the environment.

Mandeli noted that the clearance of traditional neighbourhoods and the destruction of traditional urban spaces by public sector agencies and private investors were encouraged, which led to the emergence of a series of dispersed exclusive and depersonalised residential areas and segmented urban spaces that limit public access, which has undermined community cohesiveness (Mandeli, 2011). Therefore, projects led to social heterogeneity and polarisation, and also caused the displacement of people from their traditional communities. Al-Madhadji (2010) recognises that implementing environmental legislation exposes problems, as citizens are often insufficiently aware of how these factors could be applied in their day-to-day lives.

The disappearance of traditional buildings was encouraged by modern building regulations (Mandeli, 2011). Homes that were previously inhabited by extended families for three or more generations were replaced with new multi-flat building complexes, which forced many young married couples to leave the home of their parents homes to live in socially diverse residential areas. In an effort to promoting
higher standards of living by seeking work, urban dwellers looking to make a personal profit, found themselves either compulsorily or voluntarily in a state of constant mobility, thereby weakening the bonds of kinship and the dissolution of interpersonal relations, leaving both stability and social order to be threatened (Mandeli, 2011). Sidky and Bastawisi (2010) report on damaging effects on urban public open spaces as a result of poor planning decisions in Middle East cities. These findings report that rapid expansion of urban areas result in a negative impact on urban and open spaces within and beyond the boundaries of cities, so that cities in Egypt were described as an urban environment that demonstrated a lack of balance, which could also be applied to Jeddah in Saudi Arabia.

The physical decomposition of the urban fabric and deep divisions in the urban landscape resulted from the development strategies that were employed, as well as the creation of single-use areas from planning and architectural practices. Another issue of development strategies was prioritising vehicle use in the city. These factors contributed to people living in different types of environments. Regulations relating to land use stressed the segregation of individuals according to their economic and social status in the city, which led to social disintegration (Bokhari 1978; Akbar, 1981).

Freestanding buildings created changes to the urban fabric of Jeddah, when central areas were redeveloped. Therefore, the strategy of redevelopment appears to be individualism and segregation, which is supported by findings of Wirth (1930, cited in Lin and Mele, 2005: 33), so that human relationships become ‘segmentalised’ when cities are developed. In addition, modern planning regulations and designs that are intended to increase social heterogeneity and density often produce lifeless suburban neighbourhoods. Al-Fahad (2008) finds that few people use local gardens and parks in Saudi Arabia due to their poor design and management, and that the softscape and hardscape features of these public open spaces were described as poor quality, because they often fail to meet the needs of individuals and families.

Research findings reveal various factors influencing heterogeneity and urban fabric, such as increased distances between buildings as a result of building wider streets, creation of barely accessible and widely dispersed outdoor spaces, failure to provide protection from very hot weather and a lack of public services facilities and services. Other factors include the lack of a sense of community, security, privacy
and responsibility that are responsible for the reduction of social interaction between residents, and undermine a sense of identity and collective activities such as the maintenance of community public open spaces. These have prevented people from participating in social experiences and physical activities in outdoor spaces, and enjoying urban spaces (Al-Hathloul and Mughal, 1999; Eben-Saleh, 2002; Mandeli, 2011).

Cities in Saudi Arabia have had design practices, spatial practices and economic systems imposed that have contributed to problems with the built environment. This has interfered with the social harmony found traditionally in these cities, and has had a negative influence on community wellbeing, social status, children’s activities, women’s activities, social interaction and privacy. Al-Musawi (2010) finds a common pattern in the North Africa and Middle East regions where public open spaces often fail to meet the needs of local people, and are often neglected due to a lack of understanding of the importance of gardens and open spaces to users by decision makers in municipality planning offices.

2.12 Saudi Arabia: Recreation and Leisure

In order to measure the understanding of the patterns of leisure and the needs of users, a range of recreational activities will be considered in this chapter, and will focus on recreational provision in Saudi Arabia by categorising resources and the main types of recreation sites. In addition, the demand in Saudi Arabia for spaces for recreation activities and how people use their leisure time will be discussed.

2.12.1 Recreation and leisure

Insufficient free time for working people restricts their recreational activities, but modern development and technological innovations have reduced the number of working hours for most people, leaving more time available for leisure activities. Hendon (1981) describes leisure time as being discretionary and free, and with no obligations to work, but recreation activities are enjoyable due to performance and personal satisfaction. This interpretation is supported by the findings of Clawson and Knetsch (1996, p12), who suggest, "Leisure and recreation are highly correlated, but they are not the same. Leisure is time of a special kind; recreation is activity or inactivity of special kinds. Recreation takes place during leisure but not all leisure is given over to recreation". 
In Saudi Arabia, working hours have reduced significantly since the 1950s and now represent an average of 40 hours per week (Alwatanalarabi, 2014). Thursdays and Fridays were traditionally the Saudi ‘weekend’, which in 2013 was changed to Fridays and Saturdays. Students have a four-month vacation during the summer and two weeks for their spring vacation, in addition to 10 days holiday during the second term for schools and universities. All employees and government workers have the right to take 30 days of paid holiday each year.

The current practice and organisation for the planning, design and management of public open spaces in Jeddah involves public departments of the municipality of Jeddah and private contractors, including transport infrastructure, public housing development and commercial development. Normally the design of public open spaces would involve professionals from private companies that normally would create designs for the hardscape of the city, but there has been insufficient importance given to the need to employ professional landscape architects to ensure that public open spaces meet the needs of the local population. Public open spaces are currently managed by private companies that tender for this work, but often tenders are awarded on a lowest cost basis, rather than awarding tenders to companies that have an understanding of the needs of users of these spaces, which has contributed to poor standards of maintenance.

According to the United Nations Declaration of Human Rights, citizens have "the right to rest and leisure, including reasonable limitation of working hours and periodic holiday with pay, and the right freely to participate in the cultural life of the community to enjoy the arts and to share in scientific advancement and its benefits" (United Nations, 1985, p97). Al-Hijji (1989) explains that in 1984 the Saudi Government adopted this UN Declaration and passed legislation relating to hours of work, time for leisure, holidays and relating to leisure activities themselves, which has increased growth in leisure time.

In addition to the holidays mentioned earlier, everyone has free time each day for visiting garden or waterfront areas or indoor activities, such as watching television or for family gatherings. However, the Islamic calendar has 2 important holidays, such as Eid AlFitr, which begins between 25th and 28th day of the month of Ramadan (the month for fasting) and lasts through to the 5th day of the following month of Shawwal, and lasts for around 2 weeks. Eid AlAdha, which lasts approximately for ten days (5th
to 15th of Al-Hajj Month). All government offices, private businesses and educational institutions are closed on Islamic holidays.

2.12.2 Leisure time growth

According to Pigram (1983), more flexible work patterns with staggered leisure times require effective management of recreation resources. Traditionally in Saudi Arabia, the growth in leisure time was the privilege of the elite, which is now enjoyed by everyone. The advent of modern lighting has led to a shift in most social and some work activities to the hours of late evening, which has helped to avoid unsuitable climatic conditions, and also allows more people to visit outdoor recreational areas, and particularly women who might have safety concerns in dark areas.

The growth of leisure time is due to various socio-economic, technological progress and institutional forces that has reduced the necessity to work long hours to maintain adequate living standards, but living with large amounts of leisure time could become challenging for Saudis in the future. Leisure time growth has encouraged people to demand more recreational provision and facilities, but also would expect easy access to facilities, adequate resources, and that environmental conditions are safe and attractive.

2.13 Saudi Arabia: leisure time usage

The statutory regulation of time in Saudi Arabia is partly overshadowed by the impact of environmental and religious factors upon leisure patterns and the planning of time. The working day for the government sector runs from 7.30 am to 2.30 pm, and until 5 to 6 pm in the private sector. Time at the end of work and before the Al-Asor prayer is normally allocated for lunch, which is the main meal of the day and one to which guests are usually invited. Leisure time usually take place between or after Al-Asor prayer, between 4 and 6 pm, after which time is available to spend with the family or as a social time for males to gather. Social gatherings, such as dinner parties, matches and games take place after the Isha Prayer, which is usually between 8.00 pm and midnight; a daily pattern of life that has also been adopted successfully by migrants (Hammadi, 1993).

The lives of Muslims are arranged with five prayer times every day, arranged at intervals throughout the twenty-four hour period with other activities arranged around them. Therefore, the use of leisure time and people’s activities is determined by socio-religious factors, and the organisation of prayer time is very important for people living
in Saudi Arabia. The way people allocate their time to suit the climate and the existing pattern of outdoor recreational areas also includes the concern of families for privacy during their leisure time.

It is now possible for people to continue their active day into the night due to modern technology. It is usual for the people to take a siesta in the middle of the day, when outside temperatures prevent other activities.

Some families in Jeddah often gather together at the sides of pavements, with their cars aligned alongside the pavements. Others participate in camping and hunting, and in spring months of March, April and May they may go hunting in the desert or mountains for native birds. Open spaces in the city that have play equipment are used by families with children, as well as using these spaces for sitting, fishing and picnicking. Other people spend their leisure time fishing, visiting relatives and friends or playing traditional games, whilst their children go to play in groups, and some of the women are busy with household duties. Many families prefer privacy or shade in their leisure activities and remain close to their cars. Trees are sometimes used for shading or sculpture within the site. Residents of Jeddah tend to spend their leisure time at home with their families, but when away from their home, they often meet with other family members or friends at their homes or at public open spaces in the city. At weekends and holidays, more leisure time is spent outdoors, except during high temperatures during the day in the summer months. This pattern of leisure activities is very different to European and North American leisure activity norms.

Islam considers the act of recreation as worship if it is intended to strengthen the body for the sake of the Almighty God. However, the use of leisure time or the layout of the physical structure must not cause any harm or inconvenience to other people. Leisure time is often spent within the limits of Islamic law and teaching, although Islam encourages people to share time evenly between work and recreation. Islam encourages people to teach their children swimming, shooting, and horse riding.

Culture, customs, habits and traditions all influence their pattern of leisure and recreation. There is a pattern of segregating the genders that is an important tradition of Saudi life, governing the conduct of groups and individuals. Most Saudi and migrant male groups or individuals prefer to be far away from families, and spend weekends or
afternoons with groups of friends, sitting near the sea shore, or spending their leisure
time playing soccer, volleyball, fishing and swimming. Many Saudi and non-Saudi
families often picnic under shelters or between cars, with a canvas erected, or by driving
the car right to the edge of a view point or shore-line to minimise exposure, as well as
and provide shade and privacy.

Two families often join together as one group, single-family groups, male groups and
female groups in the desert. The two-family groups may camp together for two to three
days, taking tents and picnicking equipment with them for cooking with their own
recreation patterns of shelter, eating and pleasure. Leisure time is spent playing football,
swimming, cooking, playing cards, chatting and engaging in social interaction,
particularly at weekends or during Eid vacations, when visiting parks, seaside areas or
deserts. Places are usually selected where they cannot be seen, yet where they can see
others at a distance, as they try to maintain their own territory for camping (Al-

Saudi families often choose to spend their recreation time in open desert areas, over a
hill, next to trees, shrubs or a bank of valley, under highway bridges, where they find
shelter and shade. Should there be no natural barriers that provide them with some sort
of privacy and the sense of personal space and territory, they use their cars as an
alternative form of screening. The way that time is used also depends upon the number
of people in various age and activity groups, and what they choose to do with their
leisure time. In addition, time is matched by how an individual perceives the nature of
leisure itself, which is usually predictable from annual holidays, weekends and evenings
after work.

In Saudi Arabia, Nahass (1986) found the lack of adequate outdoor recreational and
public entertainment facilities contributed to television being the main leisure activity
for males and females, although the hot climate could also influence this. However,
Patmore (1983) describes reading and watching television, and other home-based
activities contribute to around 90% of recreational time for most people.

2.14 Recreation: demands by people

The Saudi Government has recognised the importance of providing opportunities for
outdoor recreation, and most Saudi residents are able to spend some of their money,
time and effort on outdoor recreation. However, currently, the demand for recreation in Saudi Arabia is greater than the supply of facilities. This increase in demand for a better environment, housing, social status and enhanced conditions in comfort and convenience in all aspects of life was the result of rapid population growth, as well as the economy, transportation, and education (Hammadi, 1989).

According to Pigram (1983), increased demand for recreational activities has been accompanied by the increased availability of disposable time, the choice of leisure activities, and the demand for outdoor recreational space. Such choices are influenced by users’ expectation, and linked to age, family status, social group, personal taste and education. Individual demand for outdoor recreational opportunities, together with the space to accommodate the desired leisure choices, is dependent upon users’ interests and skills to pursue outdoor recreational activities.

Economic security in retirement and earlier retirement, together with a longer life span, further increase the possibilities for leisure activities and the demand for more recreational opportunities. As people move from rural areas to the urban environment, more open spaces are required to ease the congested and overcrowded areas by providing green, outdoor open spaces. As people become better educated and healthier, they demand greater opportunities for recreation.

Gallion and Eisner (1980) explain that better understanding of recreational demands would clarify the reasons for non-participation or under-participation in specific areas and activities, which would reduce wastage of resources, as well as ensuring that additional recreational investment is directed towards remediying and deficiencies. In Saudi Arabia, increased demands for recreation activities need to overcome issues of design policies, inadequate planning and insufficient resources.

**Summary**

This chapter provides information about the context of the research location of Jeddah in Saudi Arabia and defines the geographical location and the influence of the hot, dry climate, as well as the historical development of the people of this region that contributes to the current cultural, social and religious influences that identify life in modern-day Jeddah. The urban expansion of Jeddah has been due to income from the
oil industry that has negatively influenced its infrastructure in terms of slum
neighbourhoods, unplanned open spaces and a reliance on private cars. The role of
migrant workers has also been discussed in depth, as these migrants form around half
the population of the city, and use the open spaces in Jeddah along with Saudi residents.
The contribution of migrant workers to the economic growth of Saudi Arabia has also
been discussed, but also raises issues of negative attitudes towards them by Saudi
residents. These findings also show that landscape design and planning has
insufficiently met the needs of users for leisure and recreation activities in open spaces
in Jeddah.

The following chapter investigates the findings from the review of literature on place
attachment and the bonds formed by users with specific places from the perspective of
Western studies, as well as from the limited studies of North Africa and the Middle
East.
CHAPTER THREE
LITERATURE REVIEW
CHAPTER THREE

LITERATURE REVIEW

3.1 Introduction
This chapter explores the studies and theories that address diversity in peoples’ experiences of public open spaces. Research that focuses on open space usage, experience and benefits, has increased over the past few years. The methodology for collecting the data relating to peoples’ experience and motivation to use open spaces ranges from experimental studies (Hartig et al., 2003) to qualitative approach (Rishbeth and Finney, 2006) to different and new methods of identification, such as the walking voices project by Powell and Rishbeth (2012). This diversity of research methods has attempted to capture different types of data to reveal different dimensions of place experience, but all of these studies relate to the use of open spaces.

The review of literature was accomplished through searches of a range of databases, and a scope of journals, books and other texts. The online database resources included the Web of Knowledge (now Web of Science), Science Direct and Google Scholar. Citation searches were also applied in order to achieve greater scope of different subjects. There were a range of terms that were used to search Internet databases, which related to open spaces, benefits and motivation. In addition, a combination of terms within Saudi Arabia, Arab, Arabic countries and the Middle East is applied. As the context of this research is based on an Arab country, it is essential to identify any study relating to this context.

The structure of this chapter reviews the literature within the following twelve sections, which discusses findings related to people’s relationships with open spaces, physical activities, mental wellbeing, social wellbeing, patterns of usage and the factors of gender, age and ethnicity. This review then identifies the relationship that users form with places, so that the sense of place is analysed, which leads to the main focus of this research study that is place attachment. Although the findings of various researchers into the concept of place attachment are highlighted and examined, the focus and framework developed by Scannell and Gifford (2010), together with their three dimensions of place attachment, are introduced and applied for this research study.
3.2 Open space

Open space is defined physically as land and water that is not covered by buildings, situated within an urban area (Gold, 1980; Cranz, 1982; Tankel, 1963). In describing open space, Jan Gehl (1987), a Danish architect and urban designer, refers to an outdoor area as one that allows different types of activities, including optional social activities, to take place. Additionally, necessary activities are those that are ‘almost compulsory’, such as going to work, school, shopping or waiting for a bus. He describes optional activities as those taking place ‘if there is a wish and time’. Such activities may include walking, standing, sitting or sunbathing. Dependent upon whether or not another person is present, social activities are considered to have evolved from necessary and optional activities, which may include greetings, conversation and communal activities, as well as passive activities of watching and hearing other people.

Marcus and Francis (1998) suggest the idea of open space as public, semi-public, and semi-private open space, which includes publicly owned and publicly accessible open spaces, such as neighbourhood plaza spaces. Spaces that are privately owned and managed, but accessible to the public, such as corporate plazas, college campuses, as well as those that are owned privately and accessible only to a particular group of users, such as elderly housing are also included within this category. Such definitions provide an important understanding and its potential to enhance the social integration of a flexible community.

In early times, the planning and management of open spaces that surround buildings, together with their importance in improving communities was taken into account, as accounts of the planning of open spaces in Ancient Egypt reveal. The management of the Greek Agoras and Roman public spaces were taken into account during the planning of renaissance Italian piazzas and Nineteenth Century boulevards in Paris. Issues such as places that are built and managed, as well as how they function politically, socially and economically were important areas to be considered. Many books have been written about this topic, which demonstrates this interest in the use of public space (Lofland, 1998; Carr et al., 1992; Woolley, 2003), guidebooks (e.g. Longo, 1996), design
handbooks (Cooper-Marcus and Francis, 1998), political critiques (Mitchell, 2003; Low, 2000) and other key texts (Orum and Neal, 2010).

In this research, public open space is defined, within the Jeddah urban context, as the outdoor spaces, such as parks, Corniche area and side streets of a city. Additionally, public open spaces across the city also include natural areas, such as the desert. Open spaces such as these allow users to take part in a wide range of social activities that may be optional, as well as necessary, providing many benefits that will be discussed later in this chapter.

3.3 City form and open spaces
Heckscher and Robinson (1977) suggest that the common professional approaches to city form indicate that the skeleton of a city are formed by its public space, upon which business centres, neighbourhoods and institutional complexes rely upon. A city is given a sense of cohesion through the provision of waterfronts, green spaces, riverbanks, walkways and parks, which allow a sense of togetherness to develop, as well as the ability to take part in recreational activities. This framework is culturally embedded across most of the world, yet in the Arab Middle Eastern context such design and use of open space have not been given prominence.

In order for city dwellers to support their recreational activities and social interactions, dynamic public spaces are essential. The character of a city is determined by its parks, streets and squares and other open public spaces. The social and physical functions of a public place and the manner in which it can enhance the safety, pleasure and care of urban users has developed in recent years (Lynch, 1960; Carmona et al., 2003). Carr et al. (1992) make the point that the drama of community life takes place in public spaces, demonstrating a relationship between the complexities of urban structures. However, this is dependent upon the global context; the European tradition of planning civic space surrounded by unplanned public spaces leads to informal appropriation of spaces, even if the city lacks local neighbourhood open spaces. There is no clear open space system in Jeddah, which reduces the opportunity for the dynamic use of public spaces. The reputation, image and life of a city are enhanced by urban public spaces (Cybriwsky, 1999). The provision of public spaces adds an essential dimension to the life of the city, as well as giving users a sense of attachment and civic identity, both emotionally and physically.
Landscape may be described as a cultural phenomenon, which is embraced within different cultures and places. This research is specific in terms of climate, religion, politics, culture and other factors. The context of the research is important since it has implications for the ways that a place is used, how activities are performed and how the sense of place is developed. To many readers of Western research, the term ‘green space’ suggests the presence of lush vegetation, yet the subject of open spaces and green infrastructure is not necessarily the same in the Saudi Arabian context. In this context, it has different meanings and perceptions, because it has its own landscape image; even though the terminology is culturally embedded in the Western context. There are very few common green spaces, parks management and open space planning in Arab culture, because these rely on a set of cultural assumptions that may not be appropriate to the Middle Eastern context. Through conducting this research, and especially in Jeddah, the researcher is hoping to understand where such assumptions are appropriate, where they need to be adapted and what is appropriate for Arab and Muslim cultures.

Jeddah’s waterfront is an important example of similarities in the typographies of open spaces, because it has the potential to provide a full range of leisure and entertainment facilities, if it was carefully designed and took into account the needs of the community. The use of public spaces can be very different in different cultures; for example, in Saudi Arabia there is a lack of open spaces within local neighbourhoods. Access to open space is different for men and women, because of legal issues, as well as public transport deficiencies. Community life within Saudi Arabia is dependent upon a range of complex religious, legal, economic and cultural factors, which lead to a lack of, and misunderstandings of, spatial planning in the city of Jeddah.

The demand for accommodation and vehicles has increased alongside the development of the city of Jeddah. Such demands have forced the city authorities to provide a suitable infrastructure for new buildings and methods of transport. The urban planning progress has led to the remaining public spaces within the city to be largely ignored.

The meaning of public open spaces can be ambiguous due to conflicting perceptions about the same place (Macnaghten & Urry, 2000; Jorgensen et al., 2007). Ozguner & Kendle (2006) suggest that attitudes are influenced by how well public open spaces are maintained and managed, and that many immigrant residents identify favourite areas.
Open spaces that were poorly maintained were researched by O’Brien & Tabbush (2008), who found that respondents complained about litter and graffiti, which was seen as contributing to worsening of the neglected areas with increased anti-social behaviour. These findings are also relevant to the context of Jeddah where users identify their favourite open spaces, and perceive that poor maintenance is linked to anti-social behaviour.

3.4 Open spaces and physical activities

This section discusses findings regarding the impact of open spaces on physical activities and health outcomes and their relevance for the context of Saudi Arabia. The socio-ecological framework proposed by Sallis and Owen (2002) suggest that users of open spaces would be more physically active if these offer an accessible, safe and attractive place for exercise, which is observed in some walkways used by residents of Jeddah. These findings contrast with those of Hillsdon et al. (2007), who report no link between access to open spaces and time taken to drive to locations, and physical activity, sedentary behaviour and BMI, although people living in Jeddah often drive to open spaces due to hot temperatures and cultural traditions.

Other findings by Merom et al. (2003) and Gies (2006) suggest that close access to open spaces does encourage greater use by local people that contributes to greater physical activity. However, Giles-Corti et al. (2005) argue that attractiveness, size and specific amenities are factors that determine use of public open spaces, which could be measured to determine the association between physical activity and public space access, which are factors that should be considered in Saudi Arabia to meet social and cultural traditions. Regular patterns of behaviour, such as walking, are important and shaped by the environment, so that walking for a reason contributes to improved health outcomes due to physical activities (Owen et al., 2004; Thompson, 2013).

Some Western studies of open spaces ignore small spaces (less than two hectares) (Hillsdon et al., 2007), but many residents of Jeddah often use unplanned open spaces for recreation, such as pavements and roundabouts. In addition, Van Herzele and Wiedermann (2003) suggest that the areas outside the urban context of the city are more for weekend use, whilst the city open spaces within the urban context are more for everyday use. This is a pattern reflected in Jeddah, when weekends and holiday periods
are often times when residents visit the desert areas outside the urban context of the city.

McAuley et al. (2000) reports that social relations are part of the exercise regime in public open spaces, and of significant benefit for older adults, which is also a relevant issue for the context of Saudi Arabia. Bedimo-Rung et al. (2005) examines the benefits of exercising in parks to determine whether attracting people to parks or other open areas for exercise is worthwhile. However, community life within Saudi Arabia is dependent upon a range of complex religious, legal, economic and cultural factors, which influences the use of public open spaces.

Outdoor exercising has been found to be important and helpful physically and mentally to the human body, and Pretty et al. (2003, 2005) refer to the synergistic benefits of exercising and being in outdoor spaces with others. By adopting qualitative interviews, Krenichyn (2005) investigated whether the environment might “encourage and enhance, or discourage and detract from, physical activity” for women using an urban park in Brooklyn, New York (Krenichyn, 2005, p4). These findings identified various factors that would encourage women to use this open space, such as site topography, less traffic and street obstacles, provision of toilets and drinking fountains, and that the existence of other women using the site reduced feelings of harassment from men because of the exercise clothes they wore. These are also important issues for women in Jeddah due to social and cultural traditions, and the separation of gender in public open spaces.

The concept of physical activities is misunderstood and not widely applied in Middle Eastern countries and the Gulf Region according to the World Health Organisation (WHO) in a conference of health experts (Carroll, 2014). According to Ala Alwan, “lack of exercise was the fourth leading risk factor for non-communicable diseases, ranking higher than obesity” which also echoed the findings of some European and Western studies (Carroll, 2014). Most of the cities in Saudi Arabia and the Gulf region have designed walkways in different locations of the city, and in Jeddah the case studies of this research include 3 to 4 well known walkways used by residents. However, some of these walkways are not designed for physical activities, but are still used for these purposes. However, the provision of these walkways is not enough to encourage residents to adopt more physical activities. There is a need for collaboration between...
different sectors within the government and the community, such as ministries, municipalities, urban planners and media, and the establishment of sports societies that could motivate physical activity among residents (Carroll, 2014).

The findings from these previous studies regarding the use of open spaces and physical wellbeing can inform the findings of this research, because this research identifies the quality of public open spaces in the urban context of the city and in the desert landscapes, and whether these open spaces offer mental value without natural vegetation. In addition, this study investigates the perceptions of public open spaces by people who live in similar climates with very high temperatures and largely arid ecologies.

3.5 Mental and Social Wellbeing and Open Spaces
Promoting stress reduction, relaxation and restoration rely to a large extent upon the provision of open space (Green Space Scotland, 2008), and Ulrich et al. (1991) report that natural settings restore positive effects and reduce fear, anger and aggression based on attention restoration theory and stress reduction theory. However, it is the context of the open spaces and physical activities, as well as the environment that often improve mental wellbeing (Guitea et al., 2006). Western studies into the relationship between mental wellbeing and open spaces often refer to designed green spaces, which implies poor mental health experiences for those living in hot and dry countries, such as Saudi Arabia with large desert areas. Therefore, the findings that green open spaces offer restorative qualities needs to be translated to the very different context of Jeddah.

Being in outdoor open spaces could help in the recovery of the attention fatigue and in restorative experiences, because being away, softscape features, and the extent and compatibility of nature could all promote people’s physical and mental sense, as open areas attract attention automatically without the need for concentration (Hunziker, Buchecker and Hartig, 2007). The reasons for the impact of green space upon mental health differ, but include exercise and outdoor activities, stimulation of the senses, natural daylight, and aesthetic experience (Greenspace Scotland, 2008).

According to Ulrich et al. (1991), people act spontaneously to nature, which directly produces positive psycho-physiological reactions that help to reduce stress. However, in some cases, urban environments can be a cause of stress, such as crowded areas, traffic
jams and unpleasant sites in the urban context. These findings relate very closely to the context of Jeddah due to the hot, dry climate, overuse of private cars and public open spaces that are often crowded. A study in Sweden revealed that the greater the length of time that people spend in outdoor public green space, the less stressed they feel, which is independent of gender, socio-economic circumstances and age (Grahn and Stigsdotter, 2003).

Dunnett et al. (2002) suggest that people seek relaxation, peace and quiet from visiting open spaces. Opportunities for recreation, contact with nature, stress relief and aesthetic experiences are the benefits noted by respondents in the Tyrvainen et al. study (2007). However, the quality of the countryside affects how people perceived it, and Pretty et al. suggest that poor quality countryside locations could have less restorative effects than good quality sites (Pretty et al., 2003). These findings are also relevant to the Saudi Arabian context, but opportunities to visit open spaces are often associated with gatherings of families or for groups of friends to meet, talk and share food. In addition, many areas of open spaces in Jeddah have poor maintenance, which reduces their restorative effects.

Grahn & Stigsdotter identify a connection between stress and visiting open spaces, as when people spend more time in open spaces, this contributes to reduced levels of stress they experience in their daily life (Grahn & Stigsdotter, 2003). Female respondents in a study by Fredrickson & Anderson (1999) felt comfortable being away from the urban context, and many described their experiences as beyond feeling simply away, and described feelings of spiritual experiences. These findings are also relevant for citizens of Jeddah that seek to escape from their daily life stresses by visiting public open spaces that have special restorative qualities for them. This study investigates whether the desert fulfils emotional and spiritual functions for users despite being a very different aesthetic of nature experience.

Although the context of green open spaces are regularly cited in Western studies, this research investigates the restorative qualities of open spaces in Jeddah that are placed in a different context, but also contribute to mental wellbeing for users of these open spaces. Softscape features of public open spaces include trees and plants that can attract people to use these spaces, and the desert landscape beyond the city provides the motivation for many citizens of Jeddah to escape to a different typology of landscape,
which enhances their mental wellbeing. In addition, it investigates the perceptions towards green spaces for people who live in very hot and desert landscape countries.

Social wellbeing, including social inclusion and integration are facilitated by public open spaces, as they provide settings to promote ‘social capital’, and good health, but some research studies contest these findings (Amin, 2002; Valentine, 2008). Kawachi et al. (1997) comment that the benefits arising from ‘social capital’ are available to all those living within a particular community, and access to it cannot be restricted, but there are many barriers for individuals to engage in society, and community could be defined in different ways (Crow and Mab, 2011). Immigrants often use public open spaces to become more familiar with everyday activities, rather than specifically to build social networks; however, these spaces offer forms of contact that could be culturally specific (Rishbeth and Finney, 2006). These findings have a direct relevance for this study, as Jeddah has a high number of migrant workers from many different countries, and the patterns of use for these individuals are an important element of this research. The social and cultural traditions of Jeddah also mean that Saudi citizens often use public open spaces as centres for recreation and social interaction between families and within groups of friends.

Sullivan et al. (2004) suggest that people are more attracted and engaged socially in the areas between buildings in comparison to barren spaces. Kweon et al. (1998) indicate that the use of open spaces by elderly people and spending more time with other people in these spaces promotes their sense of community and social integration (Kweon et al., 1998). Participation in the local environment also helps refugees integrate into a new society (Rishbeth and Finney, 2006).

“Parks are considered community assets and bring people in the surrounding areas to a common place for leisure purposes, a time when people are more likely to be open to what they see around them and receptive to others, because they are recreating together and sharing a common space” (Cohen et al., 2008, p. 201). A diverse society can enhance social capital by having open spaces, such as parks, for common use. There are many studies that have examined how open spaces could improve the community and social life by bringing people together. Research by Chiesura (2004) and Macnaghten & Urry indicate that people’s positive experiences in woodland spaces were noted by most
of the participants. New friendships and more contact with different people in the park for those who shared physical activities were seen as a positive experience by most female respondents in the study by Krenichyn (2004, 2005), so that “regular contact in the park led to more permanent affiliations founded on common interests, which was a pleasant surprise for some women who initially used the park only for solitary fitness activities” (Krenichyn, 2004, P124).

According to Morris (2003), social interaction, as well as improvements in the quality of life, may be enhanced by outdoor recreational activities. Outdoor activities can also help people to meet new people and make friendships. However, the context of Jeddah and the social and cultural traditions are different to Western societies investigated for these studies, but social interaction at open spaces in the city are regular activities for groups of families and groups of friends to spend at recreation activities.

Concerns about safety in open spaces are also highlighted in some research studies (Burgess et al., 1988; Burgess, 1995; Jorgensen et al., 2007). Kuo and Sullivan (2001) suggest that the greater use of public spaces increases surveillance, as well reducing factors that lead to aggression. Users of open spaces in Jeddah also have concerns about safety, particularly for areas with poor lighting at night, so that women seldom use some open spaces during night periods as will mention in chapter five and six.

Kathiravelu (2013) suggests that social interaction and friendships in outdoor spaces can be seen as a ritualised forum. The urban context is structured in ways that promote residents’ friendships and socialising, especially for immigrants and cities with diverse communities (Kathiravelu, 2013). Societal benefits such as these may not promote positive interaction, but may prevent negative social interactions. These findings are related to the context of Jeddah, as around half the residents are migrant workers, who are often separated from their families and friends for long periods, and open spaces are used to meet with others that share the same language or culture.

3.6 Open spaces in the Middle East context
This section addresses the need to situate the literature of public open space use in the Middle Eastern context. This research is focused specifically on Jeddah in Saudi Arabia: a city that has specific cultural relevance and a country that is unique in terms of its historical and current political context. However, in looking more broadly at
patterns of public space use it is important to draw out possible similarities, in particular the relevance of similar research undertaken in countries that have a similar climate, and/or those that share an Arabic culture; broadly these can be seen as other Middle Eastern countries, North African countries and some Mediterranean countries. This will ensure the research is relevant to a broader academic and professional readership than one defined by national boundaries.

It is important to state that the number of Western and European studies of place attachment and patterns of use of public open spaces is more than the studies that examine the Middle East and North Africa. There is a significant gap in knowledge that this study aims to address. Academic research activity varies across the region and therefore there have been some foci of interest, especially around large cities (for example Cairo). However, it has been profitable to take a broad approach to literature contexts, including grey literature relating to practice based work. This is also useful in informing the aim of this research relating to professional practice.

In addition, the researcher includes studies in the Arabic language revealed from the online search, as there are some studies and papers that review the benefits, design and management of public open spaces but are defined as grey literature. Online searches identify studies of public open spaces in the Middle East and North Africa, and keywords used included open spaces, landscape, gardens, parks, green spaces and desert. In addition, the researcher used other keywords related to design, management and planning. This online search took place in English and Arabic languages.

3.6.1 Social and Cultural Uses of Space

Across many different periods of history, gardens have developed as an identified characteristic or feature, and were demonstrated in Greek, Persian and Babylonian cultures. However, these artistic features and historical perspectives are also reflected in Arab gardens that provide examples of Arab culture and Islamic features, such as Jannat Al-Aarif and the Alhambra Garden. Gardens are described by Al-Nassan (2008) as having specific importance for religious and cultural reasons for Arabic society and for Muslims living in Arab countries. These two gardens now demonstrate elements of civilisation from earlier historical periods that are important for all people.
Gardens also form a religious importance when developed in Islamic countries due to specific associations with elements of the Quran, as Muslims believe that in the afterlife, paradise has an image of trees, palms and plants. Therefore, Muslims are encouraged to create, maintain and visit gardens, as these enable them to reflect about the afterlife and paradise, as well as suitable places for daily prayers. Al-Nassan (2008) explains that the names of some gardens have been established over many years in Saudi Arabia, such as Al-Rawdah and Al-Bustan. There is a clear historical importance of the social and cultural uses of open spaces, but this also needs to be considered within the current contexts of rapid urbanisation in many cities in the Middle East region.

Various studies of countries in the Middle East and North Africa investigate rapid urban expansion and the development of different sectors in this region, but there are few research studies that investigate population growth and ethnographic factors (Nagy, 2007; Malecki & Ewers, 2007). This rapid urbanisation often resulted in fewer public open spaces and greater demand for leisure activities from a growing population within cities, but insufficient responses from local municipalities to meet the needs of users of these open spaces. In recent years, the government municipality of Al-Majmaah carried out a study to investigate why few local people used the gardens and parks built and designed by the municipality. Al-Fahad (2008) cites an article in the Al Jazirah newspaper that reported that between 80% and 85% of families considered that the facilities of public gardens failed to meet the needs of their children. Other findings from this newspaper report indicated that only 20% of local respondents used these public open spaces, and that most respondents thought that the poor design and management of these open spaces were the reasons that few people used these spaces. In addition, these findings suggest that the softscape and hardscape features of these public open spaces were of poor quality (Al-Fahad, 2008).

The study carried out by this municipality also revealed that most children (80%) under the age of 16 years spend most of their recreation time on unplanned open spaces or in streets in the locality, which could be considered unsafe when compared to gardens that are infrequently used. Al-Fahad (2008) reports that most children (65%) wanted to use public open spaces to play soccer, 22% wanted opportunities for climbing and jumping, 10% wanted electronic games and 3% wanted spaces for fireworks (Al-Fahad, 2008). The municipality of Al-Majmaah used the findings of this study to inform future
planning, so that the opinions and views of adult and child users of public open spaces in this locality would be considered. However, rapid urbanisation of many cities in the Middle East due to the expansion of the oil industry over recent years has had a strong influence on increasing social diversity, and its consequent effects on patterns of open space use.

Malecki and Ewers (2007) find that cities within the context of Arab Gulf States demonstrate urban expansion as a result of the accumulation of wealth from the oil industry, which has been responsible for many workers migrating to the region, such as Western skilled workers and unskilled workers from other developing countries in Asia and the Middle East region. Nagy (2006) suggests that patterns of use of public open spaces are influenced by the large numbers of migrant workers in this region that often produces social distinctions for specific open spaces based on feelings of affiliation, strategies and behaviours of individuals and attitudes towards social diversity that are complex, so that official policies and discourse tend to overlap and interact. Another important influence on social and cultural patterns of use in public open spaces in Islamic countries in the Middle East region is gender.

In a study of the meanings of open spaces in Egypt, Ilahi (2010) suggests that the experiences of males and females are different in terms of social space in the country, but demands for freedom for females to make greater use of public open spaces by feminist movements in the country are often challenged by religious leaders. Patterns of use of open spaces are influenced by gender in Islamic societies, and there is a need for further research to investigate whether feminist movements have been successful in overcoming opposition of conservative groups to changes, and whether the needs of females are sufficiently considered when planning and creating new public open spaces. Unplanned open spaces would include streets that demonstrate patterns of use for local people, and streets in North African and Middle Eastern cities have been investigated.

According to Al-Sayyad (1981), in a study of the streets of Islamic Cairo for different generations, the report indicated that due to the lack of information and previous studies about the social, economic and natural factors, it was not possible to generate principles for contemporary urban design. This study was based on the review and analysis of physical criteria based on the history of the Muslim built environment (Al-Sayyed, 1981).
Nooraddin (1998) highlighted the importance of streets as part of the urban context of the city and defined these as in-between spaces. Streets were defined as lines that separated indoor from outdoor spaces and played an important role in historic parts of Islamic cities. These in-between spaces are mostly neglected in cities in the Middle East, and further research is needed to investigate the importance of streets for place attachment.

3.6.2 Planning, Design and Maintenance

During the early 1980s, the rapid growth of the urban infrastructure of Cairo raised concerns about the expansion of cities in this region and the problems that this created for society and cultural traditions. A conference organised by the Aga Khan Foundation for Architecture in 1984 discussed the problems of rapid urban growth of Cairo and other cities in the region, and recognised that compared to other cities across the world, the lack of open spaces in this city represented a low per capita open space. These discussions led to the construction of Al-Azhar Park in Cairo that was financed by the Aga Khan Foundation, and represents the largest designed public open space in the Middle East and North Africa, and includes Islamic elements and features, and is specifically modelled on the Fatimid style. Salahuddin (2004) explains that Al-Azhar Park demonstrates a revival of the Al-Bustan concept that is a common pattern in gardens in Islamic countries, and provides an example of innovative design and planning, but also the involvement of the local community in its preservation and maintenance. Although this development of a public open space in Cairo began over 30 years ago, it provides examples of urban regeneration, socio-economic growth and recognition of cultural and historical elements of importance that could be applied to public open spaces in other Middle East cities when making decisions about planning, design and maintenance.

The First Arab Conference on Housing in 2010 is examined by Sidky and Bastawisi (2010), who explain that the motive and focus for this conference were the effects on urban public open spaces as a result of poor planning decisions in Egyptian cities. This study attempted to promote the benefits of public open spaces in cities in the region and their importance, and reviewed the structure, design, scale and type of open spaces in Egyptian cities, and compared these influencing factors with international standards. These findings report that rapid expansion of urban areas resulted in a negative impact on urban and open spaces within and beyond the boundaries of cities, so that cities in
Egypt were described as an urban environment that demonstrated a lack of balance. Other findings suggest that citizens often have an insufficient awareness of urban open spaces in terms of aesthetic and function values, as well as showing a sense that citizens often lack a sense of belonging. Sidky and Bastawisi (2010) also found that urban open spaces in cities in Egypt had lost a perception of their own importance and unique identity even though urban spaces define the structure of a city, and argue that the concept of urban open spaces relates to earlier periods of history in Egypt involving military, commercial, social and religious activities.

According to Al-Madhadji (2010), there is a general consensus that the environment should be preserved to ensure environmental protection, access to public open spaces and a green infrastructure, but municipalities and some users of these open spaces often negatively influence the environment. Therefore, environmental legislation based on Islamic law is needed in Middle East countries to address issues of construction of new buildings, acoustic privacy, visual privacy, removing public waste and maintaining public spaces at a high level of cleanliness. Environmental legislation should also determine how users of public open spaces behave, and to encourage users to help to maintain cleanliness in gardens and open spaces, but this is recognised as being difficult to implement, as citizens are often insufficiently aware of how shared responsibility for maintenance of open spaces applies to them.

A comparative study in Sabratah in Libya and Dubai in UAE was undertaken by Al-Musawi (2010) to investigate the potential benefits and quality of open spaces within these cities, and whether they met the needs of users. These findings suggest that the case study sites of Sabratah and Dubai reflect a common pattern across North Africa and the Middle East, as there are insufficient public open spaces to meet the needs of the local population, and that most open spaces in this region demonstrate signs of neglect (ibid). This region has also shown that commercial, industrial and residential demand for land has increased significantly, so that those responsible for urban planning decisions often identify public open spaces as land that could be used for urban development. This study finds that decision makers in municipality planning departments often lack sufficient understanding of the importance of gardens and open spaces to users, and indicate that there are no profit incentives in designing and creating garden spaces. Al-Musawi argues that professional designers of gardens and public open spaces appear to lack awareness of the potential economic and social benefits from
investing in the development of public open spaces to meet the needs of local people that could contribute to improving their lives by effectively designed and maintained public open spaces.

The findings from this study indicate that the open spaces and parks in Dubai represent a sophisticated model that attempts to apply global standards to the design and management of public open spaces, which is recognised from the perspective of the city, as well as the perspective of local neighbourhoods, so that public open space in this city serves the local community and tourists that are attracted to this country. Both cities used as case studies share a similar climate and location that is represented by important historical sites that attract many tourists; however Sabratha in Libya has very few gardens and public open spaces, and the urban development of the city often uses open spaces that would have the potential to be designed and created as gardens and parks for people to use (Al-Musawi, 2010).

Gaza is used as a case study in research undertaken by Hirzalla (2014) that investigates the development strategies adopted for urban open spaces. This study finds that most public open spaces in Gaza are visually and physically deformed, so they lack often lack a function or purpose. These open spaces also mostly lack the hardscape and softscape elements normally expected in designed spaces, and the factors of climate are ignored, so that shade, water supplies and appropriate plants and trees have not been considered. These factors negatively influence the potential use of these open spaces by local people, as landscape design and maintenance have generally failed to enrich the environment of these spaces (Hirzalla, 2014).

Urban expansion and its effects on the landscape of Syria are investigated by Atfah (2013) that evaluates the changing images of cities, and specifically the urban development across areas of the countryside. These findings indicate that the culture of rural communities is being changed by the urban expansion of cities that is an important issue that the government of the country needs to address. Atfah (2013) argues that the impact on social life and the landscape of rural areas by urban expansion has been insufficiently considered or clearly defined, which poses threats for the environment for future generations by changing rural landscape spaces into urban development without considering the implications of this development.
In a study of the city of Nablus, Abbas (2008) finds that its urban planning policy gives no consideration to the needs of women when making planning decisions, so that most women interviewed for this study reported that they did not feel socially or physically safe in the city, and specifically at night. These findings suggest that designers and planners of urban spaces need to give greater consideration to the needs of women, as they represent around half the population of the city, so that their presence should not be neglected.

The review of literature reveals many written papers and studies that investigate parks and gardens in the Middle East and North Africa, where some are published and some are not published (Makki, 1987; Buanaqh, 2009), such as investigations into the design and creation of parks and gardens and whether they meet the appropriate standards and regulations (Al-Qiei, 1995; Mahdi, 1983; Badr, 1992), outdoor leisure and recreation activity provision (Hammadi, 1993) and evaluations of the value and quality of public open spaces in residential areas (Mandeli, 2010).

The studies cited above often focus on knowledge that is general and repeated in different studies, such as the criteria applied when designing and creating public open spaces, as well as garden designs. In addition, most of these studies lack references to the perceived needs of users of these spaces, or how design quality of open spaces could enhance users’ experience when visiting open spaces.

Other studies investigate how the work of a municipality could be managed at an administrative level, which offers real value to decision makers involved in planning, designing and maintaining public open spaces, as well as at a government level, as current weaknesses in managing open spaces in the Middle East and North Africa appear to relate to administrative departments and decision makers that work from a desk in an office and appear remote from these open spaces.

3.7 Gender, Age and Ethnicity of Open Space Users

The demographics of users, such as gender, age and ethnicity, need to be fully understood in order to meet these benefits and fully understand the value of open spaces. Users of different gender, ethnicity or age have different ways of perceiving and using open spaces, which is important to understand. There are different reasons as to why people use open spaces (Frumkin, 2003), with human variability leading
individuals and groups to have different perceptions when using public open spaces (Frumkin, 2003).

3.7.1 Gender

Most references to previous studies relate to female users of public open spaces and are based on Western studies, as there are insufficient studies of the factor of gender for patterns of use of open spaces in Islamic countries. However, gender is an important issue when investigating open space users, and the findings of Western studies remain an important contribution to this research. The scope of this study is to highlight the issue of gender for patterns of use of public open spaces in Jeddah, Saudi Arabia, and relevant studies of gender in Islamic countries are included in this research.

Research by Burgess (1995) reveals that public open spaces are generally accepted as safe places. However, it is important to recognise that threats, such as sexual harassment, are often experienced by women in public spaces. In terms of their assessment and interpretation of danger, the perceptions and use of public open spaces for women differ, with some respondents claiming that they did not feel limited or unsafe. Issues of safety are perceived as of secondary importance and the company of others is appreciated (Krenichyn, 2004). These findings are also relevant to women in Jeddah, but the customs and traditions of some conservative families normally require women to be accompanied by men when in public open spaces.

In a study by Macnaghten and Urry (2000) reveal that many female respondents are afraid of walking through the woods, particularly at night. Some mothers are concerned about their children being safe if they play in the woods. Other studies suggest that female respondents might have perceptions of sexual assault or possible crime, rather than the reality of safety in wooded areas (Pacione, 2003; Keane, 1997).

Relationship studies indicate gender differences in terms of perceived benefits and uses in public spaces (Curson & Kitts, 2000), and boys tend to become involved in activities and use public open spaces more than girls (Makinen & Tyrvainen, 2009). There is segregation of gender for physical and other activities in open spaces in Jeddah, so that groups would include boys or girls.
3.7.2 Age

Children are likely to develop a different relationship with open spaces, when compared with adults, since their movement through time and space tends to be limited, as children are restricted to open spaces in their home locality (O'Brien, 2006). Valentine (2004) suggests that the relationship that children have to open spaces can form two sections, since there is a perception that, due to potential dangers and risk from predators, young children need to be protected in public open spaces. This view contrasts with older teenagers who are often viewed by television reports and newspapers as threatening to society, which could be a source of safety issues for other users. Patterns of use of open spaces in Jeddah indicate that family groups that would include all age groups often use these spaces for recreational activities and to share food, so that young children are closely monitored. However, older teenagers would be more likely to form male or female groups during these visits to open spaces that are separate from groups of older family members, so that they are not disturbed by physical games, such as football.

Another significant factor for the use of open spaces is age, since findings indicate that older people tend to use these spaces less than other groups. Respondents over the age of 60 were more unlikely to use parks (Greenhalgh and Wolpole, 1996). In another survey, respondents over the age of 65 were seen as low users or non-users of open spaces, which compared to the 12-19 year old age group (Dunnett et al., 2002). In another study, users of a park were found to be mostly under the age 50 years, yet age was not a factor that influenced the choice of preferred activities. The social and family nature of patterns of use of open spaces in Jeddah indicate that users are often part of a family group or friendship group with members of different ages.

3.7.3 Ethnicity

Rishbeth and Finney (2006) found that parks were mainly visited as a social activity with family members, but not alone, in a study of refugees and how they perceive and use outdoors spaces in Sheffield (UK). Therefore, city farms and some types of urban parks were new concepts to these respondents, who often perceived these public open spaces as a novelty. The refugee respondents also explained that their visits to public open spaces, which contained plants and flowers, gave them feelings of nostalgia for their home countries, which contributed to retaining their national identity. Jeddah has a high percentage of migrant workers that also use public open spaces, where migrants
also demonstrate similar patterns of use to meet with others of the same ethnic background and same language, as well as forming attachment to specific open spaces or softscape features within these areas.

Those from different ethnic origins using parks were researched by Payne et al. (2002) in the USA, where the views of different ethnic users often differed from Caucasian respondents, such as showing a greater preference for activities that were organised, and were usually more interested in recreational activities than conservation. Another study by Tinsley et al. (2002) suggest that there are differences in the frequency of visits to parks and preferences for specific activities that cannot not be explained by proximity. Caucasian and African American respondents tended to identify natural features, such as trees and flowers, which they enjoyed more than Asian or Hispanic respondents. African American respondents were more likely to visit the park with friends, whilst Caucasian respondents usually visited the park alone or with close family members.

There was little association with visits to open spaces by refuges and asylum seeker respondents, because they felt that public open spaces had little relevance to them, and so made very little use of these spaces. Various reasons were given for avoiding these open spaces, which included safety concerns, lack of money and inappropriate behaviour (Rishbeth and Finney, 2006).

Some limitations were revealed when relating research findings to ethnicity since super diversity tends not to be reflected. There is often overgeneralisation in quantitative studies, which can fail to account for ‘mixed’ identities. First and second generations are also insufficiently distinguished, with different ethnic groups being categorised together. Qualitative studies, in contrast, are usually localised and generalisation would be difficult. The literature review also indicates insufficient studies that show ethnic differences in non-Western countries, as well as Arab dispersion.
3.8 Person and Place relationships

During the last fifty years there has been increasing interest in human beings and their relationship with the environment and outdoor spaces. There has been considerable research undertaken into the relationship between people, place and the surrounding environment within the field of place attachment. This research situates itself within this field and draws on some key conceptualisations and findings, as well as understanding the interaction between people and place and their understanding of the environment. Many fields within the social sciences are involved in this process. They include environmental psychology, sociology, community psychology, human geography, demography, leisure sciences and tourism, ecology, cultural anthropology, urban studies, architecture and planning, forestry and economics (Lewicka, 2011).

The world has changed rapidly in the last 50 years offering increased mobility, more accessible places, globalisation, together with a variety of other factors (Lewicka, 2011). Public spaces, such as gardens, streets, open spaces, plazas, bazaars and related areas are places that can form the skeleton of a city, and become increasingly important in the context of rapid urban expansion (Efroymson, Thanh Ha & Thu Ha, 2009). People could sense increased happiness by valuing, loving, cherishing or respecting urban public spaces that encourage this, which helps to ensure civility in cities (ibid).

The link between the environment and people has become a major concern for social scientists, designers and geographers in design and research, with longitudinal psychological studies demonstrating that existing ties between people and places are limited. The attachment that people have with numerous places is shown to be strong in many studies that use quantitative research methodology (Lewicka, 2011). Place attachment studies range from small neighbourhood gardens to large areas within cities and towns (Fried, 1982; Gustafson, 2009b; Lewicka, 2010; Bonaiuto, Fornara & Bonnes, 2006; Hidalgo & Hernandez, 2001), to countries (Laczko, 2005; Gustafson, 2009b; Lewicka, 2005), and places that are non-residential, such as pleasure and entertainment parks (Kaltenborn & Williams, 2002; Stedman, 2006; Hammitt, Backlund & Bixler, 2006).
Place attachment research findings clarify that it is a natural phenomena to bond with a place (Heidegger, 1962; Norberg-Schultz, 1979; Seamon, 1980; Tuan, 1975, 1977; Buttimer, 1980). The size and type of attachment vary and are based upon features, such as size, scale, characteristics, together with people’s ages, gender, social life and relationships (Scannell & Gifford, 2010). Place attachment is defined as the bond or link between place and people differently (Table 3-1).

<table>
<thead>
<tr>
<th>Author</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Shumaker &amp; Taylor (1983)</td>
<td>“A positive affective bond or association between individuals and their residential environment”</td>
</tr>
<tr>
<td>Hummon (1992)</td>
<td>“Emotional involvement with places”</td>
</tr>
<tr>
<td>Low (1992)</td>
<td>“An individual’s cognitive or emotional connection to particular setting or milieu”</td>
</tr>
<tr>
<td>Twigger-Rose &amp; Uzzell (1996)</td>
<td>“Affective bond or link between people and specific places”</td>
</tr>
<tr>
<td>Klatenborn (1997)</td>
<td>“Complex affective bonding with physical environments”</td>
</tr>
<tr>
<td>Kyle, Graefe, Manning &amp; Bacon (2003)</td>
<td>“The extent to which an individual values or identifies with a particular environmental setting”</td>
</tr>
<tr>
<td>Hernandez, Hidalgo &amp; Salazar-Laplace (2007)</td>
<td>“The affective link that people establish with specific settings, where they tend to remain and where they feel comfortable and safe”</td>
</tr>
<tr>
<td>Florek (2010)</td>
<td>“Affective link that individuals establish with places”</td>
</tr>
<tr>
<td>Morgan (2010)</td>
<td>“Experience of a long term affective bond to a particular geographies area and the meaning attributed to that bond”</td>
</tr>
<tr>
<td>Scannell &amp; Gifford (2010)</td>
<td>“The bonding that occurs between individuals and their meaningful environments”</td>
</tr>
</tbody>
</table>

Table 3 - 1: Place attachment definitions
3.9 Sense of place and bonding

The core concept within environmental psychology is the concept of ‘place’. The definition of place and the way it differs from the concept of space, which it is related to is generally agreed (Relph, 1976; Low & Altman, 1992; Tuan, 1977); however, there is less agreement about measuring and defining the bonds that people have with places, such as place identity, place dependence, place attachment and sense of place. Questions continue to be asked about whether they predict different or similar phenomena, because the relationships between the concepts are unclear.

Aspects of research into place are questioned by various researchers (Stedman, 2002; Patterson and Williams, 2005; Hidalgo & Hernandez, 2001; Manzo, 2003; Shamai & Ilatov, 2005). Most researchers agree that for good psychological balance and adjustment, the development of emotional attachment with places is necessary (Rowles, 1990), which assists in overcoming identity crises and provides people with a sense of stability required in a rapidly changing world (Hay, 1998), and involvement in local activities is desirable (Guardia & Pol, 2002; Vorkin & Riese, 2001; Brown, Perkins & Brown, 2003). Although people regularly travel from place to place, an attachment to familiar places is a necessary part of life (Gustafson, 2001a; Williams & McIntyre, 2001; Cuba & Hummon, 1993).

Hidalgo and Hernandez (2001) consider that current research into place attachment is restricted due to its ambiguous terminology, the extent of connection, as well as its spatial range. These authors raise concerns about the lack of a shared meaning of concepts, such as sense of community, place attachment, community attachment, place dependence, sense of place and place identity. In addition, there is no agreement among environmental psychologists concerning the relationship of these constructs (Knez, 2005).

Relationships between people and places are defined by a number of concepts, and place identity and place attachment are used to hypothesise the attitudes of people towards their places of residence. One definition of place attachment is a symbolic relationship between people revealing a culturally shared emotion to a particular space or piece of land that provides both group and individual understanding of the environment and its relationship (Altman and Low, 1992). Altman and Low (1992)
consider that there are six types of place attachment that reveal the hidden bonds between people and land (figure 3-1).

![Figure 3 - 1: Place attachment types according to Altman and Low (1992)](image)

These six types of place attachment may in turn be placed within three different groups (figure 3-2).

![Figure 3 - 2: Altman and Low (1992) place attachment types categorizing](image)

The interaction between a group or individual to a piece of land, and how they relate to it, including shared experiences and special events, such as birth or marriage, may be described as genealogical linkage. Attachment to a particular place, through regular visits or belief, for instance, pilgrims visiting Makkah yearly for Hajj and Umrah may be created through visits to cultural and pilgrimage events. Place attachment may be viewed together in the same place, because a particular place can be described in terms of all the categories, yet some may have more importance than others. The shared experience at a piece of land or space is transformed for most people into a shared symbol, or as a place that is culturally meaningful.

Some people associate places with cultural attributes (Altman and Low, 1992), and the philosophy of place attachment is closely related to culture, because individual open
spaces are likely to have a different history. A variety of activities have taken place and will continue to take place on each site, leading to a significant effect on the way that people react to the site. Place attachment reflects the major components of socio-cultural, life-social, ideological and material factors.

Psychological factors, such as emotions, cognitions and experiences are linked to place attachment. Some researchers comment that place attachment can be conceptualised by behaviour and emotions linking with the object of the attachment, which are a source of protection, as well as comfort. Some elements of behavioural aspects, including social involvement and activity, significantly change the development of place attachment according to some researchers (Harris, Brown & Werner, 1995).

Physical and social features that characterise a neighbourhood result in place attachment are important, because identification with place is generated that encourages social and political engagement. Studies also reveal that the higher the neighbourhood attachment, the more likely individuals are to develop a set of norms and to implement effective formal and informal social control that leads to a reduction in crime and anti social behaviour (Sampson & Groves, 1989).

Place attachment within the context of outdoor recreation has often been studied as place identity and place dependence. The symbolic attachment to a place is usually referred to as place identity, whilst place dependence relates to a functional attachment. It is suggested by Proshansky, Fabian & Kaminoff (1983) that place identity is based on individuals having more positive emotions than negative emotions, yet experiments reveal that by simply exposing an individual to a stimulus, a preference for that stimulus will emerge, which does not depend on contextual or subjective factors, but only with a clear history of exposure (Zajonc, 2001). Repeated exposure to the stimuli suggests that the affective attachment to places is formed mainly on the basis of the exposure that is repeated to the place. This may be either from actual experience of the place, or by reading and hearing about it; previous experience should be a powerful indicator of place identity, so that the effect of previous experience that predicts place identity is relatively stable (Prentice & Miller, 1992).

Places are evaluated by people, according to how places meet their functional needs; this is called place dependence and is based upon transnation theory, which leads people
to make comparisons and evaluate alternatives accordingly, but not necessarily about national comparisons of place (Stokols & Schumaker, 1981). The development of a frame of reference through an evaluation of past experiences of activities and social groups of participants form the basis of such judgements.

Insufficient attention has previously been given to the role of past experience of sites, although personal histories have been studied. In research conducted by Williams et al. (1992), respondents were divided into two groups for previous visits and the number of years since the first visit. In a later study, Moore and Graefe (1994) included the frequency of visits and the months associated with the sites in models of regression that predicted place dependence and place identity scores, with several other variables. A composite index of specialisation also included previous experience in research conducted by Bricker and Kerstetter (2000).

Place attachment refers to the bonds that people associate with places. Affective, cognitive and behavioural elements of place attachment are the three that are most frequently measured (Jorgensen & Stedman, 2001; Kyle, Mowen & Tarrant, 2004; Low & Altman, 1992), with the emotional component being the most frequently measured. A number of researchers have created place attachment scales (Shamai, 1991; Shamai & Ilatov, 2005; Stedman, 2002 and Williams & Roggenbuck, 1989; Bonaiuto, Aiello, Perugini, Bonnes & Ercolani, 1999; Fe´lonneau, 2004; Hidalgo & Hernandez, 2001; Kyle, Mowen et al., 2004). Place has the greatest influence on place attachment through symbolic meanings and physical features, with the exception of a variety of demographic and social factors (Stedman, 2003).

According to research into environmental aesthetics, most people prefer historical places to modern architecture (Nasar, 1998), which is often because historical sites unite the traditions of the group or society and provides a sense of continuity with the past (Hayden, 1997; Devine-Wright & Lyons, 1997; Hay, 1998), which facilitates place attachment (Low, 1992). This study considers that people living in city districts, which are surrounded by pre-war architecture, pre-war houses or historical sites, would demonstrate place attachment to their neighbourhood that is stronger than those living in modern city homes. Although place history intensifies place attachment, the reverse is also true. It is shown that people with fewer emotional bonds feel less attachment to a place from the past and in their own roots than those attached to a place (Lewicka,
Emotional interest of a place is related to an interest in the city of residence and also the amount of knowledge about past history.

Place identity refers to the bonds that people have with places. Jacobson-Widding (1983) refers to identity as meaning two things, which are sameness (continuity) and distinctiveness (uniqueness), and that place identity includes both. When applied to a place, the concept of identity may carry two different meanings. Identity may refer to the term place, which means a set of place features that make the place distinctive, as well as providing continuity in time, in this context. Genius loci is a concept used to describe the unique character of a place that is generally agreed (Norberg-Schultz, 1980; Stedman, 2003), which reflects this meaning of place identity. Place identity is a term also used by psychologists to refer to the future of a person and not a place. Proshansky (1978) refers to place identity as dimensions of self that define the personal identity of a person in relation to the physical environment. In addition, place is defined by Twigger-Ross and Uzzell (1996) as the means to preserve a sense of continuity, distinguishing self from others, as well as building positive self-esteem and creating a sense of self-efficacy.

There is disagreement in the literature concerning the relationship between place attachment and place identity. The two concepts are used interchangeably in some literature (Williams et al., 1992), and sometimes affective (place) attachment is seen in the same terms as place identity (Stedman, 2002; Jorgensen & Stedman, 2001; Kyle, Mowen et al., 2004). Some authors refer to both within the concept of place identity (Puddifoot cited in: Pretty et al., 2003). A further view that precedes the formation of place identity (Hernandez, Hidalgo, Salazar-Laplace & Hess, 2007) considers that although one may feel attached to a place, it takes more to incorporate the place as part of self. There are many different reasons why people feel attached to a place; people develop emotional bonds with places that may be the result of different identities and symbolisms.

Attachment to a place may occur because people have friends living there, or it may be the place where a person is particularly happy. Maybe it is important to their personal identity, because it is where the family roots are. (Manzo, 2003; Milligan, 2004; Relph, 1976; Gustafson, 2001b; Low, 1992) People may also feel a sense of attachment to a
place and a product of local identity, because it is an integral part of the city with which they identify (Fe´lonneau, 2004).

Higher-order identification may also lead to place attachment; for example, cities that are part of countries and regions that contribute to the formation of emotional bonds with places. Place attachment when linked to a religion is discussed by Mazumdar and Mazumdar (1993), which is of significant importance in Saudi Arabia, and specifically to Mecca and transport links for pilgrims travelling via Jeddah. In addition, Possick (2004) refers to ideological place attachment, which is highly relevant when two national or ethnic groups are in conflict over land that is sacred to both. Conflicts between the Albanians and Serbs over Kosovo in the former Yugoslavia, and the conflict between Israeli and Palestinian residents concerning the West Bank in Israel are examples of this.

Perceptions of places vary and are dependent upon national or local identity, resulting in different cognitive consequences and motivations. The motivation to accept the historically multicultural and multi-ethnic character of a city, which recognises its unique identity, will be stronger if the attachment to a place is due to local rather than to national identity. When individuals develop a relationship with a place where they want to stay because they feel comfortable and safe, this emotional bond is often defined as place attachment (Hernandez et al., 2007; Knez, 2005), and by developing feelings of interaction and belonging for a place that create a personal identity, these often define place identity (Hernandez et al., 2007). Other research findings have suggested that places, spaces, things and objects extend beyond individuals' perceptions to create self identity, and that individuals socialise their perceptions of the physical world to create place identity (Proshansky et al., 1983). According to Korpela (1982, 1992), a favourite place could contribute to building stability for individuals, so that a self-regulating environment is linked to place identity. Other findings have suggested that place attachment has two components: place dependence and place identity (Schreyer et al., 1981; Williams and Roggenbuck, 1989; Kyle et al., 2004). One UK study of London Docklands and the area of Rotherhithe that investigated attachment to residential environments argue that there are two ways that identity is related to place that are place identity and place identification (Twigger-Ross and Uzzell, 1996).
Many research studies report that place attachment is commonly found in different cultures within a group of people or individually (Dixon and Durrheim, 2004; Knez, 2005; Lewicka, 2008; Tuan, 1977); however, to maintain this identity, emotional attachment has a role (Twigger-Ross and Uzzell, 1996). Places of religious importance create emotional experiences that could contribute to developing place attachment and place identity (Mazumdar and Mazumdar, 2004), which reveal differences in the literature when attempting to reveal meanings that could be shared for various concepts (Dixon and Durrheim, 2000).

At local and national levels, individuals develop strong attachment to their homes and other places, so those as well as contributing to their identity, feelings of attachment often influence the system of values in society and behaviour (Smailes, 2006).

Hummon (1992) explains that the core concept of place attachment is based on the ways individuals relate to places, meanings and locations (Hummon, 1992), so that as individuals form emotional bonds with other people, they also form emotional bonds with places. Therefore, the concept of place attachment could be based on how individuals perceive their physical and social environments, and other findings have indicated those individuals’ perceptions of their physical environment influences attitudes toward their communities significantly (Campbell, Converse & Rodgers, 1976; La Gory, Ward & Sherman, 1985). There are also important factors for community satisfaction, such as the natural and built physical environments, as well as friendliness and personal safety within social elements of communities (Herting & Guest, 1985).

Hummon (1992) argues that when people invest emotion in their community, they develop community attachment, which is not associated with other factors of community life, such as density, size or type, which contributes to better understanding of social wellbeing, integration and belonging discussed earlier (Goudy, 1982). In addition, place attachment could be strengthened by participating in community events, as well as the length of residency for individuals (Sampson, 1988).

In two studies of non-permanent residents to investigate relationships between mobility and place attachment, Aronsson (2004) and Gustafson (2002) found that these became less exclusive, because the mobility of society had increased, so that living in a holiday home often resolved a desire for identity, roots and authenticity in a place, as well as
escaping from modern living (Aronsson, 2004, p77). Although several studies have investigated the concept of place attachment, and how this is associated with environmental and social benefits, there has been insufficient research into the characteristics and motivations of non-permanent residents (Aronsson, 2004; Gustafson, 2002; Jorgensen & Stedman, 2001).

Various research disciplines have investigated why people have attachments with specific places, and in a sociological study, Grieder and Garkovich (1994) suggest that symbolic meanings of places often affect the context of social human interaction. In an anthropological study, Gupta and Ferguson (1997) indicate that daily cultural life is influenced by significant places. The sense of place has been evaluated in geographical studies (Relph, 1976, 1997; Buttimer and Seamon, 1980; Tuan, 1977, 1980), which reveals similarities in environmental psychology studies that have defined the concept of place attachment (Brown, 1987; Altman and Low, 1992).

From an environmental psychology perspective, place attachment as a concept is defined as the bond between a specific place and an individual (Giuliani and Feldman, 1993). The built environment was the main focus for early place attachment research studies, but since then studies have also focused on attachment to resource dependent communities and tourist communities (McCool and Martin, 1994; Vorkinn and Riese, 2001), special places for local people in the nearby area (Eisenhauer et al., 2000), attachment to recreational and tourist destinations (Williams et al., 1992a; Moore and Graefe, 1994; Bricker and Kerstetter, 2000; Vaske and Kobrin, 2001), and place attachment for individuals who own a second home (Kaltenborn, 1997a, 1997b; Jorgensen and Stedman, 2001).

When specific goals and activities are supported by places that offer appropriate features and conditions, the importance of place dependence is revealed (Williams and Roggenbuck, 1989; Schreyer et al., 1981; Stokols and Shumaker, 1981). When a place represents functional attachment, this could be associated with its physical characteristics or due to frequent visits as the place is close to people’s homes. Therefore, when a specific place has a relationship with individuals that are ongoing, place dependence is suggested. Functional attachment is often created by community open spaces, which are natural resources that are local, but could be created in any place that supports goals or activities that are highly valued.
Therefore, elements of self-identity are revealed by place attachment (Proshansky et al., 1983), improved self-esteem is achieved (Korpela, 1989), perceptions of belonging to a community are enhanced (Relph, 1976, Tuan, 1980), and environmental values and policies are promoted (Cantrill, 1998). Moore and Graefe (1994) reported that place identity could be created by repeat visits to a specific place due to place dependence, but other findings suggest that this might not be directly related to specific experiences with the place (Proshansky et al., 1983). According to Giuliani and Feldman (1993), psychological attachment to a place is created over a period of time.

3.10 Place attachment and affordances

There is no single accepted psychological theory of relationship between place attachment and the environment. However, there are several embracing factors that describe this complex relationship that are used in environmental psychology, together with the multidisciplinary field of science, which is often regarded as applied psychology. Fundamental science, practice and informing policy are all contained within this field of research (Gifford 2009).

One of these enduring models in place attachment is the bonding between people and their meaningful environments, as described by Scannell and Gifford, 2010. It is a long studied phenomenon with the concept being defined in various ways. It is also similar to the concepts of sense-of-place, place-identity, place-dependency and others.

It is possible to enhance place attachment if the place offers social interactions (Fried 1963), and may be referred to as civic place attachment, in contrast to environmental place attachment (Scannell, Gifford 2010). Scannell and Gifford (2010) commented that environmental place attachment is connected to pro-environmental behaviour, which is independent of age, gender, length of residence, education or home town, whereas civic place attachment lacks such connection. These researchers also commented that it may be the answer to previously found conflicting results in the positive (Clayton, 2003) vs. negative connection (Uzzell, 2002) between place attachment and pro-environmental behaviour. Duerden & Witt (2010) found evidence that a direct environmental experience in teaching has a greater effect upon changing environmental attitudes than indirect experiences. Perceived freedom in a direct experience and interaction with nature is an important factor in the quality of a direct experience.
Ecological psychology is another widely influential theory of people’s relationship to outdoor spaces, which can be considered as transactional (Stokols, 1995). Linked to Barker’s ecological psychology (1968) is J.J. Gibson’s ecological psychology, within the field of perceptual psychology. This is a theory of action and perception with a central view that considers the behaviour of humans as being guided by directly perceived actions, possibilities and affordances due to their attachment to public open spaces (Gibson, 1977, Gibson, 1979). The composition and layout of surfaces constitute what they afford, but perceptions of affordances are specifically linked to people and requirements (Gibson, 1977). There are relationships between the world and the people within in, who are perceived directly and automatically without the need to be desired or known (Norman, 1999). Internal mental models are rejected by Gibson as playing a part in human actions and perceptions, and that the relevant focus of learning and behaviour should be the information that is available within the environment (Greeno, 1994). This theory is often regarded as only appropriate in explaining movement and orientation, in contrast to object recognition and higher cognitive processes, such as within learning. One deficiency of this theory is that it is not sufficiently well developed for the assessment of the role of emotional or motivational factors (Kyttä, 2004). When defined as a relationship between a perceiver and his/her environment, affordances are a good example of a true transactional approach that takes equal account of people and the environment. However, according to Kyttä (2004), the psychological examination of the environmental and socio-cultural context may not always be possible. Gifford (2009) suggests that in following a transactional model it is the lack of analytical tools to deal with the subject that explains why these approaches are insufficiently applied within environmental psychology.

3.11 Person, process and place dimensions
A tripartite organising framework aimed at capturing the essential dimensions of the concept is provided by Scannell & Gifford (2010). The dimensions provided may be regarded as highly relevant within any transactional theory when trying to capture the complex nature of the environmental-human relationship. Such dimensions are: person, process, and place, and provide an indication of the relevance of place attachment (figure 3-3).
3.11.1 Person
The person dimension refers the person who is attached. Individuals and groups may express place attachment; although as distinct phenomena there maybe overlap. Individual level includes personal connections, such as milestones and memories. Attachment at group level refers to symbolic meanings of a place that are shared, such as religious or cultural-historical meanings and values.

3.11.2 Process
The process dimension refers to psychological ways through which groups and individuals relate to a place. The psychological process dimensions of place attachment are further divided into three subcategories: affect, cognition, and behaviour. Dimension of affect means refers to the bonding to a place that is always emotional, yet may be negative, whilst place attachment mostly refers to emotional bonding that is positive. The cognitive component relates to beliefs, memories, meaning, and knowledge that people relate to a particular place. Place attachment as behaviour refers to the behaviour that people demonstrate when related to attachment, which includes the reconstruction of lost places and proximity-maintaining behaviours.

3.11.3 Place
The place is referred to as the most important dimension of place attachment. This relates to the object of the attachment, such as what it is that we attach to, which may
occur at both physical and social levels. Social attachment links to a sense of community with social interactions and group identity being important determining factors. Physical attachment occurs at different spatial scales that may include one's room, the city, the world; built environment and nature. The specific level is an important aspect of the place dimension of place attachment.

Place attachment is the positive bond to one’s environment, which has a well-being aspect that is relevant to the cultural ecosystem. Place attachment might provide other beneficial effects, such as place-protective behaviour, increase in pro-environmental behaviour, and an increased sense of safety (Scannell & Gifford, 2010). The resulting effects of place attachment are dependent upon the dimensions that are actualised in the model.

3.12 Summary
This chapter has discussed the findings from a review of the literature of the experiences and motivations that are associated with place attachment with public open spaces. These findings form a strong link with the methodology adopted for this study, so that these relationships with open spaces are analysed in association with physical activities, mental wellbeing, social wellbeing, patterns of usage and other factors, such as gender, age and ethnicity. This contributes to an analysis of the sense of place, which directs this research towards its focus of place attachment. Therefore, the concept of place attachment is highlighted and examined from the findings of various published studies, but this research applies the focus and framework developed by Scannell and Gifford (2010) that uses their three dimensions of place attachment to construct the findings that are related to place attachment.

The following chapter explains the methodological approaches developed for this research and how these approaches meet the research aims, as the methodology is strongly linked to the findings from the review of the literature. This chapter will integrate the dimensions of form, fabric and cultural practice, and analyse the complex concept of place attachment with storytelling methods adopted to recognise different perspectives.
CHAPTER FOUR

RESEARCH METHODOLOGY
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4.1 Introduction
The initial section of this chapter sets out how these ambitions informed two primary approaches: the importance of understanding place as an integration of form, fabric and cultural practice, and the potential of storytelling methods to elicit and represent complexity of place attachment. Therefore this chapter introduces the methodological approaches and methods of the research.

The methodological approaches are shaped by the research aims to identify how and why people use public open spaces in Jeddah, to examine the dimensions of place attachment and how these shape the values and meanings of place across diverse axes of identity, and to make recommendations for improved planning and design to meet the needs of users of these spaces in Jeddah more effectively.

The main body of the chapter represents the mixed methods used in the research fieldwork from December 2011 and October 2012. The content covers the decision making process of how the city of Jeddah and case study locations were selected, and a full description of all methods used, including discussion of ethical implications for working in Saudi Arabia. The chapter concludes by discussing the analysis and interpretation of the data.

Research from many disciplines is engaged in investigating the social dynamics of public open spaces, and the review of the literature indicates the diversity in the methods that have been used. A wide range of both qualitative and quantitative research methods can be found including the use of questionnaires, interviews, observation studies; as well as more landscape specific methods such as walking interviews or photographic diaries. It is important to recognise that research methods are situated within a cultural context, and need to respond to the constraints, expectations and opportunities of the location and potential participants. In this study, the suitability and context of potential methods of enquiry with open spaces users will be critiqued with respect to the Saudi context. The approaches used also needed to be able to represent
the perspectives of different stakeholders; a broad diversity of open space users, as well as designers and regulators relating to the city’s public spaces.

4.2 Methodological approaches

The methodological approaches for this study draw on the findings of the literature review and the specificity of the research aims and objectives. The investigation of place and place attachment required a methodology that integrated the form, fabric and culture of urban landscapes (Lewicka, 2011; Williams, 2013). Place attachment study is often described as divided between quantitative and qualitative methods (Lewicka, 2011). The methods used in this research needed to provide the researcher with insightful details about the users' experience and bonds to places. According to Gorman and Clayton (2005), qualitative research enables data to be collected from the context of occurrence, so that occurrences can be described, and complex textual descriptions of how people experience and interact with public urban spaces. Qualitative methods used to record the use of public spaces are informative, flexible and are better able to deal with the complexity of values and perceptions of public open space. The context of the research is located in an Arab society, so particular care is required to accurately address and represent the relationship between practices and social norms informed by gender, transnational links, socioeconomic status, religion and culture. This in depth information about place attachment and place studies can most effectively be collected by adopting qualitative methods (Williams, 2013).

Within this broadly qualitative approach, it was important to identify key principles, referred to in the thesis as methodological approaches, which would ensure that the methods would be effective in addressing each of the aims of the research: use of open spaces, understanding place attachment, and impact on practice.

To address the first aim, it was important to ensure reliable ways of recording use of public space, and, crucially, what types of public open space were most commonly used in a Saudi urban setting. To gain better understanding of the spatiality and types of open places in Jeddah for users this study identified typologies for the public open spaces in Jeddah that needed to be aware of the appropriate spaces commonly used for the context of Jeddah and Saudi Arabia. The use of such case studies will assist in obtaining a clear understanding of how the use of physical spaces is related to people’s sense of place attachment and the patterns of using open spaces (Stake, 1995). Therefore, this research used case studies of specific sites in Jeddah based on the researcher’s knowledge as a
landscape architect, and data was collected by techniques of observations and interviews at these sites.

The second aim required an understanding of how users’ value and potentially become attached to specific locations. This study investigated open space sites in Jeddah where users have diverse cultural backgrounds, so that the researcher needed to ensure that the respondents interviewed and observations reflected this diversity in terms of place attachment and emotional bonds. The bond between people and places could be critiqued within an understanding of their cultural backgrounds, behaviour, psychology, cognition and affection for social or physical features of spaces (Scannell and Gifford, 2010). This identified a need to adopt a story telling approach to gather information from respondents that would reveal greater details of these factors that influence values and place attachment.

The third aim of this research is to relate the findings of the research to the planning and design of public open spaces in Jeddah, so that these could be used by decision makers to meet the diverse needs of users of these spaces, so that they enhance the quality of life for people living in this city. The case study used in landscape architecture is “a well-documented and systematic examination of the process, decision making and outcomes of a project, which is undertaken for the purpose of informing future practice, policy, theory, and/or education” (Francis, 2001, p.19). Multiple case studies are therefore used in this research to ensure its overall strength (De Vaus, 2001).

In addition, the analysis of qualitative data requires a systematic procedure that is guided by specific objectives that can be gained by an inductive approach (Thomas, 2003). These findings justify the use of an inductive approach for this study that meets the aims and objectives by systematic analysis of qualitative data to record these intangible factors.

The methodological approaches adopted for this study, investigate place as an integration of form, fabric and cultural practice, and adopt storytelling methods to elicit complexity of place attachment.

4.2.1 Investigating place as an integration of form, fabric and cultural practice

The research study needed to investigate public open spaces in Jeddah to address the key problem identified in this context: that landscape design, planning and maintenance of open spaces insufficiently meets the needs of users due to a lack of knowledge about
patterns of use. This issue is raised in the literature review, but through careful survey work (Chapter 4 section 4.6) and interviews with users (Chapter 4 section 4.8) it has been possible to confirm this. By starting with specific places, first in developing a typology and then selecting representative case study locations within these categories, the research could ensure applicability to a Saudi context, and to the differing remits of landscape practice in varied levels of design and management intervention. A focus on particular locations in the selected city allowed for places to be observed over time, gaining an understanding of cultural uses in space and related to the specific physical features on the place. Furthermore, the use of case studies assisted in obtaining a firm understanding of how the use of physical spaces is related to people’s sense of place attachment and the pattern of using open spaces (Stake, 1995).

It was important that the methods used enabled reflection of spatial and temporal dimensions of public space use. Careful recording of these in a diverse range of public spaces was needed in order to generate data that is categorically different in many respects to data regarding social use of public space in European or North American literature. Integration of space and time within a designed landscape has been key to understanding some of the cultural patterns to being outdoors in a Saudi context, patterns that commonly reflect Islamic religious practice and human adaption to very hot locations.

Implied within this approach is the grounding of social dynamics in the physical form and materials of landscape. This may be termed a ‘landscape specific’ approach (Rishbeth. 2014 – the Place attachment book one) where an attempt is made to counter a purely sociological understandings of human interactions. The researcher’s background in Landscape Architecture practice was important in enabling professional interviews to be conducted to gain better understanding of value and attachment to places by ensuring flexibility in their structure to encourage participants to provide clear details of their experiences and memories. Developing methods that drew on this expertise explicitly helped to address the third aim of this research – to inform landscape practice – but also meant that qualities of place were foregrounded even in the more narrative aspects of the research findings.

The common language in Jeddah is Arabic; therefore, interview questions were translated into Arabic for most participants, except one participant who was American, who was asked interview questions in English. Participants who were migrants were
interviewed in Arabic, and the researcher recorded these responses in the language used for each interview. In Saudi Arabia, part of the culture is to forbid males and females who are not related from interacting together in public and private, therefore female volunteers were recruited to assist with the interviews in some cases, because the insights of women are necessary in the current research. One female member of the researcher’s family accompanied the researcher when conducting the interviews at the selected open space sites. Eighty-five interviews were undertaken in total, and the female assistant was involved in 25 interviews with the presence of the researcher. Before conducting the interviews, the female assistant was given instructions and guidelines on how to conduct the interview and how she could encourage the interviewee talk more about the important points. She also attended a few interviews with the researcher when he was the interviewer, so that she could have a clear image of how to conduct interviews. In some cases, the researcher interrupted the interview when conducted by the assistant to clarify or add another question. These interventions were carried out by passing a card to the assistant with new questions. This raised challenges for the researcher that would not have arisen in Western research studies, but is an accepted part of society in Saudi Arabia. The locations were selected on the basis that both males and females would normally use these, and could be adopted for the scope of this study. This process of questioning is reflected by the grounded hypothesis approach whereby every interview question feeds into the next one (Kvale & Brinkmann, 2009; Willig, 2001). The skills of interviewing participants are learned as the interviews proceed, which relates to both the researcher and respondents (Kvale and Brinkmann, 2009).

The integration of form, fabric and cultural practice when investigating place requires mixed methods of collecting data of patterns of use and place attachment as there are complex intangible factors that influence these. Observations and interviews were carried out at the case study sites, each of these methods have different strengths in terms of looking at cultural practice in designed landscape. Researcher observations are especially useful for gaining an overall perspective of patterns of use and to attempt to identify patterns that could be different for Saudi and non-Saudi users. Interviews, however, can provide a rich quality of responses from a storytelling approach that provide detailed information when respondents are give opportunities to respond from their own perspectives and memories of incidents. By working with both, and also discussing the findings with professionals, the research was able to critique the
integration of values and attachments with a realistic representation of how spaces are actually used.

Addressing the integration of place and culture from a specifically landscape research practice raised the limitation of commonly used terminologies for types of public open spaces. Open space typologies are shown in the review of literature, but these are based on Western studies that include typologies that are often irrelevant for use in the context of Jeddah in Saudi Arabia. In developing the methodological scope for the research project, it became clear that an initial stage was needed to develop an open space typology to meet the specific diversity and use of public open space in Jeddah, and which could be used by future research studies for case study sites in the Middle East and North Africa that might reflect similar cultural and climatic issues. This development of an open space typology also addressed the aims of this study to identify implications for improved planning and design of public open spaces to meet the requirements of local and migrant users within the Saudi Arabian urban context.

4.2.2 Adopting storytelling methods to elicit complexity of place attachment

This study intends to investigate perception and values related to open space as informed by intangible factors, such as social norms, gender norms, socio economic status and practices associated with religion and ethnicity. In particular, there were seen as relevant in shaping forms of place attachment (Gorman and Clayton, 2005). The methodological approaches to investigate the complexity of place attachment need to understand landscape qualities of open spaces that are sensory and temporal. There are also issues of cultural memories that need to be considered. Data should be collected from participants with diverse backgrounds, and especially when these methodological approaches are applied in an Arab country where social, cultural and religious factors are likely to be different from the methodological approaches adopted by most Western studies. The context of this study within an Arab country includes the factors of society, culture and religion that are not often considered in Western studies, so that challenges included the conservative society of Jeddah that does not welcome approaches from strangers. Also, religious laws prevent females from speaking with unknown males to collect research information, and the importance of personal and family privacy in outdoor spaces in Saudi Arabia makes it difficult to gain full understanding of values and place attachment bonds with traditional interview questions.
These challenges can be overcome by adopting a storytelling approach when collecting data, which is used to investigate place attachment at the case study sites of Jeddah. Storytelling methods encourage respondents to be reflexive when interviewed at a case study site, so that the researcher is aware of the dynamics of the situation, clear about pre-conceptions and knowledge evolves from the interviewee and the researcher (Sandercock, 2003; Rishbeth, 2013). According to Sandercock (2003), she stated that stories could be a useful tools for planners. She indicated that planning can be applied through story because it has the strength to present the knowledge and how people perceive the city (Sandercock, 2003). This is different from the analysis of narrative and representations of narrative for case studies used in research in Western countries, where participants are often more willing to talk openly about their attachment to places. Therefore, storytelling methods are used for this study to overcome the challenges of collecting information from participants in an Arab society that is very conservative, so that individuals’ lives are reflected their experiences in a series of stories. These storytelling methods provide different qualities of responses from participants when compared to qualitative interviews, as respondents could tell their own stories of place value and attachment without restrictions of specific questions, and add detailed responses that could be unexpected by the researcher. The context of the interviews at the case study sites adds greater value to the data collected, as participants reflected on the elements of the open spaces that motivated their place attachment bonds, which could be defined as on-site storytelling or located storytelling.

To achieve personal interaction between the researcher and the participant, this study aimed to achieve flexibility within interviews. The understanding of place attachment might be enhanced by responses to semi-structured interviews by adapting the structure to meet what would be appropriate for the interviewee, so that gaps, contradictions and difficulties could be overcome by storytelling methods to gain better understanding of place attachment, and the underlying practices of form, fabric and culture. The researcher has opportunities to interact with interviewees and ask supplementary questions to challenge any perceived contradictions or gaps in information.

The use of a storytelling approach in this research has enabled complex textual descriptions of place attachment with public open spaces based on the interactions and experiences of individuals and groups. In addition, this helped the researcher to triangulate and give detail to researcher observations and give more rigour to the
knowledge previously gained about the users’ experience and pattern of using open spaces in Jeddah.

The following sections examine the specific methods involved in this research, and how they are integrated in developing the analysis and the findings for this study. In addition, each section reflects and states the problems and limitations by conducting these methods, how they were adopted from Western based research practice and reflect some of the issues raised through studies in Arabic countries. These are addressed for each of the selected methods and demonstrate how the researcher dealt with these issue

![Diagram](image)

**Figure 4 - 1: Research methodology process**

### 4.3 The Selection of the City of Jeddah

The scale of a geographical setting was considered by the researcher to be appropriate for this study rather than investigating more than one city, comparing different cities with similar cultural, social and religious backgrounds or a neighbourhood setting that would provide a small scale focus for this research. The researcher justifies this geographical setting, as the findings could provide valuable information for those responsible for decision making about public open spaces in Jeddah.
Jeddah city is selected as the geographical setting for this research for a number of reasons. Significant developments have taken place in the city over many decades, due to the impact of expanding commercial activities, and the improved economy in Saudi Arabia. Jeddah presents a typical example of a city in the Middle East region, but is also unusual as many migrant workers are based there, and its position as a seaport means that many pilgrims from other countries pass through the city. There is also urgency in providing such research, because of rapid development that continues with the participation of Western landscape architectural companies, as well as a dynamic growth within the landscape profession. This study is distinctive from others in terms of culture within an area that attempts to accept development, yet also wishes to preserve the customs and traditions from previous generations. The purpose of this research is to investigate the open spaces that are commonly used in Jeddah, and attempts to provide new knowledge that can contribute to its landscape architecture and planning strategies.

The researcher is familiar with and possesses existing knowledge of Jeddah, in terms of its socio-cultural perspective, residential areas and public spaces. In addition, the researcher has previous experience when conducting Bachelors and Masters studies, as well as practical work experience in planning and design proposals in developing residential and other spaces across the city. The researcher graduated as Bachelor of Landscape Architecture Department in King Abdulaziz University and later became a lecturer in the same university within the Faculty of Environmental Design. Academic and governmental contacts are readily available, which could provide essential assistance in gaining relevant information from different parts of the city such as Jeddah Municipality and Ministry of Municipal and Rural Affairs. Familiarity with the city is advantageous for this research as it results in a reduction in time accessing the relevant services and facilities and ensures that the research is embedded in a good general knowledge of the urban contexts of the case study locations.

4.4 Overview and Integration of mixed methods
This study has two approaches to gain better understanding of value and place attachment by users of public open spaces in Jeddah, which investigates place as an integration of form, fabric and cultural practice, and adopts storytelling methods to elicit complexity of place attachment. These methods were then adapted to use case study sites to develop a typology that was appropriate for this city and the social, cultural and
religious backgrounds of the residents, which included observations, on-site interviews and practitioner interviews.

These methods supported the objectives of this study by identifying typologies of urban public spaces used commonly by residents, and recorded activities and use across demographic factors on different days and different times of the year at case study sites. The ways that people develop place attachment, share meaning and develop responses to specific places were investigated, and identified differences between Saudi and non-Saudi users. Professional practice relating to planning, design and management was also recorded and analysed, which focused on social requirements, and implications for landscape architecture professionals were formulated.

Various public open spaces in Jeddah city were visited during an initial explorative survey to gain sufficient personal knowledge and experience. This process was essential to form a detailed understanding and to clarify the direction of the research. During the survey, photographs were taken in order to establish the overall state of the environment, as well as the contemporary public spaces. The initial survey included observations, walks and short dialogues with the users in some of the chosen areas. "When you observe behaviour, you soon become aware of repetitive activities in identifiable places. Place-specific activities within such a pattern are more closely related to one another than to patterns of activities in other places. In different socio-cultural and physical settings the same behaviour can have different design implications" (Zeisel, 1981, p114).

A pilot study was conducted during the initial stage that lasted from 2nd December 2010 to 5th January 2011 and from 5th March to 24th April 2011. The purpose of the pilot study was to establish the availability of data, the feasibility of selected public spaces, further exploration of the research question, as well as to determine the most appropriate method for the completion of the study. A variety of data sources was required for the pilot study, including base maps, aerial images of the city dating from different periods, and maps of Jeddah produced in a variety of scales. In addition, the pilot study took account of Jeddah’s population and demographic characteristics.

In order to achieve the objectives of this study, there are two phases within the fieldwork. Both of these phases require different strategies and activities necessary to take account of their respective similarities and differences. In order to maintain a record of the process of the research, as well as recording the time available, two phases
were devised. This process would enable public spaces to be analysed according to the seasons. In addition, different methods used for gathering data were arranged; for example, observation may not be possible during one particular time period, yet might be possible at a later stage.

Table 4 - 1: Pilot study, fieldwork and data analysis

During the fieldwork a minimum of 85 interviews were conducted for the two main types of the typology, which will be explored later in this chapter and in Chapter five (see Chapter 5, section 4.4). The researcher used the on-site interviews to gain more knowledge from the user’s pattern of using open spaces. In addition, the observation helped to record user’s behaviour, which also indicted spatial and temporal aspects. These approaches will contribute to the gap in knowledge when place attachment is studied in the Middle East and North Africa regions that differ from the findings of Western literature that reflect different cultures and societies.

Table (4-2) indicates the aims and objectives that are addressed by the use of each data collection method. The following sections will introduce and give more details about each method that was used for data collection.

<table>
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<tr>
<th>Aim</th>
<th>Objective</th>
<th>Method</th>
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<tr>
<td>1) To investigate how and why residents use designed and incidental public spaces in the Saudi Arabian urban context.</td>
<td>a) Identify typologies of the urban public spaces that are commonly used by residents. b) Record activities and use across demographic factors on different days, and at different times of the year in selected case study locations.</td>
<td>- Identify typology - Observation - On-site Interview - Photographs</td>
</tr>
<tr>
<td>2) To address dimensions of</td>
<td>c) Investigate the ways that</td>
<td>- Observation</td>
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</table>
place attachment in shaping the values and meanings of public open space across diverse axes of identity. people develop place attachment, share meaning and develop responses to specific places and, in particular, the differences in usage between Saudi Arabian and migrant users.

3) To identify some of the implications for improved planning and design of public open spaces to meet the requirements of local and migrants users within the Saudi Arabian urban context. d) Record and critique current professional practice regarding the planning, design and management of open spaces in Saudi Arabia, with specific focus on social requirements. e) Formulate implications for the landscape architecture profession, working on the planning, design and management of open spaces in Saudi Arabia.

Table 4 - 2: How aims and objectives are addressed by method

The following sections describe each method adopted for this study, which is followed by a discussion of the process of how the data collected was integrated into the research findings.

4.5 Identifying typology

<table>
<thead>
<tr>
<th>Selection</th>
<th>Broad scoping studies of Jeddah open spaces.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>Desk based data analysis and Car survey – on site survey.</td>
</tr>
<tr>
<td>Data collected</td>
<td>Photos – Maps and Satellite images review.</td>
</tr>
<tr>
<td>Time Scale</td>
<td>Between January 2011 and July 2011.</td>
</tr>
<tr>
<td>Objectives met</td>
<td>A and B.</td>
</tr>
</tbody>
</table>

Table 4 - 3: Summary of the methods for identifying typology
It was important to develop an open spaces’ typology initially in order to investigate users’ attachment and patterns of using open spaces in Jeddah. This could provide better understanding of the social uses of open spaces in the urban context that could be relevant for other cities and countries in this region. It was also important to identify this typology in order to understand the range of different types of open spaces used by both Saudi and non-Saudi Jeddah residents. The survey of the typology of open spaces in Jeddah was carried out by car survey, exploring on foot and desk-based by identifying different locations and routes across Jeddah. "When you observe behaviour, you soon become aware of repetitive activities in identifiable places. Place-specific activities within such a pattern are more closely related to one another than to patterns of activities in other places. In different socio-cultural and physical settings the same behaviour can have different design implications" (Zeisel, 1981, p114). Observation as a technique is appropriate for comparing and contrasting the state of various urban settings (Zeisel, 1981).

The focus upon typology was adopted to explore the sites in Jeddah that people use for a variety of purposes, such as sport and family gatherings, together with a variety of other reasons that are investigated in later stages of this research. The classification of sites into different categories focuses upon the qualities, characteristics and activities, and recognises a similar typology of use even though the open spaces are not the same. The researcher conducted this survey to identify the most common open spaces that are used in the city and the possibility to identify these places within open spaces typology. The typology of public open spaces guides the researcher during the investigation of Jeddah place as an integration of form, fabric and cultural practice. The survey of these open spaces included seaside places, parks, walkways, small gathering zones associated with shops and mosques, together with a variety of other types of open places, which helped to develop a typology for this study that identified cultural practices that differ from other countries. The survey to record the available open spaces in Jeddah was conducted from January to July 2011. The areas being surveyed included waterfront developments, public gardens, road edge spaces, shop entrances that form small civic squares and mosques. The geographical location of the surveyed area included northern, southern and central areas of Jeddah.

The development of a typology has intrinsic worth as one of the achievements of the research project. However, it was also instrumental to the further process of the research
and was used as a tool for selecting the case study locations of specific places that represented the broad range of public open spaces in Jeddah. The case study method is described in the following section.

**4.6 Case study**

The case study is defined by Stake as “the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances” (Stake 1995, p.11). The case study used in landscape architecture is “a well-documented and systematic examination of the process, decision making and outcomes of a project, which is undertaken for the purpose of informing future practice, policy, theory, and/or education” (Francis, 2001, p.19). According to Stake (1995) and other researchers, the instrumental case study is research into a particular case to gain an understanding of other factors that can help the researcher to understand and gain additional insight into research questions.

The case study method is adopted in this research in order to be specific about cultural practices in public open space, and in order to locate in form and fabric the investigation and study of place attachment in Jeddah. The use of such case studies will assist in obtaining a firm understanding of how the use of physical spaces is related to people’s sense of place attachment and the pattern of using open spaces (Stake, 1995).

This research methodology is primarily case study based, supported by fieldwork and data collection, which involves semi-structured interviews with key users in the selected case studies that is discussed in the following section and in Chapter five (see Chapter five, Section 5.5 and 5.6 for more details). The use of such case studies will assist in obtaining a firm understanding of how the use of physical spaces is related to people’s sense of place attachment and the pattern of using open spaces (Stake, 1995).

It is important that the amount of case studies required to conduct a piece of research is justified. De Vaus (2001) commented that, it is possible for a researcher to include either a single case study or many cases within a piece of research. A single case study may count for one replication and therefore it may not be possible for a theory to be fully tested, according to replication logic. In contrast, Yin (1994) comments that one suitable case study that is well selected and relevant may provide a thorough test of a specific theory. Should multiple cases be used, the research would be more worthwhile.
when compared to a research conducted with only one case study (De Vaus, 2001). Multiple case studies are therefore be used in this research to ensure its overall strength (De Vaus, 2001). These multiple case studies help to gain the knowledge to understand how people use open spaces, because the distribution of each site is different geographically, which leads to differences within the users’ demographics. There is an in-depth analysis for each of the cases examined in order to compare and contrast their respective contents. The approach taken for this case study is Jeddah as a single case study, as well as multiple case studies within this city; therefore, this study highlights the issues of Jeddah as a city by investigating different case study sites within the urban context of Jeddah and outside the city boundary. This study selected nine case study sites from the public open spaces typology identified for this study, and the criteria used for selecting these included planned and unplanned sites that demonstrated regular use, sites that showed patterns of use, such as meetings of family groups for sharing food, sites that attracted Saudi and non-Saudi users, and sites that demonstrated use by local people that could be specifically related to the cultural, social and religious factors that are common in countries, such as Saudi Arabia, but not Western countries.

This section indicated the important for applying case study approach within his study. However, there was a need to explore users activities, behaviour and interaction in the selected public open spaces. Because of that it was important to imply observational method to record the activities, behaviour and interaction that will help to frame the findings for this research. The case studies integrated data collection from observations and from on-site interviews. The following section will introduce the method used.

### 4.7 Observation

<table>
<thead>
<tr>
<th>Selection Criteria</th>
<th>Examples of different typology as identified in method 1.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activities</strong></td>
<td>Observation – Taking notes</td>
</tr>
<tr>
<td><strong>Data collected</strong></td>
<td>Notes – Drawings</td>
</tr>
<tr>
<td><strong>Time Scale</strong></td>
<td>From January – May 2012</td>
</tr>
<tr>
<td><strong>Objectives met</strong></td>
<td>B and D</td>
</tr>
</tbody>
</table>

Table 4-4: Summary of the methods for open spaces observation
Studies of urban environments often use observation as a form of research. Observation as a technique is appropriate for comparing and contrasting the state of various urban settings (Zeisel, 1981). The research by Cullen (1961) relates to the visual observation of objects and spaces to assist in understanding the urban environment, as well as gaining a personal experience of the location. Whyte (1980) used a similar strategy, whereby observations to analyse urban settings, together with the activities of users were included as part of the research. The observations of these researchers establish the social life of spaces. Researchers’ observations provide deeper understanding when considering the provision of public space, and this research draws upon an example of a study of public spaces by Banerjee and Loukaitou-Sideris (1992) by observing users without invading their privacy or patterns of use.

"When you observe behaviour, you soon become aware of repetitive activities in identifiable places. Place-specific activities within such a pattern are more closely related to one another than to patterns of activities in other places. In different socio-cultural and physical settings the same behaviour can have different design implications" (Zeisel, 1981, p114). Observation could show how people behave and use their environment, so that behaviour patterns provide clues to explain these. In addition, observation helps to determine the number of people, activities, management, spatial and temporal distributions and length of stay in a particular location.

Patterns of behaviour observed pose questions for the researcher, such as why a particular pattern of behaviour took place at a specific location, such as using a particular place or seating spot.

According to Zeisel (1981), the key elements in the observation of environmental behaviour are listed as follows:

*Figure 4 - 2: Key elements in the observation adopted from (Zeisel, 1981)*
A number of factors, including users’ demographic factors, the movements and circulation of users, the selection of seating areas, design of site and layout, how space is used and whether or not the design of the site assists and is beneficial to site users were observed within existing outdoor recreational patterns. Time, weather, environment, people type and gender, locations, activities and movements were also recorded by the researcher. During the data-gathering period for this research observations were made at different periods of time, and during numerous visits in the following time period:

![Figure 4 - 3: Observation periods](image)

The researcher also took photographs at the case study locations. This was a valuable way of documenting how the social activities related to the physical form of the locations, and capturing some of the detail and atmosphere of these sites. However, there were practical and ethical challenges.

Taking photos of people in a place of leisure can be an invasion of privacy (Alderson, 2004). Conventions of taking photographs in public places are culturally specific, so that it could be acceptable in one country, but not in another country. The researcher did his best to avoid intruding in situations that were truly private, such as a couple arguing, someone playing with their family, and especially women. People and conservative families in particular, often clearly objected to photographs being taken and being watched and, on occasions, the researcher was threatened. Therefore, the researcher responded to the sensitivities of people using public open spaces by restricting the number of photographs taken to those taken from a distance to avoid recognition.

Observations also recorded the usage of public spaces, and were conducted during different time periods to raise awareness of differences that may occur during a specific
occasion, such as a celebration. The researcher visited each of the case study sites to carry out observations at four different times during the day, so that observations were carried out during the early morning (08.00 – 10:00) when people were travelling to work, during midday breaks (13.00-15.00) when students were travelling from schools to home, during the late afternoon (17.00-21.00) when some people were returning from work and some were starting their afternoon activities, such as shopping and visiting friends, and during the late evenings and night (22.00-02.00). These observations attempted to gain an understanding of activities, and how they are located spatially. Brief written notes about usage, activities, behaviour and interaction with the site, the surroundings, as well as with other users were recorded in order to understand the social life that was taking place in these spaces. Individuals’ interaction methods were also recorded, together with the spatial and environmental actions of non-interview participating individuals.

Brief written notes were used to record the typology of activities from the researcher’s observations that were used to document them systematically during the observations, and the key elements developed by Zeisel. A map of each site was used to indicate different points such as the activity zone within the site, gathering spots, users’ behaviour and interaction with the site. These notes of typology of activities and maps were used during the analysis of the collected data and coding. It is important to note that this method of research also has limitations, as the researcher may misunderstand the behaviour of users of public open spaces, or may have unintended bias in giving appropriate priority to activities recorded.

The identified typology, the case study selection and the observation method show that these methods should help to understand and investigate the public open spaces in Jeddah; however, there is still a gap and lack of awareness about why people use these spaces and what are their motivations. There is a need to address and investigate the dimensions of place attachment within the selected public open spaces. On-site interviews with site users help the researcher to enhance this understanding, and storytelling methods are used to elicit the complexity of place attachment.

4.8 Interviews

There were two forms of interviews conducted as part of the research process. The majority of interview were conducted within the framework for the case studies, and
took place on site. The second type of interview was pre-arranged with practitioners, and took place in office environments as convenient to the interviewee.

Both types of interviews were semi-structured, so that respondents were given flexibility in providing their answers, and that the researcher could ask supplementary questions to enrich the findings. Banister commented that, “Your aim in using a semi-structured interview may be to explore precisely those areas where your interviewee perceives gaps, contradictions and difficulties. Hence another advantage of using a less structured approach is that you can tailor your questions to the position and comments of your interviewee, and you are not bound by the codes of standardisation and reliability to soldier on through your interview schedule irrespective of how appropriate it is for your interviewee” (Banister et al., 1994, p51).

Additional questions that asked for elaboration or clarification were asked when participants replied with a “Yes” or “No” response. This process of questioning is reflected by the grounded hypothesis approach whereby every interview question feeds into the next one (Kvale & Brinkmann, 2009; Willig, 2001). The skills of interviewing participants are learned as the interviews proceed, which relates to both the researcher and respondents (Kvale and Brinkmann, 2009).

<table>
<thead>
<tr>
<th>Selection Criteria</th>
<th>Examples of different typology selected in method 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>Semi-Structured interviews – Taking notes</td>
</tr>
<tr>
<td>Data collected</td>
<td>Photos – notes – voice recording – transcripts</td>
</tr>
<tr>
<td>Time Scale</td>
<td>From January – May 2012</td>
</tr>
<tr>
<td>Objectives met</td>
<td>B,C and D</td>
</tr>
</tbody>
</table>

Table 4 - 5: Summary of the methods for open spaces user’s interviews

<table>
<thead>
<tr>
<th>Selection Criteria</th>
<th>People who have professional interest and expertise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>Semi-Structured interviews</td>
</tr>
<tr>
<td>Data collected</td>
<td>Transcript</td>
</tr>
</tbody>
</table>
Table 4 - 6: Summary of the methods for practitioner’s interviews

<table>
<thead>
<tr>
<th>Time Scale</th>
<th>From January – May 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objectives met</td>
<td>B, C and E</td>
</tr>
</tbody>
</table>

4.8.1 On-Site Interviews

The instrument selected as the main data collection method for this study is the storytelling interview, as it highlights diversity in participants’ experiences of open spaces. The descriptive approach is used to provide a better understanding of this research, which investigates participants’ feelings and emotions about case study sites in Jeddah. This focus upon the perspective of participants is particularly important in exploratory research, since there may be essential characteristics that had not been recognised previously, as “the ‘experience-in-place’ that creates meaning” (Manzo, 2005, p. 74).

In order to obtain personal input from a variety of individuals both open-ended and closed questions were used (Gillham, 2000). The questions were translated into Arabic before the interviews. Informal conversations were initiated with people using the case study public spaces, which formed the basis of the semi-structured interviews (Rubin and Rubin, 1995); however, this exposes limitations of these findings, as non-users of these open spaces were not interviewed. Wengraf (2001) explains that collecting individual stories through interviews provides rich textual information based on the dynamics of the situation, and Mason (2002) reports that it is important for researchers to interpret the stories that they hear. Bazeley (2007) explains that interviewers need to recognise that respondents are likely to have different perspectives when answering questions about the same issue.

The interviews carried out for this study were on-site interviews, and were not pre-arranged with respondents. Interviewing on site helps the research to understand the user’s behaviour and to understand their interaction with the site elements or surrounding more than conducting the interview in a different situation, often indoors, when the interviewee needs to rely on their memory of the place. Being on site with the participants during the interviews can give the researcher more in depth details to notice.
physical experiences that the users are expressing and this can improve the data (Rishbeth, 2013).

The study of place attachment in open spaces requires the researcher to obtain details and different positive or negative stories from the users who have ties with the site. However, some of these stories could be considered private to the person, which makes these difficult to obtain. However, it is important to obtain these stories and details, to strengthen the research findings for place attachment, so researchers refer to different methods with a consideration of the research ethics. In addition, while collecting the data for this research, extra care was given to the customs and traditions of Saudi Arabia, because seeing strangers talking with people in open spaces is not usual in the country. Being on site with the participants during the interviews can give the researcher more in depth details to notice physical experiences that the users are expressing and this can improve the data (Rishbeth, 2013).

The interviews that were conducted in public places were generally the most difficult, because of noise, as well as visual distractions, which made it difficult to maintain the interviewee’s concentration. However, it was useful for participants to be at the place that they are talking about, and especially for those who had close links with the site. Their reactions, together with the manner in which they pointed to elements of the site whilst telling their story added a useful element of emotion to the interviews.

The interviewer's role in gaining information from people who are less responsive or articulate is also important. Although most of the interviews undertaken for this research proceeded well, some respondents were more articulate than others and there were few incidences when it was difficult to gain additional information without asking leading questions (see Chapter 7, section 7.4.2). Some participants were very talkative about subjects that were not necessarily relevant to the research questions and needed to be redirected, whilst at the same time allowing them the opportunity to talk about subjects that were of particular interest to them.

The common language in Jeddah is Arabic; therefore, interview questions were translated into Arabic for most participants, except one participant who was American, who was asked interview questions in English. Participants who were migrants were
interviewed in English, and the researcher recorded these responses in the language used for each interview.

There were a number of ethical and practice challenges to conducting on-site interviews in a Saudi context. Prior to conducting the interview, the researcher was aware of the importance of both his manner and appearance, and its influence upon how people perceived others and its impact upon their responses. In terms of dress, for instance, the traditional Saudi Thobes was mostly used, and the researcher attempted to look as respectable as possible.

In Saudi Arabia, part of the culture is to forbid males and females who are not related from interacting together in public and private. Therefore a female member of the researcher’s family accompanied the researcher when conducting the interviews at the selected open space sites. Eighty-five interviews were undertaken in total, and the female assistant was involved in 25 interviews with the presence of the researcher. Before conducting the interviews, the female assistant was given instructions and guidelines on how to conduct the interview and how she could encourage the interviewee talk more about the important points. She also attended a few interviews with the researcher when he was the interviewer, so that she could have a clear image of how to conduct interviews. In some cases, the researcher interrupted the interview when conducted by the assistant to clarify or add another question. These interventions were carried out by passing a card to the assistant with new questions. This raised challenges for the researcher that would not have arisen in Western research studies, but is an accepted part of society in Saudi Arabia. Participant sampling and representation in the on-site interviews is discussed in section 4.10.

4.8.2 Practitioners Interviews

Interviews with local practitioners that are involved in designing, planning and maintaining public open spaces in Jeddah are an important method of research. These interviews with local representatives of the Municipality of Jeddah, and the Landscape Department in King Abdulaziz University reveals current opinions and views of landscape architecture practice in the city, which should have significant potential to influence policy changes in the future. The four practitioners’ interviews were conducted with two municipality officers who are responsible for open space design and management, a director of landscape design and contractor firm and with an academic member in the Landscape Department in King Abdulaziz University. These interviews
were conducted after the review of the observations and interview findings between February and March in 2013. Each interview lasted between 25 to 35 minutes.

4.8.3 Informed Interview Consent

Wiles et al. (2006) recommend that the researcher obtains signed informed consent, which shows that participants are willing to participate. The informed interview consent aims to protect both the participants and the research. If researchers gain the participants’ trust, this will help them to gather the data without any conflict. One key issue to be acknowledged when approaching participants is informed consent, which meets the requirements of ethics when conducting research, and provides information about how the findings from the data will be used.

At the beginning of the interview process, participants were informed that interviews were voluntary, as well as not being required to answer any questions that they felt uncomfortable in responding to. Participants were also assured that the interview was confidential especially for those who were officers at Jeddah Municipality and who were playing a critical role in planning and designing open spaces in Jeddah. The participants were also informed that the researcher was the only individual who would have access to the recordings of the interviews. Participants were also told that they would be given a pseudonym if any information about them would arise from the research. However in the findings chapters, if a quote from the interviews with participants were included it would be presented according to this form [gender\nationality\age]; for example, if a quote is mentioned in the text of this research from an interview with a 32-year-old female from Lebanon, it would be presented as [F\L\32].

4.8.3 Recordings of Interviews

Voice recordings were made of the interviews, as this was considered a practical method that avoided the distractions of the researcher writing notes during the interviews. All respondents were asked if they would agree to these voice recordings, and all were happy with the method of recording. Pile makes the point that that “the analysis of language can only be carried out with confidence if there is an entire record of a conversation. Hastily scribble notes...are not accurate enough to be used in this way. Tape-recorded sessions provide the only viable data for this kind of analysis” (Pile, 1990, P217).
A digital voice recorder was used to record the interviews, which produced high quality recordings that could be transferred to a computer and listened to later in greater detail and at a convenient time. The researcher was responsible for editing and interpreting the responses without misrepresenting the views of the participants. Voice recordings were used for two reasons; firstly, in order to maintain a continuous conversation, as writing notes would have disrupted the flow of the interview. Secondly, the voice recording process provides an accurate representation of what was said. In the absence of voice recordings, only the basis of a conversation could be recorded and potentially be misinterpreted.

4.8.4 Transcribing
According to Kvale & Brinkmann (2009) and Denscombe (1998) transcription is part of the analysis process, since it involves decision making of the detail and context to be included or excluded. The researcher personally transcribed interviews in order to achieve greater familiarity with the data, instead of using the services of an outsider who would not have a detailed awareness of the interview process. Field notes were written following each interview, in addition to those made during direct observations.

It is also important for the researcher to transcribe the interviews personally, since all the interviewees were with Arabic speakers and all the interviews were conducted in Arabic, with the exception of one interview with an American young man, which was conducted in English.

4.9 Photographs
Photographs are integral to many qualitative and ethnographic studies, and are a visual source of data open to being analysed alongside written data (Ball and Smith, 1992). Researchers may use images to support their research in a range of ways (Zeisel, 1981). This research used photographs of individuals or objects as a source of evidence. In addition, a review of different satellites images has been conducted to identify the selected sites layout and design due to the lack of design maps.

4.10 Sampling size
The size of the sample required depends upon the aim of both the research and the questions being asked in order to achieve saturation point (Onwuegbuzie & Leech, 2007). In order to understand what has been covered, the breadth of the subject area and
experience is required, as well as a consideration of the size of the sample for in-depth analysis. This is of particular importance in a study conducted by single researchers, when time is limited.

According to Curtis et al. (2000), sampling receives less priority and theoretical consideration than other areas of qualitative research. It is not that sampling is not given due consideration, but that there are no fixed rules and protocols, as they are with methods of quantitative sampling. Sampling will always be more contextual within qualitative research, whilst reflecting research specificity.

Literature suggests that the sampling size may be variable and based upon the type of research and the aim of the interviews being conducted, with a range of opinion offered from researchers on what might be considered appropriate in a qualitative research context. Kuzel (1992) suggests that between 6-8 data sources should be used when the subjects are homogeneous, and also suggests a general requirement of between 12-20 sources. Between 30-50 interviews and/or observation is suggested as being required by Morse (1994). According to Kvale and Brinkman (2009), between 10-15 participants is the common range in interview studies. They also state that the number of interviews will be reflected by a combination of time and resources, as well as the law of diminishing returns, meaning that after a certain point the addition of a greater number of respondents will provide less information that is new. Based on these findings, the researcher selected nine different sites across Jeddah and conducted interviews with a sample population of 85 respondents.

Interviews were conducted with a target of eight interviews at each case study site, which allowed for diversity across the sites of nationality, gender and age, while keeping the research project as manageable within the timeframe. The researcher carried out an on-going review of participant characteristics, to ensure good representation across the sample as a whole. The researcher decided to cease interviews at a point when experience suggested repetition and duplication of information obtained from participants. The total number of sampling was 85 interviews, which were conducted at 9 different sites across Jeddah.
<table>
<thead>
<tr>
<th>Open space type (Typology)</th>
<th>Study sites</th>
<th>Interviews number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waterfront</td>
<td>1- North Corniche</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>2- South Corniche</td>
<td>8</td>
</tr>
<tr>
<td>Desert</td>
<td>1- North desert spots</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>2- South desert spots</td>
<td>8</td>
</tr>
<tr>
<td>Total interviews</td>
<td></td>
<td>24</td>
</tr>
</tbody>
</table>

Table 4 - 7: Extensive landscape sites sampling size details

<table>
<thead>
<tr>
<th>Open space type (Typology)</th>
<th>Study sites</th>
<th>Interviews number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parks &amp; Gardens</td>
<td>1- Al-Jafali Garden</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>2- Hilton Walkway</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>3- Al-Rawdah Garden</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>4- Al-Masrat Complex Garden</td>
<td>4</td>
</tr>
<tr>
<td>Civic Places</td>
<td>Al-Mahmal Square</td>
<td>8</td>
</tr>
<tr>
<td>Incidental Land</td>
<td>1- Pedestrian walkways</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>2- Tunnel edges\road edges</td>
<td>8</td>
</tr>
<tr>
<td>Total interviews</td>
<td></td>
<td>61</td>
</tr>
</tbody>
</table>

Table 4 - 8: Intensive landscape sites sampling size details

The selection of participants was designed to be heterogeneous, with particular care given to the sampling of both male and female Saudi and non-Saudi participants. The selection of the participants was based on the researcher’s knowledge and experience in identifying the nationalities of users, according to their dress and appearance, though this was also confirmed verbally when participants were approached. The table below reveals a balance between the Saudi and non-Saudi participants, whilst reflecting the aim of this research by including a variety of participants from different nationalities.
Figure 4 - 4: Participants nationalities

Figure 4 - 5: Participants gender

Figure 4 - 6: Participants age
4.11 Data analysis

The language spoken in Jeddah is Arabic, and interviews were mostly carried out in Arabic with the exception of one interview carried out in English. The data collected from the interviews was recorded in Arabic on a voice recorder, which had to be transcribed and translated by the researcher. This exposed challenges for the researcher when working in two languages, and particularly when analysing the data collected to ensure the responses of the participants were identified correctly.

“When learning a craft such as that of interviewing, it is particularly important to constantly review what you did and the way you did it so as to see how you might have done it differently and better” (Wengraf, 2001, p28). Following each interview, memos were created about how the interview went, together with possibilities for improvement of questioning or other concerns, such as presentation of self. The interviews were then transcribed and notes made about emerging general impressions, topics, themes and preoccupations. Appropriate questions, phrasing of questions, order of questions and new issues to be explored with subsequent interviewees were considered, which were a valuable part of the interview process. A constant review of how the interviews went, and the role as an interviewer, was important the researcher’s own development and the gradual clarifying of research themes.
All transcripts for each interview were read before the commencement of the coding process, which helped to gain a clear understanding of the some of the common issues and themes that were raised, which help initiate a basic coding structure. Nvivo software was used for the coding, which assisted in drawing out patterns of responses and further critique of these.

From each interview the researcher attempted to identify themes and concepts coming from the users of these open spaces. The researcher remained alert to the difference between looking at 'stories as presented' and 'realities as were' because “the reader of an interview text should always be alert for suggestions of difference between the two” (Wengraf, 2001, p28). Therefore an important choice concerning data analysis is coding at different levels of what counts as data (Mason, 2002). Codes were literal in many cases, concerning activities and locations mentioned, social contexts, and used by participants to describe the open spaces. Codes were also developed on a more iterative basis, where the researchers aim to interpretive underlying values, motivations and themes, as well as an awareness of interaction between researcher and participant.

After undertaking initial coding throughout all transcripts, the researcher identified seven themes based on the interviews, which relate to patterns of using open spaces and dimension of place attachment (table 4.9 & 4.10). Data analysis helped to develop and cross-reference the emerging themes.

People have different perspectives of the same information, or when asked questions could create differently labelled and organised trees of nodes (Bazeley, 2007), but in this current research study, it is important to recognise the role of the researcher in shaping the analysis structure. Different findings from the transcripts could have emerged if another person had carried out the transcriptions, translations and analysis of the data collected.

The coding process commenced with Free Nodes, meaning that the nodes were unrelated. When it became apparent what their relationship was, these were then reorganised into Tree Nodes although some remained as Free Nodes. Tree Nodes are hierarchically organised to indicate the relationship between nodes, such as wellbeing and escape or stress.
According to Bazely (2007), as the analysis progresses the system of coding stabilises, yet remains open and flexible. The relationship between nodes can and was changed during the analysis. During the coding process, ideas about what is relevant or important can change, and it is easy to focus upon a thread of thinking, only to realise later that it is not important or relevant to the current project. This may be another advantage of using a variety of nodes, because the ones that are less important will have far less data in them. The use of broad categories to begin with would mean it would be more complex to separate the relevant or non-relevant areas.

The codes for the Place Attachment Findings chapter have been divided into four parts, which were shaped by the research aims, as well as shaped by the data collected. The data codes used were: Memory, Health, Escape and Social Life. With regard to the Open Space Use Findings chapter, three main subjects have been identified from the coding, which are: Activities and Facilities, Values and Problems.

<table>
<thead>
<tr>
<th>Themes</th>
<th>Themes related to Memory</th>
<th>Themes related to Health</th>
<th>Themes related to Escape</th>
<th>Themes related to Social life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concept and codes generated from the interviews</td>
<td>Love Jeddah</td>
<td>Love sitting facing the sun</td>
<td>An empty place</td>
<td>Interacting with others</td>
</tr>
<tr>
<td></td>
<td>Like Syria</td>
<td>Love weather</td>
<td>Psychological comfort and relaxing</td>
<td>Communicating with others</td>
</tr>
<tr>
<td></td>
<td>Memory of someone</td>
<td>Love sun</td>
<td>Hate crowded places</td>
<td>Social acceptance</td>
</tr>
<tr>
<td></td>
<td>Memory of other places</td>
<td>Love grass</td>
<td>Run outside the city</td>
<td>Social rejection</td>
</tr>
<tr>
<td></td>
<td>Memory of event with the site</td>
<td>Walking for health</td>
<td>Open sites provide more freedom</td>
<td>Every day visit</td>
</tr>
<tr>
<td></td>
<td>Positive bond</td>
<td>Everybody walking</td>
<td></td>
<td>Making friends</td>
</tr>
<tr>
<td></td>
<td>Negative bond</td>
<td>Walk anytime</td>
<td></td>
<td>Playing with children</td>
</tr>
<tr>
<td></td>
<td>Representing home country</td>
<td>Nature helps to relax</td>
<td></td>
<td>Privacy</td>
</tr>
</tbody>
</table>

| Proposed themes for the findings | Reviving memories in open spaces | A personal perception of health and wellbeing | Escape to nature and being away from everyday life | Social life within open spaces |

Table 4 - 9: Place Attachment Nvivo codes generated from the interviews analysis (by the researcher)
Table 4 - 10: Open spaces pattern of use and frustrations Nvivo codes generated from the interviews analysis (by the researcher)

<table>
<thead>
<tr>
<th>Concept and codes generated from the interviews</th>
<th>Activities &amp; Facilities</th>
<th>Value</th>
<th>Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bring furniture</td>
<td>Exciting</td>
<td>Dirtiness and cleanliness</td>
<td></td>
</tr>
<tr>
<td>Buy food</td>
<td>Fear</td>
<td>Facilities</td>
<td></td>
</tr>
<tr>
<td>Eating</td>
<td>Happy</td>
<td>Lack of parking</td>
<td></td>
</tr>
<tr>
<td>Playground</td>
<td>Interacting and communication</td>
<td>Lack of seats</td>
<td></td>
</tr>
<tr>
<td>Shopping</td>
<td>Psychological comfort and relaxing</td>
<td>Lack of WC</td>
<td></td>
</tr>
<tr>
<td>Sport - exercise</td>
<td>Psychological comfort and relaxing</td>
<td>Lack of playground</td>
<td></td>
</tr>
<tr>
<td>Swimming</td>
<td>Psychological comfort and relaxing</td>
<td>Location</td>
<td></td>
</tr>
<tr>
<td>Waiting</td>
<td>Psychological comfort and relaxing</td>
<td>Maintenance</td>
<td></td>
</tr>
<tr>
<td>Mosques</td>
<td>Safety (physical and social) comfort and relaxing</td>
<td>Social context</td>
<td></td>
</tr>
<tr>
<td>Playgrounds</td>
<td>Safety (physical and social) comfort and relaxing</td>
<td>Safety</td>
<td></td>
</tr>
<tr>
<td>WC</td>
<td>Social acceptability</td>
<td>Security</td>
<td></td>
</tr>
<tr>
<td>Kiosks</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proposed themes for the findings</th>
<th>Patterns of using open spaces</th>
<th>Value and quality of places</th>
<th>Barriers and frustrations</th>
</tr>
</thead>
</table>

4.12 Reflection on methodology and cultural context

The methods used in this study are adapted from different cultures and drawn from reviews of research mostly from Western and European contexts. The Saudi Arabian context is different to these cultures, and during the fieldwork and based on responses from some of the interviews, the researcher learned that this had been the first time that many participants had seen a researcher collecting information in public spaces. Respondents were generally happy to contribute their opinions to this study, and some expressed hope that these would help to make changes. However, this highlights that it is unusual to interview people in open spaces and to conduct observation methods in public open spaces in Jeddah and in other places in Saudi Arabia.

The researcher attempted to choose suitable methods to meet the aims of this study even though these are considered novel in Saudi society. The problems the researcher experienced from applying these methods are similar in some respects to the problems Western researchers face, especially when conducting observation methods that may be perceived as intrusive. Approaching Saudi families for interviews was one of the major problem experienced, especially with conservative families, and the researcher used a female assistant to conduct interviews with conservative families, as well as to conduct interviews with female respondents.
4.13 Summary
This chapter explains the methodological approaches and methods adopted for this research were explicitly linked to the aims of the research, and informed by themes developed within the literature review. The methodological approaches contributed to shaping methods relevant to identifying patterns of use and attachment to open spaces within the context of Saudi Arabia. Qualitative methodology and an inductive approach are adopted for this study, as these enable complex textual descriptions of people’s experience and interaction with open spaces to be investigated. Intangible factors are relevant for this study, such as social norms, gender roles, socio economic status, and practices related to religion and ethnicity, and the inductive approach that guide these specific objectives. The identification of a developed typology underpinned the case study selection and fieldwork to collect data from observations and semi-structured interviews.

The following chapter is the first of the thesis chapters that reports the findings of the research. It introduces and discusses an open space typology for the context of Jeddah, which has potential to be widely adapted for broader Arabic country contexts.
CHAPTER FIVE

JEDDAH OPEN SPACES TYPOLOGY
CHAPTER FIVE
JEDDAH OPEN SPACES TYPOLOGY

5.1 Introduction
One of the objectives of this research is to identify a typology of public open spaces that is commonly used by the residents of Jeddah. This chapter discusses why there is a need for open space typology for this research, and discusses and evaluates the identified typology in different open space typology research. To achieve this objective it is very important to discover all types of space that people use and consider whether these could be classified into groups with common characteristics, and how residents use selected case study sites that might be designed or incidental spaces whether these spaces are within the urban context or outside the boundary of the city. Therefore, typology of open space could include public parks, squares, plazas, memorials, markets, streets, playgrounds, community open spaces, greenways and linear parkways, urban wilderness, atrium, marketplaces, neighbourhood spaces and waterfronts (Carr et al., 1992). This typology also serves to inform the selection of the case study sites, and to identify a typology for open spaces in Jeddah, and to discover whether these are relevant to the Saudi Arabia context.

The second part of this chapter evaluates each of the selected study sites that are identified as typical of each typology. A basic framework for each case study has been developed in two parts, which are general information and site history and background (Francis, 1999). This section intends to present the key elements: project name, location, size, landscape, architects, client, costs, construction phase and the master plan, and an outline of the history and background of the site, as well as any previous issues for the selected sites.

5.2 The need for typology
In order to gain a grounded understanding of the types of places that Jeddah residents use regularly for different purposes, it is important to survey public open spaces in the city. Developing a typology of open spaces in Jeddah should make a useful contribution to academic knowledge, as well as supporting the work of the researcher in undertaking this study, and to support the aims of this research to explain place attachment and motives for using public spaces.
Identifying the typology of open spaces from the case study locations should produce baseline data of types of public space that are clear and understandable, and relevant for this geographic location, which has been insufficiently studied in the existing literature. The typology should also inform strategic planning and open space infrastructure, rather than simply making comparisons between different case study locations. This research into typology could also have implications beyond the scope of this study in that these typologies could have relevance in other similar countries and cultures, such as Arabic cultures and countries that have a similar ecology and climate.

The researcher has a background in landscape architecture, so that this study will apply an informed approach to identify typology in Jeddah, and to understand physical features that can be integrated with cultural and social dynamics within the findings. Typology should also help the researcher to apply a ‘broad brush’ approach to overcome the problems of evaluating open spaces in Jeddah, as the city is very large, and typology can be used in the analysis of the findings. Studies of typologies have been carried out for various research studies within a Western context (Carr, Francis and Rivlin, 1992; Dunnett, Swanwick and Woolley, 2002); however, this review of typologies suggests that it would be unsuitable to apply these to Jeddah for various reasons, which are explained later.

The methodology chapter explains that the typology of open spaces in Jeddah was carried out with a car survey, exploration on foot and desk-based to identify different routes to explore the sites that people use in Jeddah for different purposes, such as family gatherings, sport, waiting and many other reasons that will be explored later in this research (see Chapter 4, section 4.3.2). Transects of the city were investigated to identify the various types of open space that exist in Jeddah. These sites were classified by focusing on the categories of site qualities, characteristics and activities. It is beyond the scope of this research to plot every public space in Jeddah, but will attempt to identify key typology of open spaces, which are commonly used in Jeddah. The car survey technique was chosen to investigate the typology of open spaces in Jeddah where unplanned places had been selected by users, such as roundabouts, pavements, and spaces by the sides of roads, as these demonstrate regular patterns of use for leisure and recreation activities, and was a practical solution for the researcher to access these places to make observations of users that were discrete and respected their privacy. In
addition, the car survey technique was used to collect observations at popular spots in desert locations to identify patterns of use. In contrast, the observations carried out by exploration on foot to investigate typology were focused on public open spaces where it was not possible for the researcher to observe patterns of use from a car, such as seafront spaces, parks and public walkways, and maintained respect for the privacy of users, as well as collecting valuable data. The routes selected to make observations by car survey and exploration by foot were based on the knowledge and experience of the researcher, who is an experienced landscape architect in Jeddah, and who has a good understanding of the cultural, social and religious practices, behaviours and patterns in this city.

5.3 Review of existing typology

The review of literature for open space typologies and criteria for the classification of open spaces within each category of typology types reveals that this approach would be unsuitable to be applied to Jeddah for different reasons. From observations and the car survey, the researcher found that public open spaces were often used based on peoples’ perceptions and attachment, rather than how some of these open spaces were originally designed and planned; for example, in Jeddah the researcher found that street sides could be open spaces to sit, walk, wait, gather and talk. It is important to understand the differences between each site and how to categorise these sites to the open space typology.

This study reveals examples of cultural differences in the use of open spaces in Jeddah, such as the use of roundabouts used by people for leisure and relaxation, instead of their intended use as part of the road infrastructure of the city. Users of roundabouts have transformed these places into a usable space, and there are other similar examples at different locations across the city, such as grass verges at the sides of roads or middle of roads, grassland or trees at the corner of the junction of two roads, street roundabouts and roundabout corners, tunnel slopes and motorway shoulders. These typologies are largely ignored in the literature of open space usage, and enhance the baseline data on types of public space.

In Jeddah, these open spaces are often used, and in some cases they are heavily used, which make typologies studied in previous research unsuitable to apply to Jeddah, as they do not exist. This is explained by the findings of Dunnett, Swanwick and Woolley
(2002) who define four main types of urban green space as amenity green spaces, functional green spaces, semi-natural habitats and linear green spaces, and table 1 shows how each of these types is aggregated to subtypes. However, the typologies presented by Dunnett et al. do adopt a methodology overview that could be applied to Jeddah by focusing on amenity spaces, functional spaces and natural spaces as broad typologies. Therefore, specific elements of typology developed for the landscape of the United Kingdom would be ignored as not relevant, but some specific elements could be adopted or adapted, such as transport corridors, natural desert locations, and informal recreation spaces.

<table>
<thead>
<tr>
<th>Main types of Green Space</th>
<th>Recreation Green Space</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parks and Gardens</td>
</tr>
<tr>
<td></td>
<td>Informal Recreation</td>
</tr>
<tr>
<td></td>
<td>Areas Outdoor Sports Areas</td>
</tr>
<tr>
<td>Amenity Green Space</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Incidental Green Space</td>
</tr>
<tr>
<td></td>
<td>Housing Green Space</td>
</tr>
<tr>
<td></td>
<td>Other Incidental Space</td>
</tr>
<tr>
<td>Private Green Space</td>
<td>Domestic Gardens</td>
</tr>
<tr>
<td>Functional Green Space</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Productive Green Space</td>
</tr>
<tr>
<td></td>
<td>Remnant</td>
</tr>
<tr>
<td></td>
<td>Farmland City</td>
</tr>
<tr>
<td></td>
<td>Farms</td>
</tr>
<tr>
<td></td>
<td>Burial Grounds</td>
</tr>
<tr>
<td></td>
<td>Cemeteries</td>
</tr>
<tr>
<td></td>
<td>Churchyards</td>
</tr>
<tr>
<td></td>
<td>Institutional Grounds</td>
</tr>
<tr>
<td></td>
<td>School Grounds (including school farms and growing areas)</td>
</tr>
<tr>
<td></td>
<td>Other Institutional Grounds</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wetland</td>
</tr>
<tr>
<td></td>
<td>Open/Running Water</td>
</tr>
<tr>
<td></td>
<td>Marsh, Fen</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Woodland</td>
</tr>
<tr>
<td></td>
<td>Deciduous woodland</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other Habitats</td>
</tr>
<tr>
<td></td>
<td>Moor/Heath</td>
</tr>
<tr>
<td></td>
<td>Grassland</td>
</tr>
<tr>
<td></td>
<td>Disturbed Ground</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Linear Green Space</td>
</tr>
<tr>
<td></td>
<td>River and Canal Banks</td>
</tr>
<tr>
<td></td>
<td>Transport Corridors (road, rail, cycleways and walking routes)</td>
</tr>
<tr>
<td></td>
<td>Other linear features (e.g. cliffs)</td>
</tr>
</tbody>
</table>

Table 5 - 1: Urban green spaces typology (Dunnett, Swanwick and Woolley, 2002)

This typology reflects the full range of different types of urban green space that occur and which together form the green fabric of the urban area in the United Kingdom.
They may be publicly or privately owned and managed, and may or may not be accessible for public recreation.

It is difficult to apply this typology precisely for categorisation in Jeddah for different reasons, as observations and the car survey in Jeddah revealed no sites that could be applied as functional green spaces and semi-natural habitats. However, institutional grounds do exist in terms of open spaces around schools and colleges. Burial grounds have very specific functions in Saudi Arabia and offer no recreational function for either gender. In addition, there are some spaces, such as around schools where male and female pupils are segregated due to cultural reasons. Linear spaces would be associated with streets, such as the street islands in the city, and amenity spaces could be covered with some historical sites in Jeddah, but with modifications to the Dunnett et al. subtypes, and this will be explored in the following section.

According to Eckbo (1969 cited in Woolley, 2003), identifying the function of a place is the basis of open space typology, which includes provision for relaxation and recreation, conservation of wildlife, natural agricultural resources, scenery, and the shaping and control of urbanisation. Other researchers have argued that typology could be based on the use of the space that could lead to accurate classification of public open spaces (Llewellyn, 1992). In 1981, Lynch started the classification of open spaces, which relied on users’ experience within the site. Woolley (2003) and Francis (2003) included green spaces, hardscape spaces and natural spaces within their typologies.

Most types of open spaces revealed from the review of literature cannot be applied precisely in the context of Jeddah, because the findings were based on Western cultures that would be unknown to city residents, or would not be normally applied in the context of Jeddah due to different cultural perceptions within the society of Saudi Arabia. Examples could include farmers’ markets and memorial sites; however, some events or people are represented in various sculptures that are located at roundabouts.

This comparison of existing typology and the identified open spaces in Jeddah reveals that it is not possible to apply these typologies in the context of Jeddah. Social, cultural and religious differences influence why it is not possible to apply previously developed typologies to the selected case study sites. However, the structure of these typologies helps to identify open space typology in Jeddah.
5.4 Jeddah public open spaces typology approach

This research only focuses on the outdoors public open spaces in Jeddah city, contrasting with other typologies cited here that also included private spaces, which are outside the scope of this research. All softscape and hardscape sites, such as squares and plazas, are included within this typology. The typology adopted for Jeddah public open spaces for this study has been broadly based on the methodology suggested by Dunnett et al. (2002), but has identified specific typologies that are not relevant for Jeddah and adopted or adapted specific typologies that could be applied from this study of a Western culture and different climate and ecology. Based on the observations, most of the observed activities were gathering, waiting, talking and walking as exercise in the surveyed sites that consisted of public spaces distributed across the city in different neighbourhoods, some spots in the south and north Corniche, pedestrian walkways, tunnel edges, road edges and desert sites. The researcher applied a clear methodology for collecting this observational data that was explained in detail earlier, but this data collection approach also exposed challenges for the researcher in recording the use of open spaces accurately and without bias, as well as attempting to provide typology of open space use in Jeddah within the time limitations for this study. In any typology there is a balance to be made between the types and the varieties of the open spaces. The categories for Jeddah’s open spaces typology appears broad, and in many countries might be further broken down into different types of places and parks, but in Jeddah because of current practice approaches to the design and management of open spaces, there is little variation of open space types.

![Figure 5 - 1: Jeddah public spaces typology](image-url)
Users’ activities were similar at most of the typologies, but the focus was often influenced by the geographical location, nature and the environment of each of the studied sites; for example, both the designed and incidental observed sites exist within the urban context of the city. The streets and tunnel edge typologies form the structure of the urban fabric within the city and the gardens or parks that are distributed in the different neighbourhoods in the city. The seaside and the desert typologies form the extensive landscape of Jeddah city. Table 1 shows that the typologies observed present the intensive landscape and the extensive landscape of Jeddah. The extensive landscape is represented by the sea and the desert typologies, and the intensive landscape is represented by both designed and incidental typologies within the urban context of the city (figure 5-1 & table 5-2).

These case study locations were selected by the researcher based on his experience and knowledge of landscape architecture within Jeddah that represent locations that are used frequently by people that could indicate the role of these sites as representing place.
attachment and meaning for users. These case study locations also were intended to represent a variety of open spaces that should enrich the data collection, so that findings relating to typology of open spaces in Jeddah could represent baseline data that would be clear and understandable, and inform strategic planning in the future. Studies of open space use in this geographic location are very limited in the existing literature, and these case study locations should identify typologies that could have implications for research in other countries and cultures, such as those with a similar climate and ecology. The researcher also selected these case study locations in the hope that they would provide a better understanding of physical features in open spaces that could be integrated with social and cultural dynamics (figure 5-2).

Figure 5 - 2: Intensive and extensive case study location
5.5 Intensive landscape case study sites

This section introduces and describes the selected case studies for interviews and observations in the intensive landscape context in Jeddah. This type is divided into two parts that are the designed sites and the incidental sites. The designed selected case studies broadly follow the Francis format for introducing case study, which suggests three levels in presenting case studies, based on the level of knowledge that was needed and the nature of the enquiry. However, these findings are based on Western literature and the researcher was based in California in the USA when undertaking this research, and cannot be applied precisely within the context of this study. These points are firstly project abstract, the second is a full project case study and the third is more in-depth case study material with information included of a more contextual or specialised nature. While each may have a different audience, the need of academic researchers would require more detailed analysis at the second and third levels (Francis, 1999).

Therefore, the aim of using case studies for this research is to give the reader an overview about these sites, as well as the context and character of each of the study locations. Thus, the case study sites are presented broadly based on the first level of the Francis format. However, it is important to mention that, while the researcher was collecting data about each of the selected case study from Jeddah Municipality, there appeared to be a lack of information in the public domain related to the history, design, designer, drawings and more detailed information about most of these sites. The findings and dynamics that relate to social cultural issues are discussed in depth in the following chapter, and this section attempts to introduce a clarification of the context, history and physical form of the case study sites, as well as detail of the typologies.

5.5.1 Incidental Sites

This part presents the incidental land selected case study sites, which are divided into two types, such as types of places that were not designed and planned for family or friends to gather or for picnics, but local and migrant residents often use these sites for leisure activities. These sites are defined as public open spaces. The first subtype is a pavement on the street or in the neighbourhood that would be designed for pedestrian use but not recreation use, and could also be at roundabouts that were not designed for public access or for recreation use. The selected case study of this type included a selection of participants who gathered on pavements in the north and south of Jeddah. The second subtype is tunnel and road edge cases, which present a new type of typology.
not mentioned in any previous typology. As mentioned before, these sites were not
designed for public recreational use, but are a part of the city transportation elements
such as bridges, tunnels or walkways. These selected case study sites are discussed to
explain their actual use, location and design.

**Tunnel edges**
The study site for this category is the sides of a tunnel located in south of Jeddah in
Prince Majed Road, and close to the west entrance of King Abdulaziz University
(Medical School Entrance) and is defined as a public open space. This is used by
students and employees of the University during leisure times, and is selected as a case
study site as this is regularly used (figure 503). The two sides of the tunnel are sloped
and planted with grass, and the width of these two sides is 30 metres, and is the part that
people use, so that the slope prevents its use for recreation and constricts users to a
linear space, despite the challenges of the climate, although this is used less during high
temperatures during the day.

![Figure 5 - 3: View across the area where people gather and the street](image)

There are no facilities or services, such as toilets or playgrounds, provided at this site,
because of the heavy traffic in this tunnel and because the sides of this tunnel were not
designed for public use. However, Jeddah Municipality provides the site with a kiosk
that sells refreshments, because they recognise some of the needs of the people using
this site (figure 5-4).
Pavements (Pedestrian walkways)

This subtype of incidental spaces is pedestrian walkways, which are parts of the city where people travel on foot, and usually along sidewalks and paths, which connect one destination to another, and defined as public open spaces. Some of these walkways are the boundary for vacant or undeveloped spaces located in neighbourhoods, including vacant areas and future building sites, which are often used by children, teenagers and other local and migrants family residents (figure 5-5). Pedestrian walkways are used by people to meet with family and friends, and can often include opportunities for picnics.

The width of these walkways varies according to the location, and the observations and interviews revealed different forms of sidewalks, and their width varied at the studied sites from 2 metres to 5 metres. These walkways are normally paved with grey precast concrete pavers, but in some parts of the city, Jeddah Municipality uses a composition between the red and grey colour (figure 5-6).
These walkways were designed only for pedestrian movement purposes and not for gathering and picnicking; therefore, there are no services or facilities, such as kiosks or public toilets, attached to these sidewalks. The use of these incidental study sites of pavements and walkways can be contrasted with those at commercial shopping centres, residential areas and more isolated areas, where they are used less for leisure purposes.

5.5.2 Designed sites
This part presents the designed selected case study sites, and is divided into parks and gardens and squares and plazas. Parks and gardens type has four selected case study sites representing a range of subsections of parks, and squares and plazas type has only one example, because the selected site was considered as one of the most important squares in Jeddah. The reason for selecting four sites in the parks and gardens type was that these sites varied in terms of their geographical location and the urban context where they are located. In addition, the design form of each is different, which is explained later, and each of these sites is presented with photos, plans, project location, project background and the design (Francis, 1999).

Parks and Gardens: Aljafali Mosque Garden
This garden is located at the end of Al Madinah Al Munawarah Road in Al Baghdadiyah district, south of Jeddah, and is a public open space. The total population of this district is estimated to be 35,776 and most of the population is non-Saudi and estimated to be 29,635 (CDS 2004). This district is located within the old part of Jeddah.
and there are key features and locations near the site such as, historical Jeddah locations, Al Balad market and some older houses that are considered to be part of historic Jeddah (figure 5-7). The east side of this garden faces the Alby’a roundabout, which is a landmark representing a special event for old Jeddah residents. The roundabout has the Mameluke Minarets designed by Saleh Abdulkarim. In that spot and based on historical tradition, people of old Jeddah have sworn their allegiance to the kingdom's founder King Abdulaziz (Motieur, 2005) (figure 5-7). This space is less than 100 metres from the Ministry of Foreign Affairs and about 50 metres from Aljafali mosque, which is one of the most famous mosques in Jeddah. This mosque is famous because of its design and location near the water, and because between the garden and the mosque there is a parking area where capital punishment takes place at different times during the year. This use of public open space differs significantly from Europe and the USA, and represents the cultural differences of Saudi Arabia. The west border to this garden faces Buhayrat Alarbaeen, which is a lake (figure 5-7).
Figure 5 - 7: Al Jafali Mosque garden location and analysis
This garden is situated in old Jeddah, but this does not mean that this garden was built at that time. This garden is newly established, but there are no records to identify the year of construction. Based on a review of Jeddah maps for different periods, the researcher found that it was possible to estimate that this garden was established in the early part of 2000. According to these sources, this garden has two designs with the first from 2000 to 2007 and the second showing the current design.

The area of this garden is 1.3 hectares, but its design lacks shape, form, structure and balance, and does not represent any design themes, such as elements that could represent the historical location of this open space. From the perspective of a landscape architect, the garden design appears vague and incomprehensible, as the garden is completely covered by grass with a walkway splitting the garden into two parts. This branches to other walkways that have the same width and lead to a dead end, and lack connectivity to the wider area.

Most users of this garden gather and sit on the grass, although some users, and mostly individuals, sit on the concrete benches that face the lakeside (figure 5-8). The observations at this site revealed that most users gathered at the side furthest from the street, which could probably be explained by the high speeds of vehicles using this street, and no fences or structures to prevent the occurrence of harm or accidents. There are two pieces of play equipment for children located on sandy ground, which is not in very good condition, because children use it regularly (figure 5-9). There is no public toilet in the garden, and so users of this space need to use one that is attached to the mosque.

Figure 5 - 8: Concrete benches that face the lakeside Figure 5 - 9: Play equipment in the garden
Many residents of the Al-Balad area that surrounds the Al-Jafali Mosque Garden are perceived by local people from responses to interviews to be ‘irregular’ or migrants without rights to work or live in Saudi Arabia, and who are thought to pose a threat to families who also use this site.

**Parks and Gardens: Faisal Bin Fahd street (Hilton Walkway)**

At the end of the west side of Prince Naif Road, and before reaching the Corniche Road, there is Alnawras roundabout in the north of Jeddah. The first exit off this roundabout leads to Prince Faisal bin Fahad Road where this study site is located. Faisal bin Fahad road is not far from the sea, and less than 300 metres from the Corniche (figure 5-10). The western part of the street is parallel to the Corniche road, which is separated by a group of residential high rise buildings, hotels, residential complexes, a theme park and many empty plots of land, which are owned by the government or individuals, which hides a view of the sea for many people. At the eastern part of the road there is a linear development of residential and commercial villas, hotels, residential complexes, restaurants and empty land spaces. This street is an extension to the famous Open Air Museum street in Jeddah (figure 5-11). This museum has a variety of sculptures, which represent an abstraction of different elements from life (figure 5-11).

This walkway was founded in the early part of 2003, and is a public open space but it called (Hilton walkway) because it is close to the Hilton Hotel. The garden presents the middle island of the street, and in the past it had a few plants in an empty street, but has now been transformed into an intermediate island when residents of Jeddah began to gather there for picnics and some residents used it as walkway. Jeddah Municipality responded to this by rearranging the layout of this intermediate island, and transformed it into a garden and walkway (figure 5-10). According to an interview with a respondent who held an important position in Jeddah Municipality and preferred to be anonymous commented “this walkway has no design, the decision maker and the consultant decide to build a walkway in the central of this street until the Amwaj roundabout”, he also added that “this is the case with the majority of gardens in Jeddah...there is no involving of landscape architects or planners...as well as the decision makers have no background about designing open spaces and garden”. It was not possible to acquire the master plan or the design for this intermediate island from the Municipality.
Figure 5 - 10: Hilton walkway location and analysis
This garden and walkway area has an area of 5.5 hectares and the length of the walkway in the middle is 1.40 km. The width of the intermediate island varies in different parts, but the maximum width is 75 metres and the minimum width is 15 metres. These variations in the width occur because of the surrounding plots that affect the form and the movement of the street. The walkway width is 5 metres and paved by red concrete interlocked in the middle, and grey concrete on the two sides of the walkway (figure 5-12).

As mentioned earlier, the centre of the site is a walkway that crosses the site from the south to the north. This walkway splits the site into two parts: west and east parts, and are grassed and planted with *Azadirachta indica*, which is commonly used in Jeddah, because it provides a good shaded cover. In some parts, different types of palm species have been planed, such as *Washingtonia filifera*, *Washingtonia roubsta* and *Cocos nucifera*, and in other parts these palms are planted individually.
In this linear garden, there is play equipment for children distributed across different parts. In recent years there had been a kiosk to serve the users, but now this kiosk has been removed. There are no public toilets in the garden, and none that are close, such as at a mosque or restaurant, so that users have to walk a long distance.

**Parks and Gardens: Al-Rawdah Garden**

This garden is located to the east of the centre of Jeddah when driving from Alrawdah Street and heading east towards Almadinah Almunawarah Road, and the Alrawdah district is a residential area that includes many luxury villas (figure 5-13), and is defined as a public open space. Hidden from the street and the activities of the city, this garden is used mainly by local residents, as the researcher has lived in Jeddah for most of his life and was unaware of this open space. Most interview respondents for this study who were interviewed at other study site locations revealed they had no knowledge that this site existed.

Based on the review of Jeddah maps and from the interviews with the respondents, it might be assumed that this site is about 12 to 15 years old. One of the interviewees suggested that this site previously had a different design, but the two designs were not significantly different. According to the review of Jeddah maps, during the middle of 2006, a basketball field was built in the north part of the garden.
Figure 5 - 13: Al Rawdah Garden location and analysis
The total area of this garden is two hectares, but the design of this garden is distinct from other study sites, because of a more intentional use of design form, and users experience a sense of elevation across the gentle slopes. Alrawdah Garden has some green concrete structures, which form a door entrance or gate to the garden (figure 5-14). In another part of the garden there are five cylinders made of concrete and painted in dark green, except for the bottom that is in contact with the ground, which is painted dark brown. These five cylinders are abstract forms and no information was held by Jeddah Municipality to reveal their intention by the artist involved (figure 5-14). In the place attachment chapter, the purpose of interpretation of the sculpture is discussed again. There is a wall at the southeast part of the garden, which has attracted graffiti activities (figure 5-14). The walkways of this garden are cast in grey concrete.
The garden has a border of mature Ficus trees within a landscape of large rocks. The basketball field is bordered by a row of *Phoenix dactylifera* palms, which are also planted in the grassed area with *Cocos nucifera* palms. The garden is covered by grass and there are a few rocks distributed across the grass. The fence of the basketball field provides a good structure for climbing plants to grow, such as *Thryallis glauca* and *Jasminus giandiflorum* (figure 5-15).

In the centre of the garden there is a children’s play area that is covered by sand. The grassed area provides a good area for playing football for children, as well as adults (figure 5-15). There are no public toilets in the garden, and the nearest facilities are in the restaurants on Alrawdah Street, which are about 350 metres away. There are no kiosks at this site, so users normally bring what they need with them.

Figure 5 - 15: Alrawdah Garden planting structure, children’s playground area and the basketball pitch
**Parks and Gardens: Al-Masrat Complex**

This site is located in the north of Jeddah, and is situated in the Almasarah residential scheme, which was established in 2004, and is defined as a public open space. This site infrastructure, such as roads, lighting and electricity, were designed and built by the construction developer's firms. The municipality requires an area of the site for public services, which includes a mosque and a garden to provide the infrastructure for the site. The houses and villas had been designed and built based on the design preferences of the owner of each piece of land within this site. This residential area includes many large private villas, and there is less high density housing, which suggests the residential profile of the surrounding area to be the homes of high income families (figure 5-16). The planning for the central area of this residential scheme included a green space for residents, which was completed in 2007. The surrounding context of this open space is mostly residential villas.

The total area of this study site is 4.56 hectares, and has three main facilities, which are the Aysha mosque, fitness gym and the open space area. The open space area is 2.4 hectares. The mosque and the gym are situated in the middle and they split the open space into two parts, with the east part smaller than the west part (figure 5-16).

The two parts of the open space have the same layout, which displays a symmetrical geometry, where the first part is 195 metres long and the second part is 150 metres long. The outer and inner walkways follow a parallel pattern, and the walkways surrounding the central walkway have a linear shape. The west part of this linear walkway is circular and leads to the square walkway to the east (figure 5-16).

The planting structure of this site contains a variety of palms, trees, shrubs and lawn. The *Phoenix dactylifera* and *Cocos nucifera* palms planted around the site as borders with a significant distance between each one. A group of *Conocarpus erectus* isolate the children’s playgroup from the mosque. *Delonix regia* is also distributed in different spots and around the lawn area.

There is a children's playground situated in the central walkway, but there is no public toilet and users of this site use the toilet attached to the mosque. There are no kiosks provided in this open space, but there are supermarkets, a gas station and restaurant at a distance of 300 metres from the site (figure 5-16).
Figure 5 - 16 Al Masrah complex garden location and analysis
Squares and plazas: Al Mahmal Square

This square is located within Jeddah downtown known as Albalad, in the historical centre of Jeddah city, and is the main ceremonial square in the city, and is defined as a public open space. Commercial buildings surround this square from the north and from the south. In the south there are the Al Mahmal shopping centre and Gazzaz building, and Almlk Abdulaziz Road is the eastern border to this square and Baishin Road on the west. Al Mahmal shopping centre was founded in 1987, and is considered as one of the first shopping malls in Jeddah. This square is located within a very rich historical context for both the Ottoman era and old Jeddah, as it represents the Souk of old Jeddah (figure 5-17).

The name of Al Mahmal is linked to the early history of Islam and commercial operations that were carried out at that time, and evidence of the Al Mahmal site can be traced back to the Ottoman era to the era of the governor As'ad Pasha Aladom who ruled over Jeddah for over fourteen years, when it was important for international trade with camel caravans. These camel caravans transported fabrics, spices, wheat and precious jewels. This site is near the sea and was also used by naval convoys carrying various trade goods from the Red Sea for loading and unloading (Alawsat, 2006).

Based on the review of Jeddah maps, the design of the hardscape of this square was built in 1990, but no information about the designer or any other evidence related to the design of this square was available from the Jeddah Municipality. This square has a rectangular shape that is 170 metres long and 30 metres wide. This square is designed with black and white tiles, where black tiles cover most of the square, and white tiles are used in the centre and sides of the square. These white tiles are shaped as triangles and squares, but with curved edges (figure 5-17).
Figure 5 - 17: Al Mahmal square location and analysis
Structures and features within the square include two sculptures, fountain and a clock sculpture towards the east side of the square, and two sculptures represent hospitality of the Arab. The first art work is the Rose Water Sprinkler which designed by Julio Lafuente (figure 5-18). The second art work is Mustafa Senbel’s Samovar Fountain (figure 5-19). The marble base of the first sculpture on the east side is used as a seating area by the site users, as well as wooden benches distributed across the site. Commercial buildings surround the square from the south and the north, and some of the entrances to these building have stairs that are also used as places to sit and wait (figure 5-20).

In the east part of the square there is a kiosk that serves the users and the people who work in this area, and a few metres from this kiosk towards the central part of the west side of the square and before the stairs that lead to another area of Albaald, there is an open spot that is regularly used for praying by the users of this space and by the people who work in Albalad. At the times of prayer, some people who work in the area spread out a long praying rug to help them to pray on a clean surface (figure 5-21).
5.6 Extensive landscape case study sites
This section discusses the selected case study sites within the extensive landscape category of the typology. Jeddah is located between the desert on the east and the sea on the west. The waterfront is within the urban context of Jeddah and is the typology of this open space that increases public access to the sea, and is defined as a semi-public open space. However, this site appears to lack design and management, and could be described as a hybrid design or a non-designed open space. This observation could also be applied to the desert case study sites, because the spots people use were not designed or planned, and have evolved as natural spots for users.

5.6.1 Waterfront
Jeddah waterfront, or the Corniche, is one of the most important locations in the city, featured in magazine articles that promote Jeddah for tourists, and through word of mouth by friends who had lived in or visited Jeddah. The length of the Jeddah Corniche
is immense, and has many different designs, because each section of the Corniche was
designed by different designers and planners, and built by different contractors over
different periods. According to the Oxford Dictionary, Corniche is a French word
meaning "an ornamental border at the top edge of the front of a building or pillar or
round the top inside edges of the walls in a room." Corniche also means "a mass of
snow, ice, rocks, etc., hanging over the edge of a cliff, roof, etc., and seeming likely to
fall." The name of the Corniche has been applied to the Corniche originally from
Alexandria, Egypt. According to Waller (1985) Mohammed Saeed Farsi, who was
mayor of Jeddah is behind the moving force of the Corniche. His education (as an
architect) was at Alexandria, Egypt, which also uses Corniche to refer to the waterfront
or seafront taking the name from the original version in the south of France. In Jeddah,
the Corniche is the name given to the area along the sea to provide people with
improved access to the seafront. There are private access zones and public access
zones, and local people would use the public access zones of the Corniche to visit the
seafront.

At the beginning of the 1970s, the Corniche was developed to enhance, beautify and
reclaim the deteriorated coastal areas of Jeddah, which had been "used as rubbish-
dumping areas with random car parking taking up the empty spaces adjoining the sea
edges" (Farsi, 1984, p.64). Since that time, many research projects were carried out to
produce a detailed study of the entire coastline, which was to be part of the overall
development of the City of Jeddah.

The overall pattern of the Corniche seafront does not continue along the sea edge for
the whole of its distance, because the public walkways frequently have to turn inland to
avoid important sea edge land uses, such as the desalination plant, the King’s palace and some military structures. These diversions cause the Corniche to be divided into three sections, which are the Southern Sea front, the Central Corniche and the North Corniche that includes Sharm Abhor (figure 5-23).
Figure 5 - 23: Public and private access zones of Jeddah Corniche and the case study locations
These three zones, extending from south to north constitute the whole of Jeddah's Corniche as a series of similar recreational areas for public use, and provide facilities, such as picnicking, sport, swimming and play areas.

Where the south Corniche extends about 25 km from the central urban area of Al-Shoiba, there are rich coral beaches and sand dunes. It is a mix between natural areas and urban fabric. This part of the Corniche has a more unspoilt or natural appearance in comparison to other zones of the Corniche, which is now the starting point for divers, fishing and sea trips, and includes the Jeddah seaport. Another part of the south Corniche, which is close to more urban areas, has a sandy beach and spots where people can gather, as well as some sculptures, and is recognised as a tourist centre.

The central Corniche (Al Hamra) contains developed land that is an extension of the central urban area up to the entrance of the Military Area and Jeddah Saline Water Conversion Corporation from one side and King Fahad Palace and the royal court from the other side. Access to the Corniche in this part is limited due to more fragmented land usage.

The North Corniche and upper north Corniche zone are almost twice the length of the southern Corniche, and reaches approximately 58 km starting after the Military area until King Abdullah Palace, and then up to Salman Bay, north of Sharm Abhor. On the landward side of the Corniche Road, hotels and high-rise buildings have been built to take advantage of the sea view and Corniche facilities, as well as residential complexes and private villas. The upper north Corniche part has private houses and residential complexes due to the urban expansion of this part of the city in the last twenty years with the provision of services and infrastructure development in this area.

Sculptures are very prominent and often concentrated in the central Corniche rather than the north and south Corniche. The main concept of sculptures is to give identity to the place, and to form an outdoor museum, and there are more than 294 sculptures at this site (Al-Madinah, 1989) of which most have been constructed by famous artists, planners and designers such as Abdulhalim Radwi, Henry Moore, Julio Lafuente, Mustafa Senbel and Victor Vasarely (Mane, 1985; Farsi, 1991). Some sculptures represent religious values, such as verses from the Holy Qur'an in various forms, and others represent Saudi heritage or Jeddah architectural styles. "It is not surprising to
discover that Jeddah is considered by experts to be one of the world's foremost centres of modern and industrial outdoor sculptures” (Nahass, 1986). Most, sculptures were donated to the city by individuals or companies, but the Municipality provides the land for the location of each sculpture, and in some cases it contributes towards the cost.

Private locations in the Corniche are excluded from the observations and interviews such as resorts and theme parks; therefore, the researcher selected specific case study locations at the Corniche that are accessible to the public and regularly used by local people. From the perception of a landscape architect, the researcher observed that the design and facilities appeared to be neglected in the specific case study locations along the Corniche where there was public access, such as insufficient public toilets that are not cleaned regularly, offensive smells and insufficient seating in shaded areas.

The overall concept of the Corniche indicates that it was designed as a recreational traffic road with pavements and some open spaces incorporated for public use. The journey by car along the Corniche road is enjoyable, because of its curves and the different scenery revealed while driving. It was constructed as hard-edged ordinary sidewalk pavements, with trees in some parts, and seats in straight lines along the pavements. The designs of the study spots fail to represent any theme, style, characters, nature of the sea, the culture of Jeddah city, or the kingdom itself.

There is a general lack of services and facilities at the Corniche, as its design fails to consider quality leisure activities, and insufficient consideration appears to have been given to traditional activities for families at the seafront. There are some ice-cream vans, illegal street vendors, broken benches and kiosks distributed along the Corniche, but no public toilets, except one that is not usable.

The Corniche includes large black stones at the edge of the water where rats are often seen. Users of the Corniche are mostly unhappy that rats live there, and some consider them to be a source of disease, and could be the result of “the poor hygiene of the Corniche” according to an interview with a Saudi female. Users also commented that it would be difficult to eliminate these rats unless the stones were removed; however, it was difficult to discover why rats were such a problem at this site.
The hygiene of the Corniche is a crucial part of the issues relating to the Corniche, because the cycle poor management and maintenance may be part of the reason why there are careless attitudes of site users. Jeddah municipality has failed to provide a well designed and maintained Corniche, which has led to careless attitudes, such as leaving litter after picnics, by many users.

Despite these disadvantages, crowds still visit the Corniche to relax, spend free time with family or friends, and to enjoy being by the sea even if the spots they use are not sufficiently designed, maintained or cleaned. People still visit the Corniche even if it is difficult for them to keep a distance between their seating spot and other users, which exposes privacy concerns, because some spots are more popular than others, which contributes to crowding (figure 5-24).

Figure 5 - 24: View shows the crowds across the Corniche
Figure 5 - 25: Corniche spot 1 location and analysis
Photos from the first study area in the Corniche

Figure 5 - 26: Photos from the first study area in the Corniche
Figure 5 - 27: Corniche spot 2 location and analysis
Figure 5 - 28: Photos from the second study area in the Corniche
Figure 5 - 29: Corniche spot 3 location and analysis
Photos from the third study area in the Corniche

Figure 5 - 30: Photos from the third study area in the Corniche
5.6.2 Desert
The Saudi Arabian nature or desert is an important element in Saudi life visiting this area is part of the tradition and customs for many Saudi families, who often visit the desert, and is defined as a public open space. It is very important to mention that the sites that are used when visiting the desert have no services, and the sites include mountains, sand, and desert flora and fauna. The Saudi citizens of Jeddah travel to their favourite desert spots for picnics with their families and friends, to explore the ecology of the area and to experience what life would have been like for earlier generations of their families who traditionally lived in these desert spaces. Citizens of Jeddah that visit desert spots would need to travel around 35 to 60 kilometres to reach their destinations, and many visit these desert spots to enjoy the ecology of the region that would include the mountains, desert plants and the different atmosphere of the desert context which is different the urban context. However, Jeddah Municipality has not introduced sufficient policies or regulations for those who visit desert spots to ensure their safety. These desert sites or spots did not reveal any design, management or maintenance programmes according to the Jeddah municipality, and are located to the north, south and east of Jeddah.

Figure 5 - 31: Two views to the backpackers gathering in desert spot outside Jeddah urban boundary
The desert is part of the typology of public open spaces, but these areas have not been managed or planned, and could have contributed to recent tragic events for some visitors to these wild places. It is essential to apply management policies for these sites, which will maintain their environmental qualities, but provide protection of their ecology and improve accessibility for visitors.

5.7 Open spaces design, quality of management in Jeddah
The typology of open spaces reveals significant contributing factors, such as sense of belonging, sense of place, social cohesion, recreational benefits, mental wellbeing and physical wellbeing within an urban landscape. However, these benefits would only be achieved if open spaces are managed and designed effectively, which exposes the limitations of public open spaces in Jeddah.

5.7.1 Open space design in Jeddah
Jeddah has insufficient management and design for its open spaces based on interviews with various members of the Jeddah Municipality, the views of a landscape architect and the survey of people interviewed in selected open spaces in the city. Most open spaces had not been developed through design process stages, and during an interview with a representative of the Municipality the respondent commented “these gardens were just built randomly without a design.” This response could be validated by the survey of open spaces in Jeddah that revealed that most only had pathways with small groups of plants.

No design significance was revealed from the sites studied for this research, and none reflect specific site history or themes, such as the historical part of Jeddah in the south of the city, where Al Mahmal Square is located. However, Alrawdah Garden represents design features that meet the needs of users, which is located in an expensive residential area of central Jeddah, but the Municipality of Jeddah has no data about the design process of this garden.

The design and maintenance of these spaces should be an important issue in Saudi Arabia, as well as elsewhere as population densities within urban and suburban areas increase dramatically. Professionals working for the Jeddah Municipality, officials of the Ministry of Social Affairs and Makkah Province and some academic staff of King Abdul-Aziz University, who advocated the principle of community centres and suggest
that the design of urban spaces within modern residential areas should be high quality, holistic, as well as meeting socio-cultural requirements.

Open space design in Jeddah has been evaluated from a landscape architecture approach as the researcher has background knowledge and experience in this field, and has revealed that there has been insufficient consideration and investment in the design and management processes and practices in Jeddah. Several study sites have revealed open spaces that have lacked appropriate design features to meet the needs of users sufficiently, the management of these public open spaces has often failed to maintain reasonable levels of hygiene and repair, and the maintenance of specific facilities, such as toilets is often poor when these exist in the sites, and is often a cause of concern to users. This baseline information relates directly to the aims of this study. Within the context of landscape planning in Jeddah, some of the design weaknesses could be due to the lack of specialised landscape architects for the design process and project management for open spaces in the structure of the Municipality, and to the use of Western professional designers that lack understanding of local people’s needs, as well as their customs and traditions, such as the Corniche proposal.

5.7.2 Management quality in Jeddah open space
Various elements of the design and construction of open spaces in Jeddah are revealed in this section related to management quality. Responses from the interviews with site users, interviews with practitioners and municipality officers, observations at the specific sites studied and the review of similar studies indicate that the provision of public spaces in Jeddah is affected by four factors. These influencing factors are based on the findings of a study of management of public space in England by De-Magalhaes and Carmona (2009), which are: regulations, maintenance, resources and coordination.

The responses from the interviews revealed a lack on site management for the study sites. Based on the interview with a member of the Jeddah Municipality, no clear management plan for public spaces in Jeddah exists. According to the interview the respondent said “The open spaces in Jeddah are only cleaned by the Department of Cleaning and are maintained by the Department of Maintenance.” He added “I can ensure you that this job is done rarely and the people who are responsible for these tasks are not qualified and they do not have a clear programme or plan for this job”.

These findings suggest that limited financial resources have been a significant factor in preventing public spaces in Jeddah from being efficiently maintained, well designed or of good quality by regulators and providers. This view was widely expressed by respondents to the interviews with university professors, contractors and representatives of the Municipality. Therefore, insufficient funding was the reason given for poor maintenance of existing open spaces and for constructing additional resource. However, this was also linked to insufficient staffing levels and employees that often lacked expertise and skills, which have prevented them collaborating with other stakeholders and limited their capacity to carry out their work. One representative of the Municipality pointed out that: “the funds that are related to the design and management of open spaces in Jeddah are really low when compared to other sectors of the city.” He added “there is a lack of well-trained staff within the municipality.”

Several factors are suggested by Mandeli (2011) that could contribute to insufficient resources for managing public spaces in Jeddah, such as a dependence on central government funding, because cities in Saudi Arabia cannot apply local taxes to meet their needs. Therefore, this indicates a lack of a political approach to quality of life. Another important factor is the reducing scope and size of the state across the country, and rationalising public investment. Also, private sector interests would gain no profit directly from public spaces, which could be viewed as liabilities, and local authorities would only be likely to invest in public projects if rapid political gains could be achieved and without high maintenance costs. Therefore, local communities and open space users lack a voice to reflect their needs; however, public open spaces can also offer an ‘escape value’ for socially unacceptable activities, such as dating or drug use.

Finally, most services in Saudi Arabia have no charge and citizens do not pay tax, so service delivery is represented by minimal cost recovery, which indicates a lack of local accountability (Mandeli, 2011). As a result of these factors, revenues of municipalities are limited, so that addressing local needs for public amenities are often undermined, because staff are insufficiently qualified and trained and municipalities are poorly equipped.

This suggests that performance of public space management has been undermined by insufficient financial arrangements, expertise and personnel, as well as lack of
equipment and resource allocation. Conflicts in management efficiency are also revealed from a lack of coordination in organising resources that limit efficient management and intervention. In addition, poor levels of maintenance could be associated with a lack of a cohesive strategy for providing public spaces, as most were created without sufficient funding for managing these on a long-term basis. However, when budgets for open spaces are transferred to fund other projects, existing open spaces suffer from neglect and are poorly maintained.

**Maintenance**

Interviews with representatives of the Municipality revealed insufficient investment to be the most significant challenge for the provision and maintenance of public spaces, because its responsibilities have been expanded massively in recent years, and many different agencies and departments are now involved in managing public spaces. This has taken place as the same time as the introduction of national policies to reduce spending on new public investments, so funding for managing public spaces has steadily declined. Therefore, new public spaces have been funded from budgets that had been allocated for maintaining existing projects, which now demonstrate a lack of maintenance and neglect. However, there appears to be no cohesive strategy for providing new public spaces, as new projects are constructed without funding for their management on a long-term basis.

The specific problems faced in Jeddah relating to poor maintenance are highlighted by Mandeli (2011), who suggests the problems are increased by competitive tendering processes that normally award contracts to the lowest bidder for park landscaping, verge maintenance, graffiti removal, street cleaning and refuse collection. The second limitation is insufficient enforcement of contract mechanisms and ineffective monitoring, so that quality of service delivery seldom matches contract specifications. Another factor suggests was that there is no integrated relationship between external contractors and the Municipality for waste collection, so that communications between workers and Municipal officers are ineffective. The final factor indicates that public attitudes towards domestic waste disposal are described as irresponsible, as well as antisocial activities including vandalism and creating litter (Mandeli, 2011). This current study supports these issues, which indicates that there has been no improvement over recent years, but should encourage better strategic planning based on the evidence collected from users of public open spaces in Jeddah.
Recommendations to address these problems for Jeddah Municipality would include improving management capacity and ensuring sufficient resources by adopting a long-term strategic plan for the whole system rather than isolated components, and to improve the coordination of the activities of all stakeholders.

**Coordination**
Based on investigations undertaken within Jeddah Municipality during this research and the interview with a representative of the Municipality, departments with responsibility for maintaining, building and designing open spaces in the city operate independently, and have no systems to coordinate their activities with other departments.

One Municipality representative said “there is a lack of well-trained staff within the municipality.” The researcher suggests that these departments of the Municipality could be more effectively coordinated by employing qualified and trained staff who have a background and knowledge in designing, building and managing open spaces. This would ensure that staff are clear about what and why activities are being carried out, and that these would be linked and communicated to other departments. Therefore, there is a need for better training, improved status and improved professionalism for those with responsibility for public open spaces in the city.

**Regulations**
Findings from the interviews with officials from Jeddah Municipality reveal frustrations with the attitudes of residents towards waste disposal, antisocial behaviour, and problems of general maintenance in crowded public places, such as commercial activities by the side of major roads. In an interview with a university professor, the respondent suggested a need for bylaws that would stop public areas being used for illegal activities and use. Although bylaws have been passed and forums hosted to encourage citizens to keep their city clean, breaches in the bylaws and other laws have seldom led to prosecutions due to poor coordination within the Municipality and between various authorities.

When construction specifications or regulations are insufficiently enforced, they often create adverse effects (Rakodi, 2001: 212), which have been revealed in Jeddah due to weak enforcement of contracts with minimal violations by developers and contractors being prosecuted. However, the Municipality has also experienced problems with public
spaces in terms of applying regulations for their use and activities (Mandeli, 2011), which supports the findings of De Magalhaes and Carmona (2006) who defined one weakness of public space management as fragmentation of responsibilities. During the development of the city, various municipal authorities had various interests, and often granted individuals the right to occupy public spaces in exchange for an expropriated property that the Municipality needed for another public project.

**Summary**

This chapter has discussed the importance of identifying a typology of public open spaces that is developed for use in the context of Jeddah, which differs from the context of many Western studies of typologies of public open spaces that are often factors when investigating place attachment by users and patterns of use of these spaces in the review of literature. The development of a typology of open spaces in Jeddah makes a valuable contribution to academic knowledge and supports the aims of this study to explain place attachment and motives for using public open spaces. This chapter also introduced each one of the case study locations which helped to understand each site context and user patterns. The follow chapter discusses patterns of open space use in the context of Jeddah.
CHAPTER SIX

PATTERN OF OPEN SPACES USE
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6.1 Introduction
This chapter investigates patterns of use of open space at the selected case study locations in Jeddah adopted for this research. The activities observed that would contribute to revealing patterns of open space were observed in 2011 and 2012 by the researcher, and methods used are described in Chapter 4. The motivations for this research were to investigate when, why and how residents use designed and incidental public spaces in the Saudi Arabian urban context, as this has been insufficiently investigated in previous studies. The urban context of Jeddah provides a wide range of open space locations that should reveal patterns of use, such as coasts, desert sites and gardens, as explained in the previous chapter.

However, this evaluation of patterns of use of open spaces in Jeddah has shown that there are also barriers to the urban context of place attachment in this region due to cultural, social, climate, religious and gender influences that have been discussed earlier. Therefore, there are cultural restrictions that affect patterns of use of public open spaces, as well as cultural influences that promote place attachment for users. Other barriers faced by users of open spaces in this study have highlighted the barriers of poor maintenance and facilities to meet the needs of users and their families. However, despite these factors that influence patterns of use, both Saudis and non-Saudis often use these spaces in their free time, which provides them with rich experiences that greatly enhance their quality of life. What do they seek and what are their expectations from these open public spaces?

This chapter explores the pattern of usage of open spaces by observations and interviews with users in Jeddah at the selected case study sites to fill the gap in knowledge in the review of literature on this subject. This evaluation of patterns of use at each case study site includes when the site is used and how each site is used.

6.2 Pattern of use
To explore the pattern of use for open public spaces in Jeddah for groups and individuals it is important to understand who is using the space, when they use it, and
how. Each user of open public spaces has their own way of interacting with the space relating to their life situation, history and personal preferences. Each of the studied sites has its own characteristic regarding the users, how it is used, and why it is used. Place attachment for users of sites or elements within these sites were identified by the interviews and site observations, such as the location of the place, facilities on the site, and the quality of the place. The following descriptions of each site are structured by typology identified discussed through each case study before addressing comparative aspects of open place use across the sites.

Incidental land: common walkways

It is important to understand why people choose informal places to spend their free time, but for this typology of open space, the users vary depending on the geographic location of each of these sites, as well as the influencing factors of gender space and forming an identity with informal places. The types of users become featured in each curb or pavement; for example, the pavements near to the Earth Roundabout are known as a gathering area for young Saudis only. King’s Road after Auto Mall is considered as a gathering area for families. Some of these families are Saudis, but Indian and Palestinian families use this area as well. Young males use these informal places as recreation sites, as they meet their needs for recreation activities better than designed spaces, such as gardens or the Corniche, where many families meet together, especially Saudi families. Families also use informal places in Jeddah, as their children can play games without disturbing more formal gatherings of people. This phenomenon has become widespread among young people and families also, because they believe that gardens and parks have no maintenance, no facilities, and no design, but also due to preferences of time for these places.

When non-Saudis visit this sidewalk, some families bring their own portable chairs and tables, and most Saudi families visit the site as a large family and friend groups. When Saudi women and men visit the site as a large group, the sitting area is always separated by gender, even though some of these informal pavement areas can vary in width from 1.5 to 4 metres. The types of activities for both Saudis and non-Saudis in this area are similar, and include cooking food, gathering, children playing on the sand, and young males playing cards.
The time spent at these sites varies between weekdays and the weekends, as there is limited use during weekdays, but at the weekends and holidays the number of users of these places is higher. Some families start using the places in the afternoon until midnight or later, and other families as well as young males start using the site after 9 pm. Although users of these case study open spaces in Jeddah explained that they used informal places for recreation that were close to their home or close to their work when walking, some users suggested that they normally travelled to their favourite open spaces by car, as this was more convenient in this hot climate during the day, and that car travel was part of their experiences of enjoying their favourite open spaces. The choice of time of using open space was often shown to be based on gender, as females would not normally use these spaces when dark, but males often reported that they would choose some open spaces when dark, such as the Hilton Walkway and different spots in the Corniche. Although, informal spaces used for recreation normally lack facilities that are nearby, such as toilets and facilities for washing, which creates barriers for families with children.

**Incidental land: Tunnel edges\road edges**

This typology differs from the informal places around pavements and walkways, which were designed to be used by pedestrians, even though they had not been designed for recreation and picnics, as tunnel edges and road edges were not designed for use by people for any purpose. Most users of this site work in the surrounding area, and according to the interviews, some of the non-Saudi users were part of the academic staff at King Abdulaziz University (KAU), and considered this site to be their recreation area during weekdays. There is a range of nationalities that use this site, such as family users from Saudi Arabia, Egypt, Sudan, Jordan, Syria, India, Yemen and Palestine. However, male university students also use this site, and most were not from Jeddah, but from villages close to Jeddah and some from other cities. The observations and interviews at this site revealed that most users could be classified as medium- to low-income families.

There is a range of activities, and some are typical in Jeddah for a site of this typology. Other activities are more unusual and may be specific to the context of the site of the university. First, this part will explain the normal type of activities on this site, as in open space of this typology families commonly gather for cooking food, chatting and enjoying their free time. Males - whether young or old - use the site to gather, chat, play cards and, for a minority of them, cook food. Most bring food from outside the site. In
addition, some university students who come from outside the city of Jeddah and who live in the area gather at this site during exam periods to study. The significant types of activities that take place on this site are social and family celebrations.

During the observations at this site and based on the researcher’s knowledge of this site, different types of male social events take place on this site. Some of these events are weekly, monthly and annually, such as monthly gatherings for male groups who work at the university or academic staff from the university. The groups consist of 15 to 25 persons, and they bring all the food and drink that they need. The responses from an interview with a Sudanese family included their perception of this place as a “perfect place for family gathering”, and as this family was celebrating a ‘baby shower’ some of their Sudanese friends had also joined them. This family had developed attachment to this place from visiting regularly with other friends, and sharing conversations in their native language. This site is heavily used during the weekends, summer vacations, and holy days. There are users of this site during the weekdays, but far less than the number of users during times other than weekdays, which indicates that most users are not connected to the university.

Parks and Gardens: Al-Jafali Mosque Garden
During the observations and the interviews at this site, it was obvious that most users of this site were from Egypt; followed by a few Saudi users, then users from Yemen, which reflect those who mostly use this Mosque. This site is located within a low to medium income level, and most of the people who live in this part of the city are migrants who work in the Al-Balad area. During the interviews, most stated they were a “simple family”. The type of users at this site varied according to the time, but most users were families until sunset. After sunset and because of the lack of lighting in this site, families preferred to change location or return home. The users of this site then became young and old males who worked and lived around the area. Responses from Egyptian users indicated that the space reminded them of similar green spaces in their home countries, which provided the motivation to visit this space more frequently.

Most families with children travelled by car to this garden to spend their free time reflecting medium- to high-income groups, but lower-income families living near to this case study site walked to this garden. There were no significant activities that occurred within this site, as most families came with their children to sit and enjoy the sunset. On
the west side of the site there is a children’s playground that is heavily used, though it has insufficient play equipment for the number of children who want to use it. A participant who was interviewed on this site indicated that he worked around the area and before he went to work he preferred to pass by the “sea not the site”, which made a positive start to their day, which indicated that this participant used this site as a route to work, and had a greater place attachment to sites near the sea rather than this garden.

As mentioned previously, this site has two types of users. This site is used at the weekends more than on weekdays, and during weekdays this site is used as a link between the commercial area and the Al-Jafali Mosque. Recently, many of the Al-Balad population are irregulars, as based on responses from the users and observations this site is also used by ‘irregular’ people who have no legal right to work or remain in Saudi Arabia. This causes fear among families who use the site, and after sunset all users of this site are males, and most are from Yemen and Saudi Arabia. Most of these users gather at the weekend, playing cards, chatting, waiting for others, and bringing food to the site usually until 12 am to 1 am.

**Parks and Gardens: Hilton Walkway**

This site ranks after Al-Mahmal Plaza in the diversity of its users, in terms of gender, income levels, nationality and social background, and is used by both groups and individuals. According to the observations and interviews in this place, the users are mostly Saudis, but many come from Egypt, Lebanon, Syria, Yemen, Sudan, Jordan, Palestine, Chad and India. During the observations it was sometimes obvious that more females used this walkway than males, such as during daylight hours, but after dark males mostly used this open space; however, high daytime temperatures reduced the numbers of users of both genders. The motivations for females to use the Hilton Walkway more than other public open spaces could relate to its physical characteristics and affordances, such as good surveillance, a privately owned well managed site, a perception of safety, as well as important feelings of privacy in this semi-public open space. Other users were those who came to Jeddah for different purposes, such as one-day visits to visit family members or shopping, and they made time to visit this place: “*I always try to find some time to come to this walkway each time I visit Jeddah*” [F/S/35]. This finding is relevant to this study, as it shows that this public open space is not only popular with local residents, but has a broad reputation.
The main activity on this site is walking, and most the city residents describe this as “the best place for walk”, and people from different locations come specifically to walk for exercise. Other types of activities make this site attractive to users, such as cooking food, as this open space has been traditionally used by families for this purpose. During the weekend and especially on Fridays most families who visit this linear garden are barbequing. There are playgrounds in different places within this site that are always busy.

There are a few types of activities that are perceived as negative activities, because they make the site users uncomfortable. Firstly, there are a few outside activities that are illegal and can cause annoyance to other the site users. These activities are brought to the site by Ethiopian labourers that do not have residence permits. The horses and bicycle rental are their primary source of income. Secondly, some young males play football on the footpath that annoys the people who walk there, especially the women. Finally, according to one of the interviewees a Saudi female said, “there is a group of Indian people who come to the site and play cricket in the walking path and that they close the path in some part so they can create their playing field” [F/S/40]. These findings of perceived illegal activities and annoyance to other users exposes underlying racial tensions by local people interviewed, as the Saudi female emphasised that the group were Indian more than a group of people playing cricket across the walking path. Females could also feel intimidated by groups of males, especially young males playing football, which indicates older users’ perceptions.

It is rare to see this site without users. Due to the hot and warm weather in Jeddah, most people do not walk in the morning; however, according to the observations, a few people prefer to walk at this time. The morning is the quietest time, and the site is busy at all other times: The majority start their daily walk in the afternoon, some prefer to walk between 6 pm and 9 pm, and the rest - because of their daily life - start walking after 10 pm. Even in Ramadan and Eid people still walk. Observations during weekdays showed that most groups were male, and with few large family gatherings. This contrasts with weekends, when most groups were Saudi families and families of migrant workers using this open space for cooking food and relaxation.
Parks and Gardens: Al-Rawdah Garden

This is the site where most users are non-Saudis, and observations and interviews showed that non-Saudi users included people from Syria, Lebanon, Egypt, Jordan and the Philippines. However, with the exception of the basketball court, there were few single males using this site, and most users were family groups. Most users did not live around the area, and they came from different districts. Respondents who visited this site were the only users who said that they always brought their friends or families who were visiting Jeddah for the first time when they asked “If you have a friend or family member someone visiting Jeddah do you bring him/her to this place?” Families that came to this site usually came for relaxation and to enjoy their free time and the nature of this site. They cook food, gather for chatting, and their children play on the play equipment. Some of the users in this site smoke shisha. The basketball court is mostly used by Filipino males who expressed their delight at the facilities.

Most families who came to this site brought with them all the required equipment, such as tables and chairs, so they could feel comfortable rather than sitting on the grass. Many people who used this site believed that Jeddah municipality did not irrigate this site appropriately. Therefore, most brought Participants interviewed at this site suggested that it was a fact known all over the city that Jeddah Municipality used sewage water for irrigation, as this was clear after each irrigation process due to the smell of the water.

The number of users during weekdays is limited in contrast to the weekend, when this site is heavily used. On Thursdays, people often start to use this site after 4 pm until midnight. On Fridays, some of the male users come to the site after “Friday Prayer” - around 1 to 2 pm - and some of them after 4 pm. During Ramadan and Eid the number of visitors to this site is lower than other times: interviewees said that this was because there were no activities that represented the celebration of Ramadan and Eid, so they did not use this place. In contrast, during the summer vacation this site is busy almost every day.

The pattern of use for migrant workers reflects a specific sub-section of the migrant community, as this site offers opportunities for meeting with other migrants from the same country and opportunities to speak in their native language and share their traditions and customs. Therefore, immigrants from Syria, Lebanon and Jordan are
attracted specifically to this garden to make friends and meet with others as they live so far from their family in their own country.

**Parks and Gardens: Al-Masrat Complex**

The observations and the interviews on this site revealed that the only nationalities who used this site were Saudis who lived around the area, and Filipinos and Indonesians who worked as drivers or guards in the surrounding residents villas. This site was not heavily used because of its location within a residential area. Therefore, the interviewees indicated that they were motivated to use this public open space as it was close to where lived or worked. In the case of interviews with Filipino and Indonesian workers there were no other motivations raised by them, such as place attachment as a reminder of their home countries because of some plants and other people from the same country.

Some of the residents in this area used this site for walking, but this was very rare. Males used it as a transportation point between their houses and the mosque or the gym, which were located within this site. Drivers and guards use it to enjoy their free time and to relax. Most drivers are from Indonesia and India and they usually gather in groups (3 to 5 persons) late at night when they finish their work. According to the observations, they play cards, smoke and sometimes bring food. During the observations and interviews, only one family used this place for gathering; they came from outside the district where the site was located.

It is very difficult to indicate the time and the period of each of the users of this site. The drivers and guards said that they used it when they were free. The woman who was walking also said that when she was free she went there to walk, and if she could, she would find someone to walk with her, such as her daughters or any other woman who lived near her. The male respondent who was in the mosque said he used it five times each day according to the prayer times; sometimes he just sat there before he returned home. The family who came from outside the district said, “We were just passing by this area and we saw it and we decided to stay and we brought our food” [M/S/40]. They indicated that it would probably be a one-time visit.

**Civic Places: Al-Mahmal Square**

This square is distinguished by the diversity of its users reflecting the demographic division of the population in the city of Jeddah. As a central location in the city, it is
visited by a large group of users from different nationalities of both residents and visitors to the city. There is a specific group that also visits this site, namely the pilgrims who come to Makkah for Hajj or Umrah. They consider this place as the country’s most ancient and popular market, and consider it a priority to visit after or before performing the Hajj and Umrah. The type and amount of users is changeable within this site according to the time of the day and the events that occur within the site or in Al-Balad area with very different patterns of use observed during Ramadan. During Ramadan, this plaza – and the entire Al-Balad area – turns into a special place filled with hawkers that provide different types of products to attract women, men, and children of all ages and nationalities. All of these hawkers are considered ‘irregular’ because they do not have any permits to sell or display their products at this location or other locations across the city.

The problem is that the Jeddah Municipality does not organise such events in special seasons, but the municipalities confiscate their products and chase away those vendors, which causes many problems and distorts the civilised image of the region. This was revealed from participants’ responses at these places, which questioned why the government did not establish and manage these events for the public. When the researcher was studying in the United Kingdom, he observed different markets in city centres during the year, and specifically the Christmas Market. The Christmas Market was similar to that taking place in Al-Balad during the celebrations and the variety of the users who enjoyed these markets, but the difference was that in the UK, the organisation and arrangements for these stalls met local regulations and laws.

After the period of Ramadan, Al-Mahmal square has no unique activities within the site, and during the observations, people used this plaza for transportation, because it links three commercial buildings. Some users stop to look at some of the products offered by the hawkers, but some do not. Older people sometimes sat on the benches that were distributed throughout the site or they used a fountain and a sculpture base for seating. There is a part within the west side of the plaza that has been traditionally used for prayer by visitors, as well as people who worked around this plaza.

The observations showed the complex nature of how people use this site, as the plaza space provides opportunities for various activities within the city. Although some users cross the plaza when travelling to their destinations, but many others come specifically
to the plaza to experience its ancient market. This open space offers activities for shopping, socialising, meeting with friends and family, as well as opportunities for formal and informal prayer. These patterns of use also would include pilgrims who visit this site when travelling for Hajj and Umrah. In addition, the number of site users was higher during Ramadan, while the time people spent there was also longer than in other months, and during Ramadan, people often used this place until 3 am.

Waterfront
Jeddah Corniche had a diverse variety of users, which included Saudis, Egyptians, Lebanese, Jordanians, Palestinians, Sudanese, Emiratis, Algerians, Moroccans, Somalis, Ethiopians, Indians, Yemenis, Filipinos and Pakistanis according to the observations and interviews. The users of the waterfront were broadly represented by Jeddah residents with different backgrounds, ages, gender and incomes, but most came to this site in groups.

The range of activities that people enjoyed at the Corniche was diverse, as people sat facing the sea, brought their own food, gathered and chatted. The observations and interviews showed that users felt they had good choices for activities at the Corniche, such as children playing, young males roller skating, provision for sports activities, such as football and people walking for relaxation and contemplation. Others explained that they came to the Corniche and stayed in their car simply to watch the sea, and others commented that they came to the site to smoke “shisha” and play cards. The observations also showed individual males and male groups studying, and some Filipinos and Yemenis fished at the Corniche. Celebrations of football match victories usually occurred at this site, as well as in other sites across the city.

Observations show that the pattern of use of this site remains busy throughout the year, but more users visit during the weekends and fewer during weekdays, which could be related to the demands of work and school. Users are observed to gather in family groups mostly at the weekends, but groups of males gather more during the weekdays and very late at the weekend. The times of gathering would include mornings, afternoons and at night, although few people use this site during the high temperatures during afternoons during the summer. However, the numbers of users increase during events and celebrations such as Eid, as well as during the summer holidays. There is a gender difference in users at night, as these were mostly groups of males. This is also a
tourist attraction, so many people visit this site, which causes conflicts between cars and people, as people travel to the site by car, but often have difficulties parking and users have to face the potential dangers of road traffic near to the site. This site also represents a public space that is a ‘showcase’ to promote the image of Jeddah to tourists.

The current design of the observed spots in the Corniche does not meet some of the needs of users; for example, some people, according to the interviews preferred to walk as exercise along the seaside, however the current shape of the Corniche walkway is narrow because of all the kiosks that are placed in different spots and the people who gather, which makes it difficult for people who want to walk. In addition, people gather in different spots along the Corniche, but the number of these users in some parts means that they become too close, which affects their privacy.

**Desert**

Most users of these sites are Saudis, and people visit these places as family groups and male groups. According to the interviews, there are organised trips for some of the workers in foreign embassies in Jeddah, such as the American, British and French embassies.

The location of the desert sites are not formally marked, but are identified by memory of the users’ knowledge of the landscape. Each family or male group that visits these sites have their own spot for gathering, which rarely changes and could link to place attachment themes. The desert areas are owned by the government, but in some cases they are private property. The findings showed that the range of activities in these places varied according to each group’s interest, and extended family groups gathered to enjoy their time, chat, cook food, and prepare meals if they stayed for longer than one night. Some women took the opportunity to drive their father’s, brother’s or husband’s car in the desert, because they could not do this in the city, so women often considered the desert to be a place of freedom. This is an interesting finding relating to the restrictions placed on women in Saudi society, as these do not appear to be applied beyond the boundaries of the urban context of Jeddah. Therefore, the motivations to visit desert open spaces would include the aspirations of women for greater freedom to drive a car in the country, and opportunities for privacy in desert areas enables women to experience some degree of freedom from traditional restrictions on their behaviour.
Male groups are involved in activities that are usually the same as family groups, but tend to include hiking and mountain climbing, and some males break away from family groups to carry out these more adventurous activities, which can include using motorbikes in the desert landscape. One of the interviewees explained that some girls within the family groups enjoy hiking and mountain climbing, and some users bring tents that they erect in the desert for staying overnight. According to the observations, interviews and the researcher’s own experience, people planning to stay overnight would choose their spot carefully to set up their tents, and these overnight stays usually consist of people sitting next to their fire and enjoy their time by playing or chatting.

To some families and male groups there are special seasons for visiting the desert sites, and the interview responses reveal that winter and spring are the two preferred seasons. Some participants expressed their eagerness to visit the desert soon as they “missed it”, but no specific times for visiting were found from these interviews. According to the period of stay, some participants indicated that they liked to spend a full day in the desert, while others commented that they preferred to stay longer than one night. Some participants indicated that they once stayed for about a week. However, most users of desert spaces take day visits.

6.3 Barriers and frustrations
This section lists the types of barriers and problems revealed by interviews with the site users and the site observations, and is also based upon the researcher’s interpretation as a resident of the city, as a landscape architect, and as an academic member of the Landscape Department in King Abdulaziz University in Jeddah. According to the interviews and site observations, as well as contributions from professional interviews these barriers could be classified as the following: 1) site design and quality; 2) lack of maintenance; 3) lack of services and facilities; 4) safety and security; and 5) vandalism. Each of these barriers are identified in most of the sites studied. There are also issues of privacy and gender that contribute to socio-cultural barriers, as these factors would also prevent some people from feeling attached to specific open spaces.

6.3.1 Site design and quality
Landscape architecture practitioners have a low profile in Saudi Arabia compared to other professionals involved in planning and design issues in urban spaces, so that they are not often engaged in projects that could be relevant to their skills and experience.
This often contributes to decisions being taken by municipalities and designers and planners that have insufficient understanding of landscape architecture, patterns of use of urban open spaces or place attachment by local people.

One of the problems lies in the terminology, since the Arabic term used to define the profession implies a farming activity or one only engaged in site maintenance. Some people think that landscape architects are farmers or that their participation comes after completion. In recent years, more attention has been paid to the concept of landscape architecture and the departments that taught this discipline have aimed to communicate to the community and public bodies the importance of this. There has been some success and the role of the landscape architect in some government projects and companies has become clearer. Jeddah municipality did establish “planning and design of open areas divisions” within the structure of the municipality, but unfortunately this administration was closed after a few years. The researcher suggests that the staff had attempted to carry out their jobs correctly, and most of the administration staff were landscape architects, architects and planners, and all appeared to have worked cooperatively to improve the city’s design quality. A further issue that has influenced the design and planning of urban spaces in Jeddah has been the use of foreign landscape architecture firms, such as for elements of the Corniche, which often lacked understanding of the culture and society of users of this public open space, and their patterns of use of these places.

Most complaints relate to the design and the quality of the selected site, with the exception of the users of Al-Rawdah Garden. The number of interviewees that had an understanding and knowledge of planning and design was limited, but the findings revealed that most people had means of making comparisons, because they travelled and saw open spaces around the world, and through the media. Though people had different preferences based on personal factors, there were also a number of common themes.

Users of the studied sites complained about their design, such as the length of the walkway, the width of the walkway, planting varieties, locating site elements, and other design issues, but most commented that there was a lack of diversity in hard features. One other issue raised by a Saudi female related to the same paving material being used in gardens, walkways and pavements across the city, and said “it is very boring to see
the same material all over the city, which is really killing me sometimes, because I travel to Dubai, London and the US and they use different types of building materials in the open spaces.” This could relate to not only the paving materials, but also to how they are placed at the sites, as most walkways follow a straight line as well as the paving, but the researcher suggests that if these materials were placed in curved lines and with changes of colour of the materials used, this could help to reduce the repetition, which would provide more coherence, but with spatial variation.

There were also suggestions for less diversity, as other respondents complained about the mismatching in the site and design elements, because each stage of the site implementation had been completed at different times, and sometimes by different contractors, and most of the sites had style variations in their elements of colour, style and scale; for example, the lighting in the Hilton Walkway lacked consistency of style, which also related to refuse bins.

Open space design has a range of principles to be designed and built to enhance the city’s image, to benefit the users, and encourage greater use of open spaces. During the data collection of this research, the researcher attempted to examine the design drawings and maps of the selected sites and any studies related to the design of each site to present them within the context of this research, to provide a clear image to the reader of the structure of each site. Unfortunately, according to the employees who worked at the “Administration of Gardens and Planting” in the municipality, there were no design drawings or studies available for the selected sites in this research. A respondent working in the planning department of Jeddah, who preferred to remain anonymous, confirmed this point and suggested that most of the public gardens and open spaces in the city of Jeddah were built without designs or site studies. However, this criticism could not be applied to the Corniche, but was not raised by this respondent.

This respondent also suggested that most public open spaces had landscape features installed by contractors that had experienced problems and delays when carrying out other projects for the Municipality in a response failing to complete agreed contracts within timescale and budgets. Therefore, if a contractor failed to meet the quality standards of a project, for instance when carrying out the installation of street lighting, the contractor was required to complete work at another public site as a penalty. Other
examples given by the respondent indicated that when public service contracts revealed problems that led to complaints by the client, the contractor would be required to install hardscape or lighting facilities at the same site as a penalty, irrespective of their skills and experience of these types of landscape features, which often lacked coherence, spatial variation, and consistent style, so that the needs of users were often not considered or met sufficiently. These findings contribute to understanding the lack of design and planning for landscape architecture in public spaces in Jeddah, but the research was unable to discover other sources to collaborate the information from this respondent, who provided these findings anonymously. Therefore, it would be difficult to confirm whether this practice is widespread.

6.3.2 Maintenance and hygiene

To gain an understanding of participants’ perceptions regarding site maintenance and hygiene, the users were asked “What do you like and dislike about how this site is maintained? And do you think this place has hygiene levels that you would expect?” After classifying the responses to these questions and aggregating them according to the repetition of each answer, the researcher found that site maintenance and the hygiene of sites had several primary problems according to users’ perceptions: 1) lack of maintenance and cleaning schedules; 2) lack of knowledge of how to use open spaces; and 3) misuse of open spaces. The findings from observations, interviews and the researcher’s knowledge about the problem of misuse of open spaces indicate this is more often due to activities of Saudi users than non-Saudi users.

According to observations and interviews, open space users in Jeddah are frustrated by the prevalence of broken tiles and kerbs, untrimmed trees and shrubs, rusty playing equipment and many other examples of poor maintenance. The findings suggest that these sites are rarely maintained correctly; for example, during the researcher’s initial visit to the Hilton Walkway in 2010 broken tiles were noted, and when returning in 2012 to conduct interviews at this site, the same tiles were still broken and the problem had deteriorated. This maintenance issue not only affects city parks, but different public facilities such as streets, bridges, lighting and planted areas. The Jeddah Municipality is responsible for the administration of street and public facility maintenance, but there is poor organisation and generally unsatisfactory performance. In addition, there appears to be a lack of supervision and most contractors that undertake the maintenance work do not have qualifications for carrying out this work.
Hygiene of open spaces is very complicated issue, as both the users and the government are responsible for this, and responses from the participants were grouped into three categories. The first category suggested that the government was not taking this issue seriously and that residents would not respond to hygiene issues until the government too effective action. The second category indicated that people arrived at the site and when they found it dirty and littered, they treated the site with the same disrespect. The last category concerned those that cleaned the open space themselves; so that when they arrived at the site they cleaned the spot where they intended to sit. These users believed that taking care of the site and looking after the site’s hygiene was representative of their attitudes and their life, and also showed respect for the site and to other users. These findings failed to identify which sites had more significant problems with maintenance and facilities, as this appeared to be a common issue, but issues of hygiene could dissuade some users from visiting sites with poor maintenance, such as families with young children and people with underlying health conditions.

6.3.3 Lack of facilities

To obtain insight and understanding about facilities at the open spaces and whether users believed these met their needs, they were asked “Do you think this place has the facilities that you need?” The answers to this question reflected little similarity from most interviewees, as their understanding of the word ‘facilities’ in an open space context varied considerably, such as including public toilets, an area traditionally used for prayer, kiosk, visitors’ centre and security office. This is a brief summary of comments mentioned in the typology chapter about each site’s facilities according to the observations shown in Table 5-1.

Playgrounds were reasonably common in the parks, but the quality was low, and in particular the playing equipment was rusty, dirty and sometimes unsafe. Some of the female respondents who used different sites complained about the quality of the playground area and the fact it had no control and maintenance: “I watch my sons playing each time we come here, because I saw a child who injured his hand due damage in one of the swings, and the problem if I experienced such problems, as there is no first aid team or a visitors' centre for help”. The kiosk problems related to what was sold, the cleanliness of the food, the kiosk itself, and the way these kiosks were placed within the site. The findings suggested that the men who worked in some of
these stalls had low standards of cleanliness, which was noted by many, but particularly by non-Saudi respondents. Some parents prevented their children from buying food from these kiosks due to these issues of poor hygiene. Examples of poor hygiene observed included the sale of snake food, which often attracted flies and other insects due to the heat and smell; however, most sites showed issues of hygiene, which could be due to insufficient quality control of these kiosks and standards of food storage.

<table>
<thead>
<tr>
<th>Site</th>
<th>Seating Quality</th>
<th>Playground Quality</th>
<th>Toilets Quality</th>
<th>Mange</th>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KAU tunnel</td>
<td>×</td>
<td>n/a</td>
<td>×</td>
<td>n/a</td>
<td>Poor</td>
</tr>
<tr>
<td>pedestrian sidewalks</td>
<td>×</td>
<td>n/a</td>
<td>×</td>
<td>n/a</td>
<td>Poor</td>
</tr>
<tr>
<td>Incidental sites</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Designed sites</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Al-Jafali Mosque</td>
<td>✓</td>
<td>Average</td>
<td>✓</td>
<td>Poor</td>
<td>x</td>
</tr>
<tr>
<td>Hilton Walkway</td>
<td>✓</td>
<td>Poor</td>
<td>✓</td>
<td>Poor</td>
<td>x</td>
</tr>
<tr>
<td>Al-Rawdah Garden</td>
<td>✓</td>
<td>Poor</td>
<td>✓</td>
<td>Poor</td>
<td>x</td>
</tr>
<tr>
<td>Al Masrat complex</td>
<td>✓</td>
<td>Average</td>
<td>✓</td>
<td>Poor</td>
<td>x</td>
</tr>
<tr>
<td>Al-Mahmal square</td>
<td>✓</td>
<td>Poor</td>
<td>✓</td>
<td>Poor</td>
<td>x</td>
</tr>
<tr>
<td>Extensive landscape sites</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corniche spots</td>
<td>✓</td>
<td>Poor</td>
<td>✓</td>
<td>Poor</td>
<td>x</td>
</tr>
<tr>
<td>Desert spots</td>
<td>×</td>
<td>n/a</td>
<td>×</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Figure 6 - 1: Study Site evaluation according to the participants (by the researcher)

Parking was another problem that was revealed, as Saudi society in general depends on private cars for daily transportation. The use of outdoor open spaces in Jeddah is high, so the site borders and the streets around the site become overcrowded, because there are not enough parking areas for all of the users; for example, the Hilton Walkway was surrounded by two driving lanes and parking for this site was on the edge of the site. At
weekends and during the summer, the driving lanes become one lane, because people use the other lane for parking. Therefore, during periods when public open spaces are used heavily, the lack of parking spaces for cars and insufficient public transport facilities means that users need to walk longer distances.

Most users commented that all these sites had no mosque, and although this could meet the needs and expectations of users, the existence of a specific praying area should not be necessary within the site, because users could pray anywhere. One participant at the Corniche, who was Egyptian and with a background in design and planning, said “Why not? This site has a small plaza with a small fountain, we can use the fountain for ablution and pray in the plaza in the praying time.” This respondent makes an important point that providing water is available for ablution, Muslims could pray in any clean place and oriented to the Qibla; however, as there is a requirement for regular times for prayer many users gather in parts of public open spaces, which become a regular praying spot in the site, such as Al Mahmal Square. This suggests place attachment for religious and spiritual purposes that would be personal choices. There is little agreement with regard to ‘good’ praying areas in public open spaces; however, preference for favourite places for prayer could be informed by identifying with certain places with special memories, hardscape features or softscape features, or informed by difference, so that places could be selected for prayer times that are not the same as places of daily routines, if practical.

Public toilets are often missing in the context of the open spaces in Jeddah, and none of the studied outdoor open spaces or other public open spaces in the city has toilets, with the exception of one public toilet at the Corniche. The responses from interviews suggest that this toilet is perceived to be a source of infectious diseases, because it was not considered to be clean or hygienic, and one American male respondent said “I would never let my children use it; even if I had a dog, I would not let him use it, because it is dirty and not clean.” Some respondents argued that the presence of public toilets was not important in open spaces, and, in their perception, that it was very rare to see public toilets in American or European open spaces.

This research would suggest important reasons for public toilets. First, most residents of Jeddah are Muslim and pray five times each day. Two or three times for prayer take place during the times when people may be away from their home, and people need to
carry out ablution before they pray. Second, most site users spend more than five hours in these open spaces, and some spend more than eight hours in the same place, and both adults and children would need to use the toilet during this time. Where elements, such as fountains, are already in place, these could provide a water source to construct public toilets. Third, some children play on the sand or the planting areas, so it is useful if they can wash after this, because they do not live close to the site. Fourth, people cook food at some sites and they need a source of water to wash and clean. Fifth, people who were walking in the Hilton Walkway commented that after walking they felt it was important to wash their faces and hands because of sweating. These points revealed from observations and interviews indicate that public toilets are important in open public spaces in Jeddah.

Most family users complained about the lack of public toilets in open spaces, and one respondent said “for my family visiting open spaces is a very important thing in the weekend that we do as a family but for me it is a nightmare, each time my kids want to go to the bathroom I need to take them in my car and to look in the area for a restaurant which is embarrassing sometimes to go to restaurant to ask for bathroom, or I need to look for the nearest mosque so my kids can use the bathroom there”. The last statement was similar to many other responses from family users who were interviewed in different spaces. Therefore, the demand on local cafes and mosques for use of their toilet and washing facilities is high, although some users of open spaces could urinate behind planted areas, and particularly children, which increases the problems of hygiene.

6.3.4 Safety and security

Most participants explained that their fears for safety and security did not relate to theft or harassment, but to the location of the site. Most of the study sites were located close to streets and roundabouts with heavy traffic, and family respondents explained that sometimes they did not feel secure when they used these spaces because of the way Saudi and non-Saudi people drove in Jeddah. One Saudi female said “I fear for my kids when we come to the Corniche because there is no place far from the car where we can sit, and if there is any spaces it always crowded.” She added “most of the people drive in an uncivilised manner in Saudi Arabia especially the youth, and I am always afraid if a car accident happens, as where we sit a car could easily can hit us, because we are
not sitting far from the street and there are no barriers which can help to reduce this situation if it happens” [F/S/35].

Other safety concerns of respondents related to illegal residents, such as Ethiopians and Somalis, who were hawkers and came to these sites with horses and motorcycles that they rented, but also rented to children who would be under the legal age for this in public places. These responses also show perceptions of difference and illegality, particularly for those of different races and cultures. In addition, the absence of security and safety for these activities were major problems. During the interviews at the Hilton Walkway, the researcher observed a girl driving one of these motorcycles, and because she did not appear to know how to drive it, she had an accident and hurt herself.

Several family respondents mentioned that the lighting in Al-Rawdah Garden was very low at night, which they thought threatened their safety generally, but did not identify any specific element of danger or threat. A Lebanese female respondent commented “I just do not feel comfortable because the light is very low in here.” In contrast, family respondents who used Al-Jafali Mosque Garden did not use this after sunset, because it had no lighting and they feared theft or harassment, because their perception of levels of crime in that area was high. A Yemeni female respondent mentioned that “I do not feel safe for me and for my kids; we usually leave before sunset because this area has a lot of illegal residents” [F/Y/38].

It has been mentioned that most families cook food at different sites, such as the Hilton Walkway and Al Rawdah Garden, and use either a charcoal barbecue stove or gas cylinder stove. It is important to mention that at all the observed and study sites there were no designed places for barbecues and cooking food, which could annoy other users, because the direction of the wind could spread the smell of cooked food. Some sites had marks where the ground was already burnt, such as Al Rawdah Garden and in the Corniche.

6.3.5 Vandalism and anti-social behaviour

Some respondents reported that a few people who used open spaces in their neighbourhood or public areas in the city of Jeddah did not use them appropriately and this was often expressed as showing a lack of respect, such as vandalism and graffiti. According to the interviews, observations, and the researcher’s experience, this
vandalism does not generally reach the level of personal abuse or harassment, and users who were interviewed did not stop using these spaces because of fear of exposure to anti-social behaviour. However, although no instances of users claiming that anti-social behaviour stopped them from using specific open spaces were noted by the researcher from the interviews, it is likely that some local residents’ perceptions of the potential threats posed by anti-social behaviour could deter them from visiting these places.

During the observations, graffiti was often spray painted in open public spaces, but with less damage caused to hardscape features when compared to the streets of Jeddah, where vandalism was a greater problem than spray paint graffiti, which was believed to be caused mostly by young Saudi males. One Saudi female interviewee commented “I saw a group of males writing and drawing on the benches of the Hilton Walkways, but I can’t speak with them or even tell them what they are doing is not good, because they won’t listen to me.” An elderly Egyptian male respondent said “We always see boys drawing on the walls but we can’t do anything and there is no specific number we can call for such abuse.”

The findings showed that patterns of use of public spaces are influenced by perceptions of how behaviour should be controlled, so that patterns of use in desert spaces are being practiced in urban park spaces, where local residents have an expectation of different standards of behaviour. Therefore, some users of urban public spaces have insufficient experience or understanding of designed or managed public parks, where users are often in close proximity to many other users with different perceptions of patterns of use. As a result, activities that are acceptable in desert spaces, such as cutting tree branches, drilling holes in the soil, playing with stones, lacking attention to cleanliness of the site after use and sometimes urinating could explain why these sites are often misused.

6.4 Key findings

6.4.1 Who uses open spaces? (Users’ diversity)

The observations of open public spaces in Jeddah show that Saudis, migrants, disabled and able bodied people, families, individuals, males, females, children, the rich, and the poor all use these places, but each have different ways of using open spaces and different times to enjoy these places. Similarities of how and when they use the open spaces are evident, as well as differences, which support previous findings of place attachment and identity for users of public open spaces despite their diversity. Users are
shown to have favourite places to meet with friends and families, to meet with those who could speak the same native language if different from Arabic, to remember special events or people, to escape from the stress of daily life and to carry out favourite activities, such as cooking food, playing sport, talking with family and friends and exercising. The typology of sites often created specific attractions, such as the desert to experience traditional life and to escape controls of behaviour, the Hilton Walkway that provides females with a relatively safe place to exercise, parks and garden spaces that offer sports facilities, such as basketball and football pitches, for groups of younger people, and spaces that have become places of attachment for people linked to memories. Urban spaces in Jeddah have been shown to be important to local people despite the drawbacks of poor design and maintenance.

During the observations, it is clear that there is a diversity of users in Jeddah’s open public spaces, which could be explained by the city’s significant population diversity, and diverse nationalities using open public spaces in addition to the large number of Saudi users. The participants that were interviewed represented this diversity in the category of users, which included Indian, Pakistani, Filipino, Indonesian, Syrian, Lebanese, Jordanian, Somali, Sudanese, Egyptian, Moroccan, Palestinian and American. These findings show that the typology of spaces in Jeddah has a strong influence for migrants, such as types of plants that are associated with their countries of birth, or hardscape features that provide specific memories of native cultures, or viewpoints, such as coastal places, that remind migrants of similar places in their home countries, so that connections are made by these users with their homes, families and friends in their own countries.

Users of the open public spaces do not represent any specific segment in terms of income level, but low to medium income groups appear to use places more in the south of the city than in the north, and more in the south part of the Corniche. Most users of the open spaces travel to these places by car and this element is used to assess the income of site users, as well as the interviews that were undertaken at these sites. Age and gender vary greatly in the sites that have been studied, both for groups and individuals, and for men and women. Male users are observed using the case study sites after dark more than female users, and family groups tend to use these open spaces more at weekends and during holiday periods. These patterns of use are shown to influence different groups of users, as young male groups often play sports away from
groups of families cooking food to respect privacy. Those users seeking quiet areas for reflection or reading avoid busy places, but findings indicate that perceptions of local people at all the study sites showed a distrust and fear of migrants, which might dissuade some groups from using public open spaces.

6.4.2 How are open spaces used? (users’ activities)

The findings from the observations, interviews and the previous discussion suggest that outdoor open spaces in Jeddah provide opportunities for physical activities, recreation benefits, and social interaction for both Saudi and non-Saudi users.

Most participants use public parks as social places for gathering, chatting, and to meet friends and make new friends. The second most popular use is physical exercise for sites, such as at the Hilton Walkway and at desert sites, as well as public open spaces in Jeddah that offer facilities for sports, such as basketball and football pitches. The findings also show families that gather at the Hilton Walkway to cook food and talk with family members and friends often walk for exercise before their social and cooking activities. Desert sites also offer opportunities for physical activities that have been mentioned earlier, which could include more strenuous physical exercise.

The diversity of cultures, age, gender and income contribute to a noticeable diversity in the way people use open spaces in the city of Jeddah. These factors affect the way people use and understand these open spaces, and how these spaces meet their needs. Some sites are used to entertain and socialise within family groups, but other sites are perceived as places to escape. All case study sites show a range of patterns of use, and no sites are used for one specific purpose, although some sites have areas designed for physical exercise, such as basketball and football pitches for young males, which could affect the activities and patterns of use of others, such as users gathering to meet with friends and family members, or for those with place attachment to a site that could rekindle memories of home countries or family and friends in native countries.

The way people use these places also depends on the type of visit and the duration of the visit, and observations of open spaces for this study reveal that certain activities occur at a site because of its design and could not be performed at other locations; for example, most users of the Hilton Walkway indicate that they come to walk for exercise in preference to walking for exercise at the Corniche, even though the design of this
waterfront space would not provide particular problems for walkers. The researcher suggests that the Hilton Walkway could be a more popular site for walking for exercising, as many others follow this pattern of use, particularly women who can wear appropriate tight fitting sports clothing, but at the Corniche there is a greater variety of uses by different groups of people, and some people walking for exercise might feel embarrassed if dressed in tight fitting sports clothing. Therefore, findings show that people use open spaces in Jeddah for gathering with family and friends, physical exercise, cooking food, socialising and for children to play that could be described as active activities, as well as people using open spaces to escape, relax and revive memories that could be described as passive activities.

The patterns of use of local residents of designed open spaces show that they are used well, but that this use is influenced by the time of day and differences between weekdays and weekends and holidays, so that open spaces are heavily used at certain times. However, some residents in Jeddah prefer to use informal open spaces, such as roundabouts and strips of land along the sides of streets and motorways for recreational purposes. The use of these areas does pose significant safety, health and management issues, as these areas are neither adequately equipped for public use nor regularly maintained.

6.4.3 When are they used? (time and duration)
Time and duration of the visit is of special interest in the study of open spaces in the city of Jeddah, as observations and interviews reveal that the residents of the city use these spaces for different lengths of time that depend on the activity and the reasons for the visit. Identifying the time of the visit is based on the participants’ interviews, and also relate to the activity and the reason for the visit, so that the time for walking is different from the time for a family gathering or children playing. Most users who come to the open spaces for the purpose of walking prefer to spend their time at the site between 4 pm and 7 pm. However, some people who want to walk could not come to the site at these preferred times due to daily concerns, work or family commitments, so they use the site after 8 pm. In some locations that have been studied different types of users are associated with the time of the day at the same site; for example, in Al-Juffali Mosque Garden most users are families until sunset, but after that male youths represented the main user type. With regard to desert visits, the length of the visit depends on the users and their ability and preparation to stay overnight for a few days.
Some of the participants indicate that they only use these spots before sunset. The pattern of times of prayer in Jeddah often means that people are away from their homes during these times, and so people often select a nearby favourite place within an open space for prayer. The climate of Saudi Arabia influences when open spaces can be used, as hot temperatures during the summer mean that many people remain indoors, but at other times public open spaces can offer spaces with shading that encourage their use. Religious festivals, such as Ramadan and Eid, also influence when people use open spaces, and some respondents comment that they choose not to use public parks during these times.

6.4.4 Selecting sites to visit and sitting spots

The interviews and observations provide the researcher with a grounded understanding of why people choose specific places to visit over other places, as well as choosing a sitting spot. Most participants comment that travelling away from their home was the main goal. “If we go to a place near our home it never makes us feel that we had fun, even my kids never feel happy if the place we are visiting is close to home” one participant said. Many interviewees express the same perception of a car journey and travel to the visited site, and some participants explain that they drive for more than an hour to reach the visited site.

Choosing the sitting spot for some families is related to their custom; for example, Saudi male family respondents explain that they always try to choose a sitting spot far from all male groups or individuals. In contrast, migrant family respondents suggest that the sitting spot is chosen based on the view, a clean spot and shady or sunny areas. Observations reveal that some families use a sculpture as shelter, so it could protect them from the sun and also use the sign boards. Some participants explain that choosing their sitting spot is based on places they used previously with a family member or friend, which is discussed further in the next chapter.

Summary

This chapter has discussed patterns of open space use to investigate when, why and how residents use designed and incidental open spaces in the context of Jeddah, as this is insufficiently studied in previous research. Barriers are also evaluated for patterns of use within an urban context that include the factors of culture, society, religion and
gender. The following chapter examines motivation and attachment in using open spaces.
CHAPTER SEVEN
MOTIVATION & ATTACHMENT IN USING OPEN SPACES
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7.1 Introduction
To address how place attachment shapes the values and meanings of public open space is one of the aims of this research. In order to achieve this aim it is very important to investigate the ways that people with different axes of identity develop place attachment, share meaning and develop responses to specific places. This chapter lists stories of the unusual and exceptional, as well as conventional events that occurred in the studied sites. These stories form examples of place attachment in the outdoor open public spaces in Jeddah with particular emphasis at looking at differences between Saudi Arabian users and migrants. These stories and events are derived from the semi-structured interviews in the selected case study locations.

This chapter is divided into four main sections based upon the themes that emerged from the data analysis. These themes are as follows: 1) personal perception of health and wellbeing; 2) escape to nature and being away from everyday life; 3) reviving memories in open spaces; and 4) social life within open spaces. The findings in this chapter demonstrate that place attachment is a useful concept for understanding the values of public open spaces in the context of Saudi Arabia. These findings are referenced to demographic factors, which are nationality, history of migration, age and gender. According to the interview analysis, it is clear that there is generally a difference between the perceptions of Saudi and non-Saudi users. However, there are also some similarities in the way that users develop place attachment and perception that are explored further in the following sections.

7.2 A personal perception of health and wellbeing
This section addresses how participants believe that they interact with the open public spaces in ways that help their health and wellbeing. Many people use public open spaces for walking to promote their health and wellbeing, and findings show that many respondents demonstrate place of attachment for escape to a specific site to enjoy a natural landscape and fresh air. However, these findings show specific place attachment for some sites, such as the Hilton Walkway, which links walking for exercise with the shared qualities of enjoyment of walking with other users specifically for females. This
dimension of place attachment is relatively un-researched in the literature, as females in Saudi society have to meet cultural and social expectations in outdoor locations, but many females gain a sense of freedom when walking in a safe environment with other females at the Hilton Walkway, so that they are motivated to walk at this site and identify attachment to the place.

In the past, it was rare to see someone walking outdoors for exercise; as one of the research participants said referring to “People would make fun if they saw someone walking outdoors” [Saudi male 42] because it was not a normal event that was seen within the country. Nowadays, it has become normal and within the restrictions of very hot weather, almost everywhere people are seen walking outdoors and “even seeing women jog outdoors” [Saudi female 36]. During the observations carried out to identify a typology of open public spaces in Jeddah, male and female, young and old users were observed walking almost everywhere around the city at different times of the day and night. However, it should be noted that these findings are based on observations and interviews at public open spaces, and there would be other people living in Jeddah that do not use these urban spaces for reasons that would be beyond the scope of this research.

The Ministry of Health announced a national campaign to combat overweight and obesity in Saudi Arabia. The role of media has been an important factor in this campaign, which has contributed to people taking more care about their wellbeing, and have become more aware of their health and appearance. Both the observations and the interviews confirm that a major use of public open spaces in Jeddah is walking for fitness and health. The interviewees said that they like to walk whenever they can, which confirms the author’s personal impressions, which are that walking for health and fitness has increased steadily in popularity in Saudi Arabia in recent years. Although the government campaign to raise awareness of health issues would have contributed to greater use of public open spaces by citizens of Jeddah, cultural habits are normally difficult to change, so other factors could influence this increase in people exercising, such as changes to religious attitudes towards women exercising in public open spaces, and particularly with regard to what are they wearing. Women’s prominence in society in Saudi Arabia has been deliberately raised in recent years by the government, and this enhanced freedom for women to leave their homes might have encouraged greater opportunities for exercise.
Health and fitness have become more important as a public health issue, because over the last five years the government has started to advise people about their general health. Jeddah has warm and hot weather; however, people do not see this as a barrier to their practice of walking in open spaces, nor do people have a specific time for walking, as some even walk during the day during Ramadan whilst they are still fasting. Significant points are mentioned by the interviewees regarding their perceptions of walking outdoors, and how this can play an important role in their lives. The key reasons why some of the participants choose to walk in public open spaces are: the “scenery” [Jordanian male 46], the need for “fresh air and oxygen” [Lebanese female 32], to be “slim”, [Saudi female 22] to “lose weight” [Saudi female 25] and for the purpose of “socialising” [Egyptian female 31]. For the walking activities the majority of the participants stated that the Hilton walkway is the most important destination for them to practice walking. Therefore, walking in public open spaces takes place for exercise or sport, and for travelling to local destinations and socialising with family and friends living locally, as there is a pattern of high use of private cars in Jeddah for most journeys due to habit, convenience, insufficient public transport facilities and high temperatures.

In recent years, “the Saudi society becomes aware of the walking and the benefits of walking outdoor” [Saudi male 31], which they now believe “walking becomes very important in our daily life” [Saudi female 22]. One of the women said that “walking outdoors became a part of my life and I am really happy that the society is not preventing us from doing this” [Saudi female 27]. One of the participants said “I became more aware” and another one added “I have the knowledge of the benefits of walking outdoors which help me in my health and life” [Saudi female 27]. The majority of the Saudi women who were interviewed in this research, agreed that the freedom that they look for does not mean that they want to give up their traditions and heritage, but they want to play their part within the society and that they can help to improve it. “To be present in public places where we see a large group of women who are walking outside makes us feel safe, and that we have freedom and that we belong to the community” [Saudi female 27]. Walking outdoors for Saudi women is one way to have more independence without conflicting with the traditional norms and culture. It has also helped some of them believe that they belong to Saudi society.
Mostly, both male and female participants who were interviewed gave similar responses to what one of the interviewees said “walking outdoors is much better than walking indoors” and “on the electronic machines” and “to exercise in the gym” [Saudi male 24]. The participants were trying to identify that they prefer to exercise outdoors more than the indoors. Saudi interviewees said, “walking outdoors is more attractive than doing this exercise indoors”; another one added “while you walk outdoors the scenery is changing from point to point, but on the treadmill it is boring and nothing interacts with you such as air, sun and other people who walk” [Saudi male 35]. The majority of participants believe that walking outdoors benefits them “It is more open and I feel free to walk the distance I want and they way I want” [Saudi female 28]. When they walk outside nothing can control the way that they want to walk. It is true that the path where they walk constrains the walking area, but they are outdoors and can walk in any direction and in any position that they want.

It seems that most of the participants who were interviewed preferred to be in outdoor, open spaces instead of indoor, closed spaces, such as shopping malls, cafes and restaurants. Other participants preferred to go to indoor spaces, because of “the lack of quality in the outdoor open spaces” [Saudi male 24]. The previous points were derived from some of the interviewees who said they came because of a gathering of friends, but normally they prefer not to be in outdoor spaces. One of the participants said that “being outdoors has less control than indoors” [Saudi male 35]. In addition, “walking outdoors is more attractive than walking in the gym” [Saudi female 28]. Most of the interviewees said that walking outdoors, especially in the Hilton walkway, can occur at anytime during the day and night, because the site is safe and the presence of other people enables them to be on the site at any time. One of the participants emphasised this by saying “I cannot go to the gym at any time, because it is not open 24 hours” [Saudi female 24] and others said “I cannot afford to pay for gyms” [Saudi male 24]. The Hilton walkway is available 24 hours a day for people and it is free of charge and this why participants see it as a very special destination.

Some of the participants said “I love walking here because of the higher percentage of oxygen” [Saudi female 27]. This type of response moves on to physiological dimensions. The participants believe that by walking on this site it can provide them with fresh air, because "there are a variety of plants which can offer us oxygen" commented one of the participants. The area is seen as a source of oxygen. In the
researcher’s opinion, individuals see places such as the Hilton walkway, as places for new fresh air and quiet relief from the surroundings of the tumultuous urban domain. Theories and concepts underline the importance of fresh air for people. The need for "fresh air" was mentioned in most of the interviews within all of the study sites, which could relate to air pollution, caused by high use of private cars in Jeddah.

Participants believe that visiting public open spaces helps them to gain this "fresh air". One of the participants said "when I step outside my house and smell the air, it is a relief to me and makes me happy" [Saudi male 24]. He continued to say that "the view and architecture pollution is ruining this feeling", and commented about the different architectural styles and the poor quality of the street furniture. A respondent said "when I go out to this garden and feel the fresh air around me, I feel relaxed and happy" [Lebanese female 45]. Another commented "when I stayed at home, I feel suffocated and I go out because I need fresh air" [Saudi female 62]. These responses indicate that there is a need for fresh air, and they can have it by going out to the open spaces or even by stepping outside their homes, but sometimes this feeling is affected by their surroundings.

The focus of the previously discussion presents the view that people believe that walking outdoors provides physical and psychological benefits. Another group participants stated that walking outdoors is not only beneficial to their physical needs, but it also develops wellbeing. They stated that “walking outdoors make me feel happy” [Lebanese male 34], and another commented that “walking outdoors can reduce anger and help me to think and plan many different things that are related to my daily life” [Saudi male 43]. Some respondents explained that there were so many positive feelings about being outside at the Hilton Walkway that they could not always describe these clearly, such as “not describable” [Saudi female 52]. Participants were trying to explain what they feel about being outside. One said "it's very important that the people who are researching and designing these open spaces know what users like and want" [Lebanese female 45].

The majority of participants mentioned the words "helping me mentally", "relax", "happy", "cheerful" and many other feelings that they gain by being out in the open public spaces. It might relate to the first place that they have known and was designed as a walkway, or it is because it is next to the sea, even though the sea is not in sight.
One elderly Saudi woman commented “I cannot see the sea but I can feel it, it's near here and it makes me happy” [Saudi female 52]. She loves the sea, but she prefers to walk on the Hilton walkway, which is 10 minutes walk to the sea.

One respondent commented “I love walking and looking at people. It makes me feel happy seeing women looking after their health, men taking care of their bodies and kids playing around” [Saudi female 52]. She added “The Hilton walkway is very famous and I have some friends from Riyadh, and when they come to Jeddah they ask to visit the walkway, not once but every time they come to Jeddah”. Background research confirms that the walkway has a reputation in Saudi Arabia. People from all ages, genders and nationalities use this place, as well as people from different income bands. During the field work the researcher interviewed a princess who was walking there. She said that she liked and enjoyed this place more than the gym in the palace. She also added that many members of the royal family also use this walkway and according to her conversation with them “they prefer to be out in the public sites and to be away from the busy life”. These observations suggest that users of the Hilton walkway represent a variety of people from different socio economic status, although the scope of this research cannot quantify this in precise terms.

One of the interviewees stated that the “invisible interaction with the mother nature” [Egyptian female 38] is a greater feeling than the place itself. “Sunshine, fresh air and vegetation” [Egyptian female 38] is what they really need and this why they visit public spaces. As many scholars have found, people link to nature (Tyrvainen et al., 2007). People love to be in sites that have natural elements, such as plants, water, sun, sky and other natural forms (Hansmann et al., 2007). People enjoy touch, smell and feel natural elements (Degen and Rose, 2012). During the observation the researcher found users touching the plants in a subliminal way when they walk or when they were sitting next to the plants. One respondent said “I love to be touched by the air and the sunlight” [Saudi female 24], and another said “I love to breathe the fresh air when I come to Hilton walkway, because the air on this site is mixed with the sea drops” [Egyptian male 40]. Many of the participants feel that planting is a part of their life. They enjoy seeing plants and they try to find places full of plants. Some participants explained the type of plants that they have and love. Some of the participants said “me and my family enjoy sitting on the grass and touching the plants” [Lebanese male 43].
Another participant said “I come to the Hilton walkway just to sit on the sand and watch my kids playing” [Egyptian male 63]. This response can present a unique difference that is based on the nationality and culture of his homeland. His love and attachment to his tradition was not affected by being away from his homeland, but he was trying to relive his memories and experiences of his native home in Jeddah. He also commented “I always look for sites that have a sandy area to enjoy”, and particularly the sand play area at the Hilton Walkway and also said “I do love Jeddah and consider it my second home”.

This concept of health and wellbeing can be overlapped with the pattern of use, and some can argue that the previous responses are not related to attachment, as it is the type of use that the site provides. According to the observations and interviews, the participants believe that walking on the Hilton walkway, for instance, has an influence upon their lives, and offers meaning to their life in different ways. They can walk anywhere across the city, but they do not feel that they have the results for which they seek. The people who were interviewed in the Hilton walkways identified this by walking to a specific distance along the Walkway that makes them feel fit and slim for those who want to lose weight, to be relaxed for people who suffer from health issues, to be happy for those who try to look after their mental health. They cannot feel the same way if they walked in other places, as they explain that they have an attachment with this site and do not feel embarrassed as many other people use this area for exercise. This public open space has become a place of attachment for people to improve their wellbeing both physically and mentally, and the factors that have influenced this are shown to be more than only exercise.

Some participants said “I tried to walk elsewhere but it's not working for me, because I am not feeling that I am getting any benefits” [F\S\28]. It seems that the users who exercise by walking in this site believe that the Hilton walkway site is playing a role in giving them the physical and mental health that they seek. During the interviews in the Hilton walkway, and especially with participants who felt that this site benefits their health, participants were encouraged to interpret this site to discover a collective quality, and whether there was a spatial ease to navigate this place as the value of open spaces or as a place attachment. Some of the interviewees commented that “this site has people who are trying to seek the same goal as me, so it is helping me to see a competitor and especially if this competitor is someone I know like a girl from the
university where I study, which make me feel more enthused by achieving my goal of losing weight” [FS24].

The researcher has also attempted to analysis the passion for this place with regard to its name. There is no sign within the site having the name “Hilton Walkway” on it. People have named this place simply because it is near to the Hilton hotel. It might be that the word ‘Hilton’ linked to the name of this place gives it the feel of hotel luxury and greatness. However, this site has been defined by the activities carried out across this space, and the respondents have implied that an informal ‘club’ has evolved of people who exercise and share similar priorities.

7.3 Escape to nature and away from everyday life
The concept of escape to nature, which was touched upon by the participants in this research, can be divided into two main sections. The first one is the desert, and the second is the public open spaces across the city. The natural landscape of Saudi Arabia is mostly desert, and there are few areas where plants can grow naturally due to the hot, dry climate. Poetry and stories about the nature of the country refer to the magnificence of the desert within the context and mountains of the old Saudi lifestyle. On the other hand, some Saudi people feel that the artificially irrigated areas where plants do grow are a very important part of their lives, as well as the desert. According to the observations and personal knowledge regarding the users of the desert sites, the majority of users are Saudis.

7.3.1 Escape to outside the city
Despite the development that has swept through Saudi society at all levels, and the civil control that regulates the lives of most Saudis, it rarely affects the links and the intimate relationship between the people and the desert and life outside the city areas. Saudis may bring a tent and light a fire within the walls of their homes and gardens in the cities, alongside their villas, swimming pools and gardens, but it fails to create the atmosphere that many seek by visiting the desert. One of the interviewees said “the desert has its own magic and spiritual effect, and it is very difficult to bring this into the city context” [Saudi male 38].

Going out to the desert is an important event in the lives of Saudis. It is a priority on their agenda, especially in the inland areas and the cities, which are away from the
seaside. Each time a cloud appears in the sky, or if it rains on a place that has nothing except trees, sand and stones, or whenever the winter comes, people rush to their cars and gather their families together to go to the desert “to sit on the sand dunes, which have turned dark because of the rain, or to build tents and light fires to spend a night of quiet within the confines of the stars and the moon” [Saudi male 42]. As mentioned earlier, people enjoy interacting with nature. They feel happy when building a shelter tent to spend the night in the desert and to have the sky as their roof beneath the shining stars. This is because they want “to escape from the pressures of everyday life and concrete houses” [Saudi male 42], and to be away from the noise and congestion of the cities.

There are a number of reasons why most Saudis go to the desert, but the most prominent reasons relate to the concepts of freedom, ownership, contemplation, restorative environments and memory, as illustrated by the comments of some of the participants, is the desire to be in “the atmosphere of the past, the simple life in the desert, to be far from all aspects of civil and urban development, being alone with myself, to filter my mind of worries, to solve life’s problems, escape from the congestion of cities which is full of cars, colours, buildings, sounds, lights, and many other pattern of the urban life” [Saudi male 38]. Some participants said that they choose the desert more than the other open spaces within the city of Jeddah, because the desert “isolates” them from urban life that provides an environment for restorative purposes. People considering the desert as a shelter from “the brick and the concrete”. They love to enjoy “the view of the horizon and the sky and the earth without a hitch, and to be in contact with sand, grass and gravel”, and to enjoy “meditation in three natural colours only extended in the field of sight, which is blue, yellow and green” [Saudi male 42] which reflects the concept of contemplation. Visiting the desert “does not mean only an escape from the bustle of the city, but being in a tent or preparing food there. Every single action that we did in the desert has its own special taste in my point of view,” [Saudi male 40], which indicates a concept of ownership of spaces in the desert for patterns of behaviour.

As mentioned earlier, the Saudi Arabian desert is an important element in Saudi life. The desert represents a part of the heritage and nature of Saudi Arabia, and participants love to go there, as it is part of the traditions and customs to some Saudi families. Users are motivated to visit the desert during special seasons as this attachment represents
freedom. In addition, they consider it as the “freedom place to be in the earth”, [Saudi female 36] because they believe that “there are no rules except nature’s rules” [Saudi female 36]. When a woman goes to the desert with the family group they behave as if they are at home with regard to dress, because the distances between each group in the desert is far and males take this into their account when they build the tents and set up the places for sitting.

They also feel that they own the spot where they always gather. Some participants commented that by visiting the desert, the “sand” makes them gain a spiritual feeling, because of the scale of the site scale and the huge mountains and the “God creation” which can make them “live in a moment of hope in the ability and greatness of the Creator” [MS\42], which indicates concepts of ownership, contemplation and restorative environments. One interviewee commented that “the nature, both the green one and the desert, are the best places to see God’s power and the greatness of the Creator”. One participant believed that “every part of the city is created by God; even the built environment that God gave us the knowledge and the ability to create”. Seeing the “mountains covered by the sky and having the sands as ground” [MS\38] on the desert and its huge scale made them think more about God’s blessings and mercy on their lives. These responses show the spiritual and religious dimensions of place attachment. A Saudi female said “the construction of the desert is magnificent and these structures are what make us come every time”. Another commented that by visiting the desert they “enjoy and feel that humans are part of this structure” [MS\42].

Several participants said that they collected a few things from the site, which they can keep as a memory of the site. One respondent said “I do like hiking in the desert. I go there every weekend and this is because I like to discover new places, to be far off the modern artificial and industrial life in the cities. It refreshes my soul and gives me a chance to enjoy the challenges in my life. After each trip, I come back to the city with a great energy, more focused and very nice memories. I used to take something from each place I go to, a plant that I look after in my home, a stone which I can use in my room as a decoration or sometimes, and don’t laugh, I used to take some of the sand. I like it, because it makes me remember that place and anything that smells natural and make me feels free” [Saudi male 32]. These responses suggest the concepts of ownership and memories are important for motivation to visit desert sites and attachment to specific sites.
7.3.2 Escape within the city

The word “nature” was mentioned in almost all the interviews. During the interviews with both Saudi and non-Saudi participants, the researcher found that they believed that everything green could be a part of nature. Some stated that “The air on the street is nature, even if there are no natural elements” and the “birds’ sound is nature”. According to the responses of both Saudi and non-Saudi participants, they identify with the use public open spaces, because they just want to go out. They want to be away from “concrete” [Saudi female 28], to be away from the “artificial life” [Syrian male 34] and not to be “surrounded by walls” [Saudi female 28]. They feel that being out isolates them from all the artificial elements that surround them in the city. An elderly Egyptian man said “the urban blocks are having a bad influence on our lives; the only place that can help us to feed our emotions is nature” [Egyptian male 54]. They feel that visiting open spaces is “an important mission of their daily lives” [Saudi female 24]. In addition, based on many studies such as Edensor (2000), being outdoors and having more interaction with nature can provide people with relaxation and help them to escape from their everyday lives. They go to the open spaces to walk, relax, and sit on the grass, gather and many other activities. These activities “can have a great impact on my life because I see this place as a shelter so I can escape” so they can “unload all the negative energies” [Jordanian male 32] which they “obtained from the daily life”.

Some participants expressed their belief that being outdoors “recharges and empties my power and my body and soul energy”. Some of them have no doubt that nature is “a pure place even if it’s not like western nature”, but by “seeing the sea, birds, trees and the grass can help me to relax and enjoy even if it’s not designed and maintained like western places”, whilst others interviewees had no specific reasons why they feel that way about the nature. Saudi and non-Saudi participants stated that “routine” is what they want to escape from. Some of the Saudi and non-Saudi residents of Jeddah are aware of the influence of nature in the West, which is based upon their personal knowledge and the media, and one respondent echoed the sentiment of this impatience and asked “Why does Jeddah have no open spaces and gardens designed and maintained like the USA? It is not hard to have it and it will make our lives much better, and give the city a better image too” [Saudi female 24]. Another said “daily life is boring, and there is nothing new; this why we run to open spaces almost every day. We go to these open spaces or to the Corniche” [Lebanese male 43], which indicates this
respondent’s need to escape to open spaces. There were many different feelings expressed by participants, but it all focuses on one concept, which is the need to visit open spaces and the wish to be outside and to have more interaction with surrounding nature in order to escape from everyday life.

Many studies support the concept of escape, and attachment to natural places, as well as cities and urban surroundings (Edensor, 2000). The significant point regarding Saudi participants is that they need nature and they know that “it is not existing in the best shape and quality” [Saudi female 28]. They tried to compare it with other nature in other countries “...it’s not like western nature...” and they “dream to have well designed and maintained open spaces so we can really escape” [Saudi female 32].

7.4 Open spaces as places for reviving memories and deriving meanings
This section deals primarily with the untypical events and stories derived from the interviews at the study sites. The data is unique, because it proves a significant existence of place attachment within the study sites. These exceptional events form the link between participants and these places where each story occurred. Each of the studied sites has different characteristics and themes, as do the stories. Each of the stories presents a different type of relationship with the place itself, with an event within the site or with the site components. This section investigates the meanings of these sites through narratives and events. The meanings are not exhaustive: they represent a selection that the researcher has found in the time available for the collection of data for this research. The stories are explored according to open space typology.

7.4.1 Waterfront
The following interviews took place at the Corniche in Jeddah. The majority of participants using the Corniche site commented that they have special feelings and links to the sea. From the interviews and observations of this site, there were three important stories within the Corniche site. The first interviewee was an old woman, who used a wheelchair. She sat facing the sea with her servant. She came from Makkah, which is two hours away by car, to Jeddah and another 45 minutes travel time in order to arrive at the Corniche. She said “I just love to come and sit in front of the sea. I used to come here with my mother, but she died two years ago. My mother loves this site and especially this spot, because it’s next to the mosque”. When the researcher asked her what the site gives her in everyday life, she replied “Sometimes I remember her when I
come to this place, this place is full of memories, because we used to laugh and talk and enjoyed our time here”. She was expressing her feelings of the sea by saying “the sea is a special place; it is full of memories and secrets for everyone. I think not only me. This place is the best for many people to hide their feelings in sea and, people I know always go to the sea to tell it their problems”.

One of the special points about this woman is that she travels with her servant and with her driver every day from Makkah to Jeddah. She stays for between 2 to 4 hours and then she goes back to Makkah. She states that she has nothing to do and prefers to sit in front of the sea alone, rather than sitting with people. She said “the sea is a special place; it is full of memories and secrets for everyone. I think not only me. This place is the best for many people to hide their feelings in sea and, people I know always go to the sea to tell it their problems”.

The second story from the Corniche was with an individual Saudi man who was waiting for his wife to finish her time at a family gathering. He said “I was wondering where I could go until she finishes, and then I realised that the only place I can enjoy is the sea”. This man considers the sea to be his second home, because each time he feels stress he goes to the sea. He surprised the researcher when he said that “I pass by the sea every day”. He lives in Al-Harazat, which is a small town near Jeddah and he works for a private company in Jeddah. The sea is not located within the travel distance between his homes and his place of work. He said “I've been working in that company for three years and I'm doing the same thing each day, passing by the sea. Sometimes I get out of my car just to sit for 10 to 20 minutes, and then I leave, It can make my day, it makes me feel relaxed and happy and I can start my day with a really good attitude”.

According to one respondent at the Corniche, the sea was described as a “box of secrets” [Saudi male 43], but this phrase was also representative of many other
respondents’ perceptions and ideas of the sea. Some said that they love “to talk to the sea”, and one interviewee added “I love meditation near the sea, and to see the sky and the whole atmosphere”. This participant said that “sea waves can make me feel alive, because it's active. I feel that it gives me a great power so I can start my day, and each day that I cannot come to the site I feel sad and angry and stressed”. He added “there are many books and poems that explore the sea, and its glamour; it's all true because most of what's written in these books relate to me and most of the people that I know, and I can see it in myself”. Being away from the sea was difficult for him, as he commented “I travelled for about one month with my father, because he was sick, and we went to London. It has no sea, but only a river. I was depressed most of the time, because I think water plays an important role in my life, It's strange feeling and it makes me feel happy, and especially Jeddah Corniche”.

The last interview that has a link with the Corniche is with a group of family and friends from the Philippines. According to this group, they love this site, because it has the sea and they really enjoy their time. However, there is another reason why they choose this spot to gather. There are Manila palms (Veitchia merrillii) in the planters that are located on the street. “These palms are able to give us the feeling that we are not away from home”, they said. For them it is very significant spot, because there is a part of “their home” on this spot. These findings provide a context for transnational place attachment, as these stories attempt to explain feelings and attitudes associated with respondents when they leave Jeddah to travel abroad, as well as those of migrants who are living and working far from their native countries. Therefore, place attachment is shown to be important to people within a transnational context, which could also indicate childhood memories of their home country.

7.4.2 Parks and Gardens

Al-Jafali Mosque Garden
This site is located where capital punishment takes place in Jeddah city. The interviewee who has a story linked to this site is a Saudi woman in her late thirties. She was sitting on one of the benches, facing the sea and reading the Qur’an. It is unusual to see someone reading the Qur’an in public open spaces, and it was for this reason that the researcher chose to interview her after she had finished her reading.
During the interview, the researcher asked her “How often do you come to this place?” and “Is there another place that you visit in Jeddah?” She replied that “I come to this place every Friday, and I don’t think that Jeddah has other appropriate open spaces that we can use”. She added “I am not using the place. I grieve here”. The researcher realised that there was something related to capital punishment and reading the Qur’an. She continued by saying “The implementation of the capital punishment happened to my husband here a long time ago, so I used to come here just to read the Qur’an and pray for him. God please his soul”. She was confused about the location of this place, because it is located within the context of the city. She said “It is very difficult to understand how the government built this garden next to the capital punishment place. It is very unusual to join things for recreation and something very ugly. I don’t know how people can sit here and let their kids play in this type of place”.

This place has both negative and positive attachment for the woman. The negativity is based upon the execution of her husband at the site. She was grieving, and trying to remember her husband. The positive link is that she comforts herself by reading the Qur’an. She felt “peaceful” and “relaxed” when she did this. She could do this at home, but according to her response “I prefer to do it here in front of the sea. I feel closer and feel more related”.

**Hilton Walkway**

There are two groups of participants who have special events and links to the Hilton Walkway, which is mentioned in the previous sections in the context of health and wellbeing and escape from everyday life. Both are family groups: the first family’s relationship with this site is related to an event that happened to them at the site, but the other family’s perception is related to the design and context of the site.

The first event within the site is related to an Egyptian couple who married recently. They brought two chairs, which they placed on the grass so that they can see the sea. When the researcher asked them about what the site gives them for everyday life, he commented that “this site has had a special meaning for us here, because it is where I first meet Lubna (his wife) with her mother. I hadn’t seen them for 3 years; we were neighbours in Egypt and they moved to Jeddah before us”. She added “We were friends, very close friends and because of my father’s work we moved to Saudi Arabia”. They both commented that this site “represents our future and very sweet old memories;
when we have kids, I will tell them that I found the love of my life on this site, maybe they can too”. These memories could also reflect childhood memories of living in Egypt that were rekindled when meeting again at this site.

“Beauty of the trees, the positive energy of the people who walk and the planting on this site is what makes us come to this site” was the response from two Lebanese and Egyptian families visiting this site. These two families knew each other through their children. At the beginning of their visit to this site they did not know each other, but “every time we come here my children play with the Khalid sons, and this happened more than once, and because of this we decided to gather together each time we come to the Hilton walkway”. Ahmad’s wife added “It is very nice to know friends from other countries. Each time we want to visit this place we plan it together to know what is suitable for both of us and what is the best time to meet in this beautiful garden; it helps us socialise more”. When the researcher asked them what they liked and disliked about the site, Khalid’s wife said “this site is very beautiful; we all feel that it is very special for us, and especially that there is a variety of planting in the site”. Her husband added “to be honest, in some corners and parts in this place I do not feel that I am in Saudi Arabia: I feel the atmosphere of Hawaii and the Caribbean, which is why which we always sit here” and he pointed, like a movie director, to a special spot. They also added “the nature of this place, and the reason that we chose it to be our recreation area is because it reflects much of the nature of Lebanon”. Khalid also stressed that “many of the trees and plants are also in Egypt and helps us to feel less homesick for our home and environment”. Migrant workers in Jeddah demonstrate the importance they place on memory that provides a place attachment in a new geographic location, and could also generate childhood memories of their home countries.

These findings show a recurring theme that migrants visit open spaces as a way of connecting with their native country. Some respondents indicate that they had developed place attachment to various places within the case study sites as they could rekindle memories of their homes, families and friends. These include softscape features such as special plants, or opportunities to gather with other migrants from the same country as groups of friends, or to make new friends and talk in their home language.
Al-Rawdah Garden

Each group of people who used this site saw it differently, according to their nationality. All the users interviewed at this site were non-Saudi. The following interviews present each one of the participants’ points of view of the site.

This site is a very “significant garden” according to all the participants visiting the site and they believe that “the simplicity of this site is what really make it beautiful”. This site is “designed in a way that all the trees surround the site on all sides and the green hills give the luxury and the beauty to the site” was the response of the Lebanese family who were interviewed on this site. This family visit the site on “Tuesdays, Wednesdays and Thursdays and sometimes on Friday”. According to them, they have visited this site “for almost 12 years”, and they added that the “site design has changed twice. At first it was only grass and walkways”. As mentioned previously in the Open Public Space Typology chapter, this site has some concrete structures located on the site gates and in the middle of the site. However, because of these structures, the Lebanese family imagine this place to be “Baalbek Castle”, which is in Lebanon. As the man, who is 64 years old said, “I see and feel Lebanon on this site. All these columns make me feel that I am not in Jeddah, I feel that I am in Beirut”. His daughter confirmed this, and added that “the site is very beautiful, and that the greenery and trees do not make me feel I am in Saudi Arabia. As you know, Lebanon is known for its greenery and natural beauty. This site gives us these feelings”. Her husband added that this site is also known as “A Lebanese garden”, and they are very happy that it called this, because it makes them feel “part of the society” he said. This site makes the majority of the Lebanese families who were interviewed on this site feel at home. This was not the analysis of one family, but comments from other Lebanese families also visiting the site, which emphasises the importance of memories of home countries for migrant families in Jeddah.

Another family group that has a different perception of the site are from Syria. They moved to Jeddah in 1995 and they have been using the site for about 10 years. This family group consisted of a husband and wife and their three children. According to them, in Syria there is something called ‘Siran’. This word means the family gathering outdoors, and it usually occurred within natural sites around the country. This open space has a good planting structure. The husband said “Planting here is very nice and it is not like the other places around the city”. His wife commented “I love, I love, I love this place. I feel like I am in Siran with my family with the green surrounding us and the
sky is blue. It really looks like the natural areas in Syria”. One of their children, a young girl, confirmed this by saying “I feel like I am in Halab, I love Jeddah.”

As discussed in Chapter 6, when referring to the patterns of the use at this site, people were share food together and help each other if needed. This family was making a barbecue. What distinguishes this family was that the wife was sharing her food with everybody in this garden. When the researcher asked her about this, she said “it makes me feel happy to do so. All the people here are from Syria, Lebanon and Jordan, and I feel happy to share my food with them, because we are from the same region, and I feel like I am at home and all the other users are my guests.”

The last interview at this site is with a Jordanian family who had been living in Jeddah since 1998. This family consists of husband and wife and two children. They had previously lived in Dammam, another big city that is located on the east of Saudi Arabia. Their point of view with regard to this site was different from all the interviews and observations at this site and in the other selected locations. Based upon their responses, they did not use any other open spaces in the city of Jeddah; they only used this garden. They considered that this park was safe for them and their children, and was well designed and beautiful with plants that distinguished it from other sites. The reason why they only use this park is, as the man said, because “Saudi society does not know how to use spaces and public parks, and Saudis users do not care for the place. The wife added “Before they leave they never clean it and return it as it is, but they rely on cleaners to do this job, and I do not know why they act in this way”. Her husband added, “My wife often said that she will talk with some families when we are passing by the Corniche; she wants to tell them that they must clean up the place, because this
place is for everyone to enjoy. I stopped her, because this is their country and it is difficult for us to tell them what to do in their own country”. It is their point of view that what distinguishes this site from others is “the absence of the Saudi users, and I hope that this situation continues, because if Saudi users know about it this place will lose its character and elegance”.

7.4.3 Civic Places

Al-Mahmal Square

This site is located within the historic area of Jeddah, as mentioned in the Open Spaces Typology chapter. This area is called Al-Mahmal Plaza, and is located between commercial buildings and the south waterfront of Jeddah. Four of the participants in this site saw this site as a significant place, representing the old Jeddah and their old life and childhood.

A Saudi woman, aged 74, expresses her feelings with regard to this site and the historical area in general. She was born in Jeddah, and spent her childhood in the old Jeddah city. She moved to Makkah with her husband in 2000, because living expenses became too high in Jeddah. Her two sons and two daughters accompanied her, and she was visiting because her husband works in the area. They came every weekend with their father to Jeddah, and in Al-Balad specifically. The older son added “I and my brothers come to help our father, and my mother loves this area because she was raised here and she always tells us stories about how she was living in this area. She always feel sad, because her family house and her neighbours' houses were demolished and so she always complains about that”.

The researcher attempted to involve the mother in the conversation, because she had lived in this area and, according to her son’s comments, she appeared to have attachment to this site, because she had lived there during her childhood. She was shy, and as mentioned previously, Saudi society is very conservative. This elderly woman’s dress indicated that her family had maintained traditions and customs in their lives. She was wearing the old style veil, which is now rarely used. She started talking by saying “We are a normal family. I encourage my kids to come to this place, because it was here that I and their father grew up, and it might be after we die they can still come to this place to remember us,” she added.
When the researcher asked her what she liked and disliked about the site, she replied that Al-Mahmal Plaza, according to her grandmother, “was very important in the past, because it was a place for cargo loading and shipping a very long time ago, as it overlooked the Jeddah sea port. This place has a special spirit, and the atmosphere here is very glamorous. Unfortunately, this spirit will be forgettable and my children and grandchildren will not know anything about it, because there is nothing representing this history’. She added “the old Jeddah was a heaven on earth in the alleys and the lanes. I hope that God forgives the municipality and all the people who are destroying our heritage and history”. What was unusual about this woman was that there was a strong material and spatial awareness quality to her comments when she talked about the fabric of the city and its spatial layout. These responses specifically highlight the importance of childhood memories that correlate with place attachment.

This historical significance of Jeddah was also mentioned by an elderly Yemeni female whom the researcher interviewed in 2009 relating to a study of public perception of this site. When the researcher asked her this question “What does this place give you from everyday life? How does coming here benefit you?” she replied that “I spent my childhood with my family all my life, and my memories are all here, me and my family and my mother and my grandmother. I lived and grew up here, so what do you expect I benefit from when I come here? I remember myself and my sisters, God have mercy on them, and how we were playing and walking and how we lived our lives here. It was a great day and our life was perfect. I respect all the technology, but I still love the simplicity, such as walking in the alleys with my sisters and mother and how I first met Abu Mohammed, my husband.” Her responses to the questions carried great meaning, offering a deep attachment to her old life in this place. During some parts of the interview, she shed tears, which added both passion and emotion about her old life in Al-Balad. In drawing a picture of the place in her mind, she was pointing with her hands and referring to places where she walked and where she remembered a significant memory in the area. She added “Believe me, my whole memories and life is here. It's true that I live next to the holy mosque in Makkah, which any Muslim dreams of, but still my feeling and emotions are here in old Jeddah”. Clearly, for this woman, this place was her link to the past, and she believed that visiting this place enabled her to be in touch with her past. Childhood memories again demonstrate their strong link with place attachment.
The next story came from another Saudi woman, aged 34 years old. She said that this place had a special meaning for her, because she used to come to this place with her late mother. When the researcher asked her about why she visited this place at that time, she answered “I used to come here with mama and she love Al-Balad, because it has a special spirit in her life”. She was talking about what her mother believed, and she loves what her mother thought of Al-Balad. She added “It’s not only the Al-Balad, I can feel mama everywhere, because this place has special memories of my mother, and she loved it so much”.

The next interview was with a group of females who came to enjoy the spirit of Ramadan in Al-Balad. One of them said “I am really enthusiastic to see what Al-Balad looks like, I have never been here before, but so far it is beautiful”. When the researcher asked about the benefits of visiting this place, one commented that “this place has a different taste than the other areas in Jeddah, it might because it is old, and old is gold”.

7.4.4 Incidental Land

The following interviews were conducted on the sides of the tunnel, which is near the medical entrance to the University. People who live around the area use this site. In this part, there are three interesting interviews that are significant with regard to this research. Two will focus upon the spirit of the city, with the other exploring a special event that takes place at this site, which relates to the concept of place attachment.

The first group of five Sudanese men were aged between 50 and 75 years. They said they always came to this site each weekend to socialise. They were playing cards. They were sat next to the kiosk, which provided them with tea and then they played cards. When the researcher asked “What does this place give you from everyday life? How does coming here benefit you?” they stopped playing and totally changed the subject from about the site to Jeddah as a city. One of them said “Jeddah is like jadah”. “Jadah” is an Arabic word, which means grandmother, and the way of writing grandmother is the same as writing the name of the city in Arabic. He added “Jeddah possesses the passion and the love of the grandmother, it is a loveable city with all the problems in the city. You can’t hate it or not love it”. Another one of them said “I’ve been to many cities in Saudi Arabia, but I like Jeddah and I feel happy when I go out and walk
anywhere within the city”. The third man said “Jeddah is hugging us and make us feel at home. It is really like a mother when she looks after her kids”.

My second interview was with a group of male Jordanians. They visited the site each day, because they lived near to the site. One 54-year-old Jordanian member of the group said “I come here with my son and my grandchildren, as well as some of my friends.” The Jordanian man said “I love Jeddah, I really love it, I am not telling this seeking nationality, but I really love it and don’t ask why”. His son said “It’s true, my father’s relationship to Jeddah is like the relationship between fish and water”. One of his friends stated that “each time Jamal goes to Jordan he feels sick; not something serious, but he always says, take me back to Jeddah so I can feel better.”

The previous two interviews express feelings that relate to the city overall, and indicates how migrant participants perceive Jeddah. The speakers in these two interviews were non-Saudi and one felt sick if he travelled away from Jeddah, and the other felt that Jeddah was like the love of a grandmother and a mother towards her children and grandchildren. Two metaphorical feelings reveal how some migrants see the city, and is clear evidence of place attachment to the city. It is an interesting finding that place attachment can exist at different scales. We can contrast this strength of feeling with the men’s presence on what is effectively a road verge. These migrant men were regular users of this poor quality marginal space, but could articulate a deep sense of attachment to Jeddah as a whole. This space enabled them to come together in social groups, and to feel a sense of being in a good place.

The next interview expressed feelings about the site itself and was with a Saudi female group. The group consisted of 3 girls and their mother. According to one of the girls, she said “we come here 3 to 4 times each week and stay for about one to two hours”. Their father had died and they had no males in their nuclear family. They used this space for recreation and to spend their free time. One of the girls said “to be honest, we just come here because our mother loves this place. She loves the green area around the site and she does not like the crowded areas. She love this place more than shopping malls or cafes, and she hates to be in the house all week”. During the interview questions about the history of using the site, the researcher asked “how did you find out about this site?” Their mother replied “I knew this place from a long time ago; I used to come here with my sisters 4 years ago”. According to her statement that she used to
visit this place with her sister, is evidence of an existing link to the place. When she said this, one of her daughters said “Yes, they usually gather on this spot”. The mother was hesitant to express her feelings about the site, but it was obvious that she had a special bond with the site.

7.5 Social links in open spaces

This research presents a study about the social use of public open space in Jeddah, Saudi Arabia. The previous discussion of attachment in open public space focuses upon the ways that people develop place attachment and share meaning in response to a range of urban space typologies. This section presents results from interviews and observations relating to the theme of social benefits associated with the use of public open spaces, and specifically looks at the differences between Saudi and non-Saudi users.

People need to rest after their daily work or at the weekends, so that they can renew their energy and feel relaxed and be ready for another day of work. For many this means being surrounded by family members and close friends and is an important context for relaxation. This is more difficult for migrants who came to Jeddah for work, even for some who have settled for a long time in Jeddah. The majority of the non-Saudi interviewees find that public open spaces are the best place to socialise, to escape from homesickness and to see people from their own country. Common reasons for non-Saudi people to use public open spaces in Jeddah included “to see people”, “to interact more with the Saudi culture”, and “to let our kids merge with Saudi society”; however, the findings also show that the space most used by non-Saudis was not generally used by Saudis, which tends to contradict these responses, and could indicate a bias of these respondents in wishing to impress the researcher. Responses to questions to reveal what people achieve socially by visiting public spaces in Jeddah show a focus on how migrants feel with regard to Saudi society and how they were try to become “part of the community”. This section explains how participants socialise in public open spaces in Jeddah and if this bond exists with Saudi users.

A young woman at the Hilton walkway said “I enjoy watching people walk, kids playing and family gatherings; it can show you the social life they have” [DS32]. There are also other social activities, such as eating outdoors, gatherings, kids playing and many different outdoors activities. According to a 37-year-old Egyptian participant
referring to the Corniche “these activities can show us that Saudi society is welcoming us and they are not bothered because we are in their land. The nice thing is that we share food together and our kids play together, which shows us that we are accepted within the community”.

By creating a place in the city for such social activities, open spaces fulfil both migrant and Saudi users’ need for engagement with society, and can create benefits. When asked about social activities that take place in public open spaces, an elderly Lebanese woman commented, “might additionally make the social interaction of being available and collaborating with different people from different nationalities”, both directly and indirectly. However, findings suggest that some Saudi users have negative attitudes towards some migrants and demonstrate anxieties about personal safety, so they often gather in family groups. In contrast, migrant workers tend to use public open spaces to meet with others from the same native country, or to use places that remind them of their home country. Although some respondents from both groups show intentions to improve social interactions between Saudis and non-Saudis, so that public open spaces have the potential to create links between different members of the community.

Creating, building and socialising in open spaces are very spontaneous and cannot easily be controlled, according to one participant. He said “we always sit on this spot, and there is another family who almost always sit in the same place next to us. We are in an open area so it's easy to look anywhere, and you might look at them and smile, or my kids might play with their kids. Quite quickly we start talking and greeting each other and sometimes we are worried if they do not appear for a while, and you ask them the next time you see them”.

The responses from this interview make a valuable contribution to this research as it relates to the perceptions of migrants towards elements of open spaces. These responses attempted to clarify how some migrants identify attachment to specific open spaces as an association with their home country. Another respondent stated that “seeing people from our home country make us feel in Lebanon” and another one commented that “some elements are representing home, like the Manila palms in the Corniche make us feel we were in the Philippines, and we were sorry when they removed them”.

The sea plays a critical role of forming place attachment ties in Jeddah, and mostly for the migrants. People from Egypt, and especially from Alexandria, feel at home when they are next to Jeddah Corniche. One of the participants said “water makes me feel at Alexandria, it is the same water and sky; the difference is the location, but I totally feel at home”. An Egyptian participant commented that “open spaces are like the big home, you can have people from different places around the Middle East, and the trick is how you can be friends with each one, regardless political views or religion”. Open public spaces help to create links between members of society, but also create a sense of attachment for diverse groups of the community.

Numerous open spaces in Jeddah are recognised and understood to represent an ethnic presence, or a space within a neighbourhood that is identified by a specific group of residents; for example, the Al-Balad area in Jeddah where most of the residents are non-Saudi. The ethnicity of open spaces frequently reflects how individuals comprehend differing social qualities of open spaces and how they discern the uniqueness of diverse places.

In addition to the interview, site observations attempt to reflect users’ perceptions of this ethnicity. Some Saudi participants said that most of the open public spaces “are full of foreigners”. This was not meant in a derogatory manner, but reflected a positive image of the city that there are many nationalities of people living in Jeddah. Another Saudi participant commented “the most special thing of the public spaces here in Jeddah is that it is multicultural, and regardless of gender, age, nationality, religion and political beliefs. All of us are here enjoying this space, which is really nice to see within the city”. Although issues of racial prejudice are revealed by some Saudi users, these views do not appear to be expressed openly to migrants, and respondents also value the multicultural context of Jeddah, and accept that Saudi Arabia needs the many migrants that are currently working. However, concerns are expressed about some migrants that are perceived by the respondents to be living and working in the country illegally.

**Summary**

This chapter discusses the motivations and attachment to open spaces found in Jeddah, so that place attachment shapes the values and meanings of these spaces for users with different axes of identity to create place attachment, share meaning and develop
responses to specific sites. These findings are based on storytelling methods adopted for the interviews, which show events that are unusual, exceptional and conventional for Saudi users and migrant users at the case study sites. In addition, this chapter examines the importance of memory in strengthening place attachment, which correlates with childhood memories, but also addresses the concepts of freedom, ownership, contemplation and restorative environments.

The next chapter discusses the research findings by connecting the results to theory by evaluating the data collected, and link these results to the theories discussed in the review of literature.
CHAPTER EIGHT

THE DISCUSSION OF THE RESEARCH FINDINGS
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8.1 Introduction
This chapter integrates the results from the previous three chapters, connect the results to theory by evaluating the data collected, and links these results to the theories discussed in the review of literature in Chapter Two. The discussion highlights and analyses the key findings to support the aims of this study, and explains how this extends the knowledge of this field, and in particular simulating and testing theories and how these theories could be culturally embedded within the Saudi Arabian context. These findings should be valuable, as the distinctive use of public open spaces in Jeddah has been rarely documented, even though there is some commonality with other Arab countries. However, Jeddah presents a unique case study focus, because it is a tourist city for most pilgrims as it is close to two holy mosques in Makkah and Madinah, and many visit the city during these times. In addition, the diversity of residents in Jeddah makes it a multicultural city.

This chapter is divided into three sections based on the research aims explained in Chapter One. In section 7.1 the differences in the pattern of usage of public open spaces in Jeddah is discussed according to speciality, temporality and identity. This section highlights cultural norms and geographical norms, which are different from the American and European context. This is important due to the prevalence of environmental psychology and leisure studies research in Europe and the USA. It highlights users' motives when visiting and using open spaces in Jeddah by classifying these motives into three categories: mental wellbeing, physical wellbeing and social wellbeing. The discussion of these two sections addresses the first aim: To investigate how residents use design and incidental public spaces in the Saudi Arabian urban context.

The second aim of this study is: To address dimensions of place attachment in shaping the values and meanings of public open space across diverse axes of identity. This aim is discussed in section 7.2, which adopts Scannell and Gifford’s (2010) tripartite model of place attachment, which is an accepted framework for furthering understanding of place attachment.
Section 7.3 discusses the design and management quality of public open spaces, and evaluates opinions and issues expressed by users of open spaces in Jeddah regarding their expectations for these sites and those from the professional interviews. This section addresses aim 3: To identify some implications for improved planning and design of public open spaces to meet the requirements of local users in the Saudi Arabian urban context.

8.2 Temporal, spatial and identity of public open spaces use

The review of literature for public open space mostly presents findings of studies from Western and European countries, where patterns of leisure and use of open spaces have been well documented. The key finding of this section is that in Jeddah the pattern of use for open spaces, as well as their type, quality and design, are different in important respects from other locations. This section attempts to fill this gap in knowledge by recording these patterns of use of public open spaces, and how these differ from those in Western cultures. In particular it addresses gender, age, temporal aspects of use, societal patterns of migration, and family. It is important to mention that some of these patterns of use of open spaces also are shown to inform a place attachment bond between the users and specific sites.

8.2.1 Typology of open spaces

From the comparisons between typologies previously developed in non-Arabic contexts and the identified open spaces in Jeddah, it is suggested that it is not appropriate to apply these typologies without due awareness of the Jeddah context (see Chapter 5, section 5.2, 5.3 and 5.4). Social, cultural, religious differences, geographical location, climate and the environment impact on the structure and the type of open spaces in different countries, as well affecting how people use and perceive these open spaces. Although Jeddah is unique, it provides a useful case study that might have resonances with other countries that have geographic, cultural and climatic similarities.

In order to gain an understanding of the concept of place attachment of Jeddah’s open spaces (aim 2) and people who use these spaces, it is important to have a clear image about the type of places that residents use. There is diversity within the open spaces that are used for different purposes by Jeddah residents. Therefore, it is important to create a new typology, and this study provides a classification of open spaces in Jeddah based upon the typology of open spaces, which is shown in Table 5.1, page 101. This is in
contrast to other studies that classify open spaces based upon the activities that take place there, such as Eckbo (1969) and Llewellyn (1992) who created a typology according to use. The discussion in section 8.1.2 introduces the use of incidental sites, such as road edges and roundabouts.

8.2.2 Accessibility to public open spaces

Ferre et al. (2006), Krenichyn (2006) and Lloyde et al. (2008) comment that having more local parks within walking distance of people’s homes is positively associated with the use of local parks, whereas the necessity of driving to reach a park often deters use (Henderson et al., 2001; Griffin et al., 2008). Findings from this research indicate that some people enjoy travelling to open spaces by car and they would find it more attractive if they could travel by another form of transportation. The research found that there is a lack of open spaces near to residential areas. There are other studies that indicate that the provision of accessible open spaces within residential areas and close to schools can enhance the life of residents and would be regularly used (Ferre et al., 2006); however, within the context of Jeddah, the patterns of use by local people indicate that many people prefer to travel by car to favourite open spaces, where the car journey is regarded as part of the enjoyment of the visit, which contradicts previous findings. Although these findings are based on observations and responses at case study sites, and non-users are beyond the scope of this study.

Mobility

Findings indicate that most respondents (Saudis and non-Saudis) prefer to travel to a specific site rather than using a garden or park that could be closer to their homes, if it exists. It appears that convenience is the most important factor that determines whether or not respondents travel by car. The ability to carry all the equipment necessary when travelling with children, including tables and chairs and the ability to travel from door to door, as well as around the destination, are all important factors that families consider when deciding to travel by car. The researcher also discovered that the experience of travel was seen as a positive experience in its own right for the majority of families who use open spaces.

Respondents consider the journey to the site to be integral to their visit. According to Price and Matthews (2013), people enjoy travelling in its own right rather than
specifically by rail or car; although each has its advantages and disadvantages, such as the cost and timing (Price and Matthews, 2013). In Jeddah, people consider the journey to the site is exciting, because of the visual attractions during the journey to the site, and especially for the children. However, there are those who visit open spaces for walking as exercise and find it odd to travel by car to exercise, yet have no other option of getting there. One participant commented that “I feel like I am doing something wrong, driving my car to a walkway rather than walking there”. The researcher discovered that there were users visiting some sites close to their homes, but they had to rely on their cars to get there, because of the poor condition and quality of the city pavements.

There are multiple reasons behind the high use of private transport in Jeddah. The primary reason is that Jeddah residents like residents in other cities in Saudi Arabia use cars, because there is no reliable public transport available. Recently, the Saudi government has considered a public transportation plan for the major cities in the country, and they have started building some of these routes in cities such as Jeddah, Riyadh and Makkah (Al-Sibai, 2013). In addition, the weather in Jeddah is hot and the humidity is high, which also makes it much more pleasurable for people to use their cars. However, there are times of the year when the weather is better and people can walk. One final factor to note is that generally public open spaces in Jeddah are not sufficiently planned for connectivity, so that these places are often in isolated locations.

There are advantages and disadvantages regarding the dependence on cars in Jeddah. The enjoyment, family time and the visual attractions during the journey to the site often mean it is not perceived as a problem for local residents. However, there are well documented reasons why it is a significant issue both for the city and individuals. Dependence on a car can create a lack of physical activity and health problems, such as obesity (Cooper et al., 2005). There is also the danger of many road traffic accidents, which are very high in Saudi Arabia. The country was in second place for the number of car accidents in 2008 and in first place in 2012 for the number of people who died from road traffic accidents (Alriyadh, 2014).

There are various studies that show that the use of cars is associated with pollution of the environment (Woodcock et al., 2007; Smith et al., 2013). A further disadvantage of car use is traffic congestion, since most of the population use their cars every day. There are also problems due to lack of provision for car parking, due to the rapid growth of
vehicle ownership and use of private cars and a greater demand for parking. Studies reveal that there is insufficient parking for the number of users at the Corniche and Hilton walkway sites. On the Hilton walkway, the users of this site park on the street, because of the lack of parking spaces, which makes it difficult for people who drive on this street to access their destination easily (figure 8-2). In terms of equality, there are also people who cannot drive, such as females, teenagers and elderly people, who do not have access to a car, although many families employ a male driver so that females can go shopping and visit family members.

![Figure 8 - 1: example for the parking behaviour at Hilton walkway site](image)

**Access to incidental areas and road spaces**

It has already been mentioned that the typology of open spaces is different in Jeddah (see Chapter 5, Section 5.3 and 5.4). One of the significant findings of this research relates to the typology of incidental roadside spaces, which is very different from the Western literature on leisure and open spaces. Individuals and families in Europe or America rarely see these types of sites as part of the open space that may be used for gathering as leisure and relaxation, although this typology is widespread across Arab countries, African countries and parts of Asia.

In comparison, sites such as road edges, sidewalks, roundabouts and motorway shoulders are used by people in Jeddah, and both by Saudis and by migrants. The reasons behind the use of such sites vary according to interviews with the users of these sites. For instance, some people said that they prefer to use the sidewalk, because of the poor design of the gardens and parks in Jeddah. The lack of cleanliness of the Corniche and the issue of rats force some people to stay away from these places. The cultural and
social contexts of Jeddah have shown that some people prefer to use informal spaces, such as pavement areas for gathering, cooking food and relaxation and show place attachment for places not designed or planned for these activities. Saudi families also have cultural traditions that often seek privacy in public open spaces, which differs from the patterns of use of migrants that often see privacy as less important, so that the Corniche study site attracts many tourists and local migrants, but often lacks spaces offering privacy for Saudi families. Some migrants enjoy visiting these sites, and let their children play there, and the children are sometimes given permission to roam freely. However, some use roundabouts for gatherings that have no specific reason to use this site other than they see these places as locally available open spaces to be used. It is also surprising that some of these roundabouts are located on busy traffic routes, such as the Alayah roundabout in Jeddah’s Corniche, and most of the users have children with them.

This issue raises the need to investigate the reasons for using informal sites further, such as pavements, roundabouts and motorway shoulders, as well as sites that are designed and provided by the Jeddah Municipality. This could be possible evidence of the failure of the Municipality to provide an appropriate and attractive environment for users, in terms of design quality to meet the needs of local residents. From observations, it is clear that sidewalks do not offer an appropriate quality. Is it that users seek privacy to enjoy their time with family and children, but cannot find this in the open spaces provided?

Bahammam (1995) proposes an important socio-cultural construct of a need for privacy that should be within the infrastructure of every society. The need for privacy is the major demand of every member of society and culture, although this is also culturally defined and spatially differentiated. Privacy is obtained by physical means in every built society, such as relevant planning, and the appropriate arrangement and order of space in ways that collectively assist in providing people with the privacy that they require. According to Islamic teaching, the concept of privacy is of significant importance both in term of cultural norms and for recreation. Privacy includes different forms of human need, such as territory, personal area and relationships. This form of privacy is not the same in all cultures. Each society has its own religious and cultural rules that help to maintain and protect various levels of privacy. The infrastructure of any society helps to define and predict the terms of such privacy.
In Saudi society, for instance, there are strict rules and regulations for privacy that control and manage patterns of behaviour in society, so that family groups that visit public open spaces normally seek locations that offer suitable levels of privacy. Therefore, groups are divided by gender, so that families sit in male groups and in female groups with young children. Older children normally form male or female groups to undertake recreation activities for formal sports and games that are physically separate from other groups to respect their privacy. These cultural, social and religious factors influence the use and perceptions of open spaces, which is a specific issue for females that are not permitted to meet with or speak with strangers. However, males are able to use public open spaces freely, and often use these spaces at night, when females remain in their homes.

8.2.3 Temporal use public of spaces

Responses of the participants indicated that the length of time that they spend in public open spaces is dependent on various factors, such as weather, location, site facilities and their own reasons for being there.

The length of stay during weekdays is generally different to weekends. It is important to give a brief explanation about the pattern of daily life in Saudi Arabia before identifying the temporal use of public open spaces in Jeddah. In Saudi Arabia, the majority of shops and malls are closed at specific times each day, as well as prayer times. Closure times vary between these places, but usually it is after noon (afternoon prayer) until 4.30pm, and possibly 5.00pm (after Asr prayer). It is rare to find people using open spaces, such as the Corniche or parks during these times. Additional reasons suggested for this pattern of use include the high temperatures in Jeddah, particularly during the summer months. To provide context, shops and malls are usually open during mornings and reopen after final prayer times until midnight.

Based on the interviews and observations, family groups, individual males and females start occupying open spaces after Asr prayer during the weekdays and stay for varying lengths of time. People who walk on the Hilton walkway usually walk for short periods of time, such as around 30 minutes. However, those who visit the same site for family or group gatherings stay longer. This was the case with almost all of the sites studied. There was an exception in the Aljafali Mosque garden, where females only use the site
between 4.30 pm and 6.30 pm, as the lack of lighting made them feel unsafe after dark. After 6.30 pm, the users are only males in groups or as individuals.

This scenario is different during weekends, as well as during Ramadan, Eid and holiday periods. Some of the open spaces, and especially the Waterfront in Jeddah, are fully occupied from the early morning. Some users prefer to start using open spaces after Asr prayer, because they are planning to stay longer than the weekdays. The most significant distinction about the length of time when using open spaces in Jeddah is that people stay until very late at the weekends, during summer and in Ramadan. Respondents report that on weekdays open spaces are often used until midnight, but suggest that these open spaces are often used until 3 am on weekends and especially during the summer. Some people remain at these locations until sunrise the following day on special days, such as during Eid and weekends.

The literature regarding leisure and open spaces use implies that in many countries use of public open spaces at night is generally viewed as unsafe or anti-social. In European countries, people do not use parks and gardens at night and later times during the day except in the summer evenings when it is light. People tend to engage in indoor rather than outdoor activities. In addition, these parks and gardens are not designed for night use, and there is also an issue relating to inclement weather. This scenario is different for Jeddah. In some cases, and supported by observations, it is often difficult to identify whether users at the waterfront in the mornings were arriving early in the morning, or whether they had been there since the previous day. In addition, the length of stay can depend upon the design of the site; for example, the existence of lighting and other people that make users feel safe and encourage them to stay for a longer period of time.

8.2.4 Landscape Perception
Jeddah is a coastal city, but can also be considered as a desert city and a city of green open spaces. The position of the city between the desert and the sea is evocative. Jeddah offers three forms of nature to the users of the public open spaces: seafront locations, desert locations and green open spaces. The findings in this research indicate a variety of views relating to specific forms of landscape that reveal participants’ different emotions and senses toward these landscaped areas of the city. People use specific spaces as they perceive these satisfy their needs, such as the woman who comes to Jeddah Corniche everyday from Makkah (See chapter 7, section 7.4.1), and also the
people who visit desert spots beyond the city, because they want to be isolated from the
urbanity of the city (Coles & Bussey, 2000). However, Burgess et al. (1988) finds that
some people intend to use local and not distant spaces, which contrasts to these
findings, as most respondents choose favourite public open spaces that require a car
journey to reach, but others choose informal spaces at the side of roads for gathering
and recreation.

The analysis of the findings reveals that some Saudi users are attracted to the nature of
the desert in part, because it represents the nature of the mother country, and the
heritage and traditions of society that stem from the desert. There are other studies that
discuss the beauty of the desert and the relationship between people and the desert
landscape in Saudi Arabia, such as Alturki, (2001) and Lemerick et al., (1992) in the
US. However, the majority of Saudi and non-Saudi respondents at the case study sites in
Jeddah mention that they prefer to use managed open spaces and sea spots. This is an
important finding as it shows that people’s preference of certain spaces and landscapes
depends on their experience of using them and being in the proximity of their
neighbourhood and city. In addition, this strengthens the argument of people’s
attachment with places that they know well, such as strong childhood memories, within
the context of Jeddah in Saudi Arabia.

Most migrant users and Saudis prefer to visit spaces that have a diversity of vegetation,
such as palms, trees, shrubs, grass and flowers that provide them with a sense of nature;
they usually look for sites containing diversity of vegetation, managed walkways and
selecting spots for enjoyment and relaxation, and especially migrants users. Migrants,
and especially those from Syria and Lebanon perceive spaces with high vegetation to be
evocative of their home country.

Some of the users commented on the Jeddah open spaces by saying “Why don’t we have
nature as in the West?” An analysis of discussions reveals that what they mean by
“Western nature” does not relate to nature as an undisturbed ecological state, but refers
to the quality and management of recreational places to visit. In addition, respondents
often mention that they used a certain site, because they want contact with nature, such
as plants and grass. The Hilton walkway, for instance, which is located within the urban
context of the city, is not natural. However, users enjoy contact with plants, seek fresh
air and sunshine and enjoy its natural qualities. Some visitors enjoy their visits to the
walkway, because they see it as a view of nature, as well as the benefits of walking. Constructs of nature are determined partially by terminology, but also are closely bound up with how people perceive and see nature and what nature means for them. For instance, for some participants, the air in the city represents nature and they prefer to go out, because of their need for “fresh air”, even if they know it is not really fresh.

The perception of nature in Saudi Arabia often does not relate to the site as a whole, but to the existence of features, such as vegetation and rocks. Based on the author’s experience, some Saudi people have brought the context of the desert into their homes by building a small tent house in the garden, complete with rocks and desert plants in some cases. This reveals their attachment to their own view of nature. Other people may design and build an oasis on their property, which is missing from the most of the study sites. The oasis is a part of the desert, and Saudi Arabia has many, yet none of the open spaces in Jeddah are designed or draw on the spatial or textual qualities of the desert.

8.2.5 Wellbeing

Mental wellbeing

Chapter Six presents users’ responses that overlapped with the theory of restoration. People express different feelings and senses that they believe they gain by being in different public open spaces, but it is important to highlight that individuals differ in terms of which sites and circumstances provide them with relaxation. The findings of this research generally support a broad consensus of previous findings (Nordh et al., 2009; Thompson et al., 2011; Guita et al., 2006; Cattell et al., 2008; Hansmann et al., 2007) that natural environments can provide a restoration quality and stress relief for people who use these spaces.

The findings indicate that open spaces in Jeddah are used for restoration and escapism from the daily routine of their lives. This view is supported by a quote from one Egyptian woman “I am here (Hilton walkway) to run from the business of my life, I had a stressful day and I need some time for myself”, together with another quote from a Saudi woman who said “I came here to the Corniche to recharge and empty my power and my body and soul energy”. Restoration theory argues that people experience exhaustion as a result of their constant daily routine, so they use open spaces as respite from the pressures of the city. According to Kaplan (1995), people do not need to be in rural to experience restoration, as within the urban context, there are natural elements
that support this (Kaplan, 1995). Users of open spaces in Jeddah find different ways to restore and escape from the “routine”, and Saudi and non-Saudi participants state that “routine” was what they wanted to escape from.

People perceive open spaces as places where they can relax and enjoy their interaction with the elements within open spaces, such as sunshine, air and plants, as one of the interviewees indicated “I love to be touched by the air and the sunlight”. Some respondents commented that public open spaces are ideal places to escape from the routine and the stressful lives they have, and perceive public open spaces as places where they could be away from the “concrete boxes where we live.” Maller et al. (2005) indicate that interaction with nature can be created by different settings to improve people’s restoration and stress relief.

People have diverse needs and the ideal place of restoration for each individual is also different. The favourite places to escape for young Saudi males are desert sites, as respondents consider the desert to be a perfect place to escape and for restoration, because it is isolated from the city. Migrant males identify the seafront located in Jeddah as their preference, and is part of the urban context as the road is less than 5 metres from the sea, but the scale of the sea layer in Jeddah could help to isolate people from the urban context. In contrast, young Saudi and migrant females prefer public open spaces and the seaside for the same reason. Younger female respondents comment that they enjoy experiencing the sun, air and plants that exist in open spaces, which creates the ideal place for relaxation and enjoyment. However, older Saudi male and female respondents prefer the seaside and some of the historical sites in the city. Most migrant users of public open spaces in Jeddah that were interviewed prefer to use public and green open spaces, but some demonstrate a preference to use seaside sites, in part because of place attachment ties with these sites.

The researcher notes that users of open spaces demonstrate sensory engagement, and enjoy interaction with the space, such as walking and exercising, or breathing fresh air or being touched by the sun, and to touch the plants. The findings of this study support previous studies of open spaces to reduce stress (Grahn and Stigsdotter, 2003), self-perceived health (Maas et al., 2009), reduced headaches (Hansmann et al., 2007), better mental health (Guite et al., 2006) and the quality of life (Hussain et al., 2010).
The restoration and stress relief concepts are identified at case study sites in Jeddah. In some cases, this was the motivation of participants to visit outdoor spaces. Other respondents suggest that they believe they gain these benefits by how they use the open spaces, such as gathering with family or friends, undertaking physical activities or walking by the sea.

This study finds that public open spaces, such as seaside or desert sites, are often places people use to escape from the ‘concrete boxes’ in cities (Bell et al., 2003; Coles and Bussey, 2000; Hansmann, Hug, and Seeland, 2007), and suggests that the use, interaction and perception of open spaces have stress relieving and restorative qualities for users.

**Physical wellbeing**

Health and wellbeing have become major issues in Saudi Arabia and specifically highlighted politically over the last five years. A national campaign was announced by the Ministry of Health in order to combat overweight and obesity in Saudi Arabia. As people become more aware of their health and appearance, they care about their wellbeing. More people are observed walking at any time of the day or night. Both the observations and the interviews confirm that an important use of public open spaces in Jeddah is walking for fitness and health. Many interviewees indicate that they like to walk whenever they can, which confirms the researcher’s personal impressions, which are that walking for health and fitness has increased steadily in popularity in Saudi Arabia in recent years. However, it should be noted that observations and interviews only include users of the case study sites of public open spaces in Jeddah, and it is beyond the scope of this research to investigate the opinions of non-users.

As the government has started to advise people about their general health, health and fitness have become more important as public health issues. Jeddah has a climate of high temperatures during the summer, which can be a barrier to walking in public open spaces. People do not walk at a specific time of the day, as some walk during the day during Ramadan whilst they are still fasting. The interviewees refer to significant points regarding their perceptions of walking outdoors, and how this can play an important role in their lives. The key reasons why some of the participants choose to walk in public open spaces are: the “scenery” [Jordanian male 46], the need for “fresh air and oxygen” [Lebanese female 32], to be “slim”, [Saudi female 22] to "lose weight" [Saudi
female 25] and for the purpose of “socialising” [Egyptian female 35]. Most participants who are interested in walking state that the Hilton walkway is the most important destination for them to practice. There are other locations in the city to walk, but most interviewees state that the Hilton walkway is preferred. As a landscape architect, the author supports users’ responses.

The review of literature indicates that physical wellbeing is represented in open spaces by exercise for people from different ages, gender and ethnicity, and findings suggest that access to open spaces or living near open spaces could motivate outdoor physical activities (Ellaway et al., 2005). However, the concept of exercise in open areas is understood differently in Jeddah, due to access to these open spaces, and society’s attitudes towards women exercising outdoors and the reliance on the cars.

This study focuses on the element of physical activities at the Hilton walkway site, because of its reputation among Jeddah residents for exercising, and specifically walking for users of different ages, gender and ethnicity. In addition, men run at this site, but not all the women can do so. According to the interviews, some women do run, but this can be problematic because of how Saudi culture perceives them. The leisure patterns of women in Europe and the USA differ from those in Saudi Arabia, as the prominence of women in society has only recently been promoted by the government in Saudi Arabia, but women in Western cultures have had less controls imposed on them for many years. Most respondents visiting this site took less than 30 minutes to drive there, which indicates their desire to walk at the Hilton walkway site even if they need to pass through traffic congestion on the journey from their residence or workplace. Families that visit the Hilton Walkway also use facilities for children’s activities in playground areas.

8.2.6 Religious practice in public open spaces

It is well known that Saudi Arabia is an Islamic state, which is based upon Islamic teaching in most of the affairs of life. Muslims pray five times each day, starting in the morning until evening, and each one of these prayers has its own specific time based upon the geographical location. Muslims are not allowed to delay the prayer time, and this is the reason why shops, malls, restaurants and all other services in the city are always closed during these times. According to the observations and the interviews, the users of the sites study and pray at these sites even if there is no mosque close to the
site. However, some of the users enjoy praying outdoors and in open areas, because they consider that this is more spiritual. Unfortunately, most sites are not designed to help people to pray. Muslims can pray at any location, but often prefer an area that is shaded and cool, and washing before prayer is important, so insufficient areas designed for prayer and lack of toilet facilities are two closely related problems. Muslims cannot pray without ablutions, and need to identify the correct orientation and direction of Makkah for prayer.

Praying is usually within a group for males, but this is not necessary for females as they can pray individually. When the time for prayer arrives, people instinctively try to find others so they can pray together. Prayer is the ideal way for people from different cultures and also classes to interact together. According to the interviews, it is also an ideal way to create friendships within open spaces.

The introductory chapter explains that during Ramadan, streets, houses and markets are decorated on the outside, because of this special event that takes place once each year. The sound of prayer in mosques and the busy nightlife after midnight and in the morning is what makes this month special. The sound of prayer in the mosques is an important element of Ramadan.

Open spaces and the Corniche are occupied after the evening prayer or the Taraweeh prayer until late by families and groups of females and males. It is similar to what happens during the rest of the year, but the demand for using these spaces is higher in comparison. However, this increased use of open spaces within the city of Jeddah does not compare to the intensity of use in the city centre, ‘Old Jeddah’. There is an increased demand by the number of users visiting Old Jeddah including local and regional residents, and pilgrims. Makkah hosts approximately 5 million pilgrims each year for Umrah performers, and many of these will pass through Jeddah.

The Old Jeddah area features traditional and popular markets that increase during the month of Ramadan, and which express the spirit of the past excellence of the old Jeddah markets. It comprises of shops offering the flavour of old and traditional foods, as well as ancient toys and games for children and adults. In some ways, this celebration is similar to Christmas markets that take place in Europe and America, but has a deeper religious dimension. The use of open spaces such as parks and the Corniche is what
creates differences in the celebration of Ramadan compared to Western festivals, such as Christmas. As mentioned earlier, people in Western and European countries prefer to take part in indoor activities, which is the opposite in Arabic countries and especially in Saudi Arabia.

The special magic during the month of Ramadan also highlights a wide range of planning and design problems in the streets, open spaces and commercial complexes. They were not designed to accommodate so many visitors. Traffic congestion is one of the worst problems during Ramadan; a journey that would normally take 20 minutes to travel to the shopping mall or park in the other months, may take an hour during the month of Ramadan.

8.2.7 Gender in culture and space

Males

The interviews with participants revealed a range of differences in the pattern of use relating to the gender of the user. Although males formally have more freedom within Saudi law, there are some issues that impact on their use of outdoor places. There is a lack of open spaces that can be used by young males for their interests, activities and gatherings. In some cases, the gatherings of young males can create noise and annoy women and families.

Most young men do respect the presence of families and women and try to gather away from them to avoid creating inconvenience for the other gender. This mutual respect and awareness by men of various ages and nationalities is based upon their religion, culture and traditions. Most male teenagers interviewed at unplanned locations for leisure activities, such as roadside spaces near roundabouts and pavements, as well as specific locations at the Corniche, explain that they select these to dominate the ‘best’ locations in a territorial sense, which contrasts with other open spaces. Therefore, these young males have established spaces for their own activities that would not affect the spaces normally used by females or family groups, and consequently avoid using various spaces already established by females and family groups at various locations within public open spaces and at different spots at the Corniche.

However, it is very important to create places for males to gather for activities within the city. The aim is not to segregate them, but to give them opportunities and a choice
of places where they can spend their leisure time. Males often gather in groups after dark, and often use public open spaces until very late at night.

**Females**

The interviews and the observations indicate that gender issues play a more important role for women than men when exercising in open spaces in Jeddah. Previous studies in Western and European countries (Krenichyn, 2004; Frank and Engelke, 2001; Shaw, 2001; Yerkes and Miranda, 1985; Madge, 1997) reveal gender roles in the context of public open spaces, and some studies report the fears and conflicts that women could face while exercising outdoors (Krenichyn, 2004). Krenichyn explores women's concerns regarding personal safety, and the findings of this research support these conclusions, particularly for religious and cultural attitudes of women’s activities in public open spaces. The prominence of women has been increased due to the support of the government in recent years, and responses from females at the case study sites indicate that they gain greater self-confidence by using outdoor spaces, and raise the profile of women in society to demonstrate their capabilities and potential contributions to society.

At the Hilton walkway site, female respondents report that they use this site frequently because it is open and crowded, which gives them the confidence of safety. Female respondents also express their concern about their presence on this site, as walking outdoors is considered a conflict for some conservative people within Saudi and Islamic society. Krenichyn discusses females’ “bodily comfort and physiological needs” and female respondents express their need more than men for toilets at sites where they exercise, because they feel their physiological needs are different to men, and also age plays a critical role; however, this is more likely to be that women would be accompanied by children who might need regular access to toilet facilities.

The dress code for females in Saudi Arabia is different to Western countries or other Middle Eastern countries, as Black Hijab and Abaya are the common dress code in Saudi Arabia, especially in public. However, findings reveal that females who exercise by walking at the Hilton walkway sometimes prefer to choose a light colour Hijab, because light colours reduce the absorption of sunlight as opposed to dark colours, such as black. This raises a conflict with Islamic teaching for some conservatives who claim that this reduces the safety for some women. In addition, Krenichyn mentioned that
“this freedom was sometimes compromised by harassment from men and boys”, and finds that women who exercise at the Hilton walkway are trying not to draw unwanted attention while they use the site. They try to avoid inappropriate dressing and walk at the side of the walkway path in addition, so that they reduce the probability of unwanted comments from males (Krenichyn, 2005).

Krenichyn (2004) indicates that people find exercising in open spaces to be more enjoyable than running on the streets, because the context of the site can encourage people to exercise more, which is shown at the Hilton walkway in Jeddah. Most respondents recognise that outdoors activities help them to improve their physical wellbeing. Hansmann et al. (2007) finds that over 90% of people believed that green spaces have a positive effect on their physical wellbeing (Hansmann et al., 2007), and this current research produces findings that support this earlier research.

Female participants’ responses to the question “What does this space give you from everyday life?” relates to the mental and physical benefits, and in some cases, social benefits. Most Saudi female respondents comment that they walk, because they believed it gives them the freedom they want within Saudi society. Female respondents who walk at the Hilton walkway believe that this is the appropriate place for them to walk in order to gain a sense of freedom, and to promote their social role. According to their responses, they want males to believe and understand that their presence helps to improve Saudi community. There is a clear focus on the lives of women in the Saudi Arabian culture, and the way that the community perceives their actions and their presence. However, it should be understood that this focus is not intended to limit or control the lives of females, but attempts to protect them from the small group of conservatives in Saudi society, who attempt to control and suppress females in all their actions and limit their presence within the society.

8.2.8 Social cohesion in public open spaces
Outdoor public spaces are for all to use, regardless of the demographic differences. Poor and rich, employed and unemployed, educated and non-educated, males and females; all of the city’s residents should be welcome to use its open spaces. When these places are designed, the designers must take into account the variety of people that will use these spaces and how it can bring people together. Outdoor open spaces in the city and in neighbourhoods offer gathering places and encourage social ties. Open spaces provide
the users with a sense of place, and it has different meanings for how people value and perceive them. It can help to shape cultural identity.

Users of open spaces find that these spaces are good places to socialise with the community. However, some of the Saudi users feel that these open spaces are only for them. An elderly Saudi woman said, “These foreigners are taking our men's jobs and also they want to share our places where we can enjoy and relax”. It is important to mention that, during the interview period, this comment was made only once. On the other hand, non-Saudi users value these open spaces as good places to interact with other migrant workers and to share their memories and culture of their home countries. The social ties and value of these open spaces are explored further in the chapter relating to place attachment.

Social interaction

Previous studies provide evidence that social meetings that are routine and regular help to maintain loose ties between neighbours and familiar strangers, as well as providing the initial steps of developing friendships, and these connections may take some time to establish (Cattel et al., 2007). According to Cattel et al. (2007), superficial interaction in many public places in the UK is limited to a smile and by saying “hello”. However, in Jeddah, in open spaces and especially with migrant users it often takes a deeper dimension. For instance, the two families from Lebanon and Egypt became friends because their children play together, and they plan their visits together. In time, they became family friends, with their relatives and friends were introduced to them. This social link started because of their children’s interaction in the garden. Although this might be an unusual case, it echoes a broader pattern of social interaction in the case study sites of public open spaces in Jeddah.

Another form of user interaction is when a migrant family, consisting of four people, visits the Alrawdah garden and they prepare a barbecue and invite all the other users without exception to share their food, including the researcher. In their view, it is a form of appreciation and respect to include the other users, and is another way of making friendships. This appears to be the usual practice at this site from other migrant groups, because other users behave in a similar manner towards each other. This is another distinguishing feature of the use of open spaces in Jeddah in terms of showing transnational spaces and the practices taking place informally. The researcher did not
observe similar practices by Saudi families, but it should not be assumed that Saudi families would not share their food.

Public open spaces offer a range of social benefits to users, such as promoting physical activities in open spaces, and improving mental health and psychological health. Public open spaces provide opportunities for social interaction, social inclusion and community cohesion (Forest Research, 2010), and are considered as places for gathering that give a shared focus to diverse communities (Martin et al., 2004). Jeddah city is the second largest city in Saudi Arabia and the population of the city has grown with foreign migrant workers who represent almost half the population of the city. How these foreign migrants perceive these open spaces creates provision for their social inclusion. According to Friedrichs and Jagodzinski (1999), social inclusion is more likely for migrants if they perceive public open spaces to offer social contacts, social networks, social support, and cultural and national identity (Friedrichs and Jagodzinski, 1999). Findings reveal that most migrants preferred to use the same public open place as other migrants, because they often feel that it represents social inclusion, which is supported by other studies that suggest that people often use the same open space (Seeland, 1999). Kuo and Sullivan argue that one role of open spaces is to improve and enhance social interaction, which was noted from the interviews with migrant users (Kuo and Sullivan, 2001).

Most responses from migrants relate to the social life that they gain by using open spaces, which could be classified into four elements: interaction with friends and family, interacting with other migrant users, interaction with people of the same nationality and interaction with people from Saudi Arabia. This research shows the most common interactions to be interaction between families and friends, and interaction between migrants of the same nationality from observations and interviews at the case study site, which are responsible for promoting social interaction, social inclusion and community cohesion. Cattell et al. (2008) suggests that open spaces are considered an ideal place for interaction between people where friendships and networks are made, as well as to provide a sense of community. Socialising in open spaces is responsible for promoting attachment to these places (Eyles and Litiva, 1998). These perceptions of making friends, family gatherings and interaction with the Saudi community outdoors presents opportunities for migrants to sustain social bonds, but less noticeably make bridges, and has a direct influence on their wellbeing.
Different public open spaces in this study reveal opportunities for informal social contact between users, such as the Hilton walkway and the Corniche, and regular use of certain spaces enables users to develop good relations. Open spaces appear to play a critical role in understanding the potential for developing inter-ethnic interactions, and these findings suggest that busy public open spaces, like the Hilton walkway, Corniche and Alrawdah garden, have an influence on wellbeing qualities, as well as social cohesion. These narratives could reflect broader patterns of interaction in society, although people could behave differently in public open spaces in Jeddah. However, findings also show that Saudis often make comments about migrant workers and illegal migrants that challenged these findings of social cohesion from informal contact. In addition, some migrants comment that anti social behaviour in public open spaces, such as litter and lack of care and consideration for others, is due to Saudi users, which also shows that relationships between migrants and Saudis are not always positive.

**Saudi society and servants**

Most Saudi families have servants, such as a maid or driver, and in some cases both of these. Based on the observations and the interviews, many females and family groups travel to open spaces with their driver because woman cannot drive. This results in drivers socialising as groups in these open spaces whilst waiting for the family to finish their gathering or walking. This is accepted, and drivers often gather together and have their own picnics, as well as walking on the Hilton walkway. In addition, Saudi families often bring their maids with them to the open spaces to help in the preparation of food, as well as looking after the children.

The review of the literature on leisure and the pattern of usage of open spaces does not reveal any comparative use of public open spaces. Although not uncommon in similar societies to Saudi Arabia, the servant is an ‘invisible’ undocumented practice. It is important to mention that the researcher finds that none of the migrants interviewed and observed were in the company of maids. Based on the researcher’s experience, it is rare for a migrant and his family to have a maid, even if the mother is working. However, it is important to have a driver, because of the ban on women driving in Saudi Arabia.

**8.3 Place attachment in open spaces**

Place attachment is described as the emotional bonding between people and places (Altman and Low, 1992); in addition, Chow and Healey (2008) describe place
attachment as a more unpredictable and multifaceted phenomenon, which includes the transaction of influence and feelings, as well as learning and convictions, and behaviours and activities in reference to a place (Chow and Healey, 2008). Scannell and Gifford (2010, PAGE) define place attachment as: “a bond between an individual or group and a place that can vary in terms of spatial level, degree of specificity, and social or physical features of the place, and is manifested through affective, cognitive, and behavioural psychological processes”. Scannell and Gifford (2010) state that place attachment is formed by three-dimensional frameworks that are person dimension, process dimension and place dimension.

The findings from the interviews and observations of open spaces in Jeddah suggest that these three dimensions are integrated. The individual or the group (person) is the main dimension of this framework because he/she/they are responsible for forming their own bonds with the specific site (place), because of physiological and psychological needs (process). Some places provide users with a point of transition to remember their home or other incidents, or form a bond to the place or one element within this space by activating their physiological and psychological needs.

8.3.1 Person dimension
According to Scannell and Gifford (2010), place attachment can occur at both individual and group levels, as this relates to the person or the group perceiving this attachment. Individual or group emotional and cognitive reactions to a place often occur through experiencing the place. Bourdieu (1984) suggests that people have diverse preferences and methods for acting based upon their background, and these characterise the extent to which they have the tools to act in the public arena. However, the person experience is the key actor in developing the bond to the place, but the density, time, the substance and consequence of the experience may influence the perception of a place. For instance, people’s attachment to their home or their home country displays a positive perception that their home has in their minds, so that the level of attachment to a specific place depends on their capability of associating with people’s physiological and psychological needs. Personal memories and experiences affect the level of place attachment, but individuals play the most important role in forming place attachment bonds.
The lives of individuals or groups are often responsible for forming the way that they feel attached to or detached from a specific place, because of their knowledge, history and demographic differences. The findings from this study reveal two different adult males interviewed at the Corniche, and the researcher discovers that each has an attachment, but for different reasons, to the Corniche. Ahmad, a young Saudi male, enjoys visiting the sea every day; because he feels it gives him a positive start to his day, and describes the sea as a “secret box” for his secrets. Ahmad finds the sea is the shelter for his problems and worries. In Arabic, there is an expression “... Throw your worries in the sea...” The findings from the interviews indicate that most respondents are convinced that the sea is the perfect place to remove worries.

The second respondent is Ali, an Egyptian male, who came to Jeddah to find work opportunities, and finds Jeddah waterfront (the sea) is a perfect connection between him and his home country. He often visited the sea in Egypt when he experienced a stressful time, and repeats this pattern of behaviour in Jeddah. Even though Jeddah is a different context, culture and geographical location, the sea gives him feelings of relaxation and a sense of home.

One young Saudi female respondent admits negative emotions towards a specific public open space in Jeddah, as her husband had been executed by capital punishment at this site, but she visits this open space to read the Qur’an and to pray for her husband. This respondent explains that this site exposes her to negative and positive attachment, where her husband’s execution at the site creates negative attachment, as she grieves and tries to remember him. In contrast, her positive attachment comes from reading the Qur’an, which makes her feel “peaceful” and “relaxed”. She could do this at home, but she said “I prefer to do it here in sight of the sea. I feel closer, I feel more related.” However, some people in the community could challenge her actions, as this conflicts with Islamic teaching, whereby women are not allowed to visit a cemetery or graves. Therefore, as this respondent’s action is contrary to Islam, if other women who had a husband or family member executed at this place carried out similar act, this would display an innovation in Islam, which would conflict with religious teaching, and especially for women.

This female respondent was afraid and asked the researcher not to reveal her identity, because this would cause significant problems in her family and within society. She
explains that “my mother always forbids me to do it, but I can’t stop myself from this”. It could be likely that others who have lost relatives or friends at this site could be carrying out similar actions, as in these cases of execution in public open spaces people might seek relief from their sadness without openly conflicting with religious teachings. However, it could be equally unlikely that others who had a relative or friend executed at this site would display the same feelings as the female respondent interviewed. Another female respondent at the same site comments that “when I pass by this place all my body is trembling from inside, because I know what is happening on this site”, but she uses this open space with her children, because it is the nearest to her home.

These responses indicate that a person forms the shape of place attachment based on his or her situation, needs and knowledge. These forms of attachment demonstrate similarities in the attitudes to those described in previous studies (Manzo, 2003), and analysis of the interviews indicates that place attachment is important in activating personal memories and emotions. This is supported by other research findings, and also improves the sense of self efficacy (Manzo and Perkins, 2006). The respondents’ socioeconomic backgrounds appears to influence their perceptions of outdoor surroundings and activities in public open spaces.

8.3.2 Process dimension

According to Scannell and Gifford (2010), the second dimension of place attachment is process, which involves three components: (1) affect, (2) cognition and (3) behaviour. The first component of the process is represented by the respondents as their emotional connection to a specific place. Scannell and Gifford separate memories from the cognitive component, but these findings are challenged by other studies that question whether emotional connection could exist without memories. Emotional memory adds credibility to the notion that thoughts can trigger emotion, just as the activation of emotion can create cognitions (Lerner & Keltner, 1999).

Most respondents to this study clearly express their personal memories and emotions when using a specific open space, as they remember someone and, in some cases, remember someone who was dead. Others enjoy visiting open spaces, and often emotionally remember someone or a special occasion. The relationship that people have with a place can formed by different emotions, which are revealed in this study by love when an Egyptian couple who explain that they had met at the Hilton walkway after a
long separation, eventually became married, and love this place because they believe that it had reunited them.

The psychological comfort derived from remembering someone is another form of emotion, which is revealed in an interview with a female in a wheelchair who comes daily from Makkah to Jeddah by a car and spends around 3 to 4 hours at the Corniche in the exact spot that she used to visit with her mother, who had died. This example explains that despite the death of her mother, personal memories and emotions remain positive, which explains her enjoyment of this spot, because she remembers her mother. These examples clearly support the process dimension of place attachment (Manzo, 2005; Scannell and Gifford, 2010).

In contrast, the loss and destruction of a place can form a negative emotion towards a specific place, such as natural disasters, war or redevelopment of a place, as is revealed in previous studies (Fried, 1963; Fullilove, 1996); however, this negative emotion is not generally apparent when analysing the interviews for this study. One respondent had come to Jeddah as a migrant to find work, but does not display negative feelings, because he was motivated by his own aspirations, but still misses his home country.

Although place attachment is often perceived to relate to good memories and experiences and explains why use of public open spaces creates a bond to a specific place, the responses of the young Saudi female whose husband had been executed at the site indicates her place attachment is influenced by negative emotions. These emotions had created place attachment, even though her actions would conflict with Islamic teaching, and she has to grieve for her husband in secret.

The second component of the process dimension of place attachment is cognition, which is revealed by respondents based on their beliefs, meaning and knowledge. To some extent it could also relate to what people do at these sites that could form their attachment to the place. According to Feldman (1990), individuals and groups can be attached to a specific type of place, such as sites that are natural like desert sites or places within the urban context (Feldman, 1990). The notion of a favourite place varies between the interviewees according to their knowledge and also what they are seeking from using these spaces, but the findings show that respondents have different favourite places to visit based on situations or occasions. However, one finding from interviews
with both Saudi and migrant respondents was not anticipated, which reveals that all respondents consider the sea as their most favourite place regardless of the quality and the design of the Corniche.

The analysis of the responses to desert spots in Jeddah indicates that most individuals or groups using these spaces are Saudi. The respondents comment that they believe that Saudi Arabia has been a desert for a long period of time, and although most Saudis now live in cities, they still believe that they were originally ‘desert people’. This indicates the sense of ‘rootedness’ that has a different level of attachment based on the user’s knowledge and background (Giuliani, 2003).

Place attachment as behaviour is the third component of the psychological process dimension. The concept of place attachment as proximity-maintaining behaviour is identified in studies that relate place attachment to length of stay in a specific place and migrants’ efforts to return to their home countries (Hay, 1998). Riemer (2004) notes that those who live far from their home countries have the desire to return, even if this involves high cost and effort. However, the findings from this study in relation to two male migrants conflict with those of Hay and Riemer. Khaled from Jordan and Othman from Sudan both explain that they have no intention of returning to their home countries, which indicates their strong sense of belonging to Jeddah more than their home city. These findings are supported by those of Hidalgo and Hernandez (2001), who explain that there is a positive bond between an individual and a certain place, but there could be economic or political factors that influence a person to become a migrant worker or refugee (Hidalgo and Hernandez, 2001). During the interview with Khaled, he indicates that he could not travel from Jeddah for any length of time, because he felt homesickness for Jeddah when he did. In addition, Othman explains that he travelled throughout Saudi Arabia and worked in different cities, but he found that the atmosphere in Jeddah was the best and considered it as his home. His attachment is an indication that place attachment can be territorial, a sense of self in that city or space, as supported by Altman (1975).

The concept of reconstruction is a behavioural expression of place attachment and could take various forms, such as when people are forced to relocate due to disruption, such as natural disasters or rebuilding and development in the area. Reasons for migration are not addressed within the scope of this study. However, another form of reconstruction is
when individuals or groups relocate their residential location of their own choice, so that they choose a new location that has similar characteristics to their previous location (Michelson, 1976). This is a similar concept to Jeddah migrant choices in Jeddah, as this study finds that most migrants come from Egypt, Lebanon, Syria, Sudan and Jordan, and choose to move to Jeddah because it is a coastal city and similar to their home country.

This concept of reconstruction can also be applied when people select an open space to visit, such as the young male respondent from Alexandria, who choose to visit the Corniche, because it reminds him of his home country, and a group of respondents from the Philippines that visit the same spot in the Corniche because of manila palms planted there. In addition, responses from a Syrian family indicate that they choose to visit Alrawdah garden because of the atmosphere and the context of this garden, and explain that they use this garden because the rich vegetation “looks like some places they used to visit in their home country.” Another example of a form of reconstruction revealed from the interviews in this study comes from an old Lebanese man, who compares the concrete structure in the Alrawdah garden to a similar landmark in Lebanon, and this is why he visits this space. Plants as evidence by Risbeth and Finney (2006) are often evocative and are very evocative to people who have attachment to specific elements with a place, so that plants in a public open space become an emotional bond for migrants based on their memories of plants in their home country. These experiences of migrants then help to form a reconstruction, and provide emotional support when they are far from their native countries.

8.3.3 Place dimension

Place is an important element in forming attachment and site bonds, and the characteristics of place play a critical role in devolving the attachment between the users and the place itself. This section discusses the components and scale of this. The findings from the interviews and observations indicate that people’s experience and history at different sites form their attachment to a specific place, such as the old Saudi female respondent who visits Al Mahmal Plaza regularly, and her explanations and perceptions about the history of the Al Balad area indicates a sense of belonging to the place and rootedness. She believes that she belongs to this area, but in its previous image rather than the current image, and her strong attachment stems from her ability to connect with relatives and friends. This is a combination of attachment to the physical
and history of the place and socially based place bonds. These findings are supported by other studies that define combined physical-social place attachment (Mazumdar & Mazumdar, 2004 and Uzzell et al., 2002).

Place physical features can represent meanings or memories for individuals or groups that help form attachment (Stedman, 2003), which could be explained by the concrete structure in Alrawdah garden, which represents meaning for the old Lebanese male respondent. The physical features of Alrawdah garden reminds the Syrian group of their own home country, because of the density of trees and the structures of the planting. In their minds they see the walkway as the river that is missing elements to complete the images they have in their minds, and the meaning-mediated model might explain this image through symbolic associations (Scannell and Gifford, 2010).

Attachment to specific places can also occur due to users’ belonging and cultural backgrounds, such as desert spots in Jeddah. Another example is associated with attachment based on the length of time spent by migrants working in a foreign country, which is revealed from the responses of Othman and Ali regarding their attachment to Jeddah, as they had spent most of their lives in Jeddah, so their attachment was to Jeddah and indicated that they had no feelings for their original home countries. These findings are significant, as they indicate that place attachment perceptions do not always relate to an individual’s original homeland, but could be based on their feelings and loyalties to the country where they spent most of their life.

8.4 Planning, design and management of open spaces
The continuing increase in the population of Jeddah is reflected in the urban expansion of the city. Due to this expansion, there is a need to urgently address strategies for green infrastructure across the city. However, the development in Jeddah consists of an increase in residential blocks that lack green living spaces between these blocks. This research demonstrates that residents would benefit from high quality local provision of public open spaces in new residential areas.

Good city urban living is integrated with its environment and offers a variety of benefits, such as health and community benefits. Cities in Saudi Arabia, such as Jeddah, are located within a hostile natural environment in terms of a desert landscape and hot climate, so that integrating urban life with the environment requires designed public
open spaces with water irrigation to support elements of a green infrastructure. This deficiency can lead to the urban environment becoming stale, inhospitable and environmentally poor. These disadvantages appear when urban expansion and the densification take place without considering the green infrastructure of the city.

In contrast, there are opportunities for integration and consideration of the green infrastructure, whilst expanding the urban context of the city. This leads to greater individual benefits, as well as enhancing the image of the city as a desirable place to live in. In addition, findings relating to open spaces in earlier sections reveal significant contributing factors, such as a sense of belonging, sense of place, social cohesion, recreational benefits, mental wellbeing and physical wellbeing within an urban landscape. It is therefore very important that clear guidelines for designing, planning and managing open spaces are established specifically in Jeddah, as well as in the wider context of the Gulf Region and other countries with hot desert climate conditions.

In Jeddah, the Municipality is responsible for providing sufficient and high quality green infrastructure to improve the city urban context, as well as to provide leisure and recreational facilities that are accessible to all. However, the existing open spaces and leisure facilities need to be enhanced, as well as to ensure a more even distribution of facilities across the city, before this goal can be achieved. The needs of current and future users need to be understood, as well as ensuring that there is a balance between both privately owned and publicly available facilities and spaces.

Differences between the patterns of using open spaces in Jeddah when compared with open space use in non-Arabic countries are mentioned earlier in Section 1 of this chapter. It is important that these differences are clearly understood by decision makers, designers, planners and managers of open spaces. This thesis describes how open spaces in Jeddah are used by Saudis and migrants. If these patterns of open space usage are considered and understood during the planning and design stages of new open spaces it could improve the quality and meet the needs of people using open spaces. This could also challenge the way that people use open spaces; for example, those relying on cars, the use of roadside verges and litter in open spaces.

Western and European practices of planning and designing public spaces may not directly apply to the Jeddah or Saudi Arabian context, because of cultural differences,
which have an impact upon how open spaces are used. The best action is to understand and attempt to apply focused studies and understand Saudi culture and heritage, and to consider how open spaces might be planned and designed to reflect these. There is a need to cultivate a strong body of professional landscape architecture practice in Saudi Arabia. This could be achieved by improving the theory and practice of the Saudi landscape profession, which might lead to less reliance on Western and European landscape consultants to make design and planning decisions. However, if there is a need for Western consultants, it is important that the Saudi professional body has its own voice to reflect how the society wishes its urban environment to be designed and built. In addition, the importance of indigenous practice in Saudi landscape architecture should also recognise the multicultural nature of the city.

It has become clear that there is insufficient planning, design and management of open space; however, it is essential to provide the Municipality with standards and criteria to promote the provision of open space within the city. This could be achieved through the involvement of specialists. In addition, the contribution of the residents and private sector organisations should help to improve this.

As a long-term aim, it would be desirable to involve local communities and stakeholders in making decisions about the planning and design in their local environment. This may be commonplace in Eastern and Western cultures with evidence for its success. However, in the Saudi context it would be a significant step, and one that is a long way from happening in the current political climate.

This section provides guidelines and recommendations for improving the planning, design and management of open spaces, specifically in Jeddah, as well as in Saudi Arabia and is based upon the findings in this thesis. There are four main focus areas to improve the current and future provision of open spaces: improving planning strategies, improving the design process, providing well established management programmes and enhancing Jeddah Municipality’s role in planning and design.

8.4.1 Recommendations to improve open space planning

Hierarchy of green open spaces

There is a need to provide spaces of different scales within the city. This study reveals that there is a lack of neighbourhood scale open spaces that can be used during
weekdays. According to Thompson (2008), the hierarchy of open spaces is usually regional, district and neighbourhood and it can accommodate different types of activities. Addressing good provision across green open spaces can reduce many problems, such as the overuse of many spaces within the city during the weekdays and weekends in areas such as the Corniche. In addition, it will promote the context of residential neighbourhoods by creating spaces that accommodate children and teenage residents who play and gather in the streets and in incidental sites within their neighbourhoods, as well as reducing car dependency.

Currently, Jeddah has a wide range of district open spaces, of which some are studied in this research. The Corniche may be seen as the main city park, because of its scale (85 Kilometres long). However, studying the Corniche indicates that residents have limited access to it (see Chapter 5, figure 5-3). There is a need to improve and increase public access to the Corniche before it may be considered as the City Park. Furthermore, the desert can also be considered as the regional scale park for the city if it is designed and managed with regard to ease of use and access.

This study explores the open spaces that are located within and outside the urban context of the city, and finds that the open spaces within residential areas are not receiving sufficient attention from the Municipality. However, some neighbourhoods have gardens and open spaces, but the quality of these spaces is poor, as they have inefficient design and implementation. There is an urgent need to improve the context of these neighbourhood gardens to promote the use of these spaces alongside other sites. City planners must give more attention to the planning and design of neighbourhoods and provide green spaces that provide for a range of different active and passive recreation for residents, as well as identifying the importance of pedestrian routes that could link public open spaces with local communities. This enhancement of the scales of open spaces will improve the typology of open spaces in Jeddah, because the identified typology of open spaces in this research indicates that neighbourhood open spaces do not exist. It will provide a diversity of places to use during the weekdays and weekends and will promote the green open space system within the city.

**Green space provision**

It is recommended by the World Health Organisation that 8 square metres of open space per person be provided as a minimum provision. Jeddah currently falls significantly
below this target with an average provision of only 2 square metres of open space per person in most districts (Open Spaces Audit, 2008). As the population of the city continues to expand, demand for all types of open spaces and leisure facilities increases.

Effective processes of design and planning could achieve the creation of open spaces as part of a network and infrastructure system for the city, and these coordinated links are highlighted in this study. If there is a hierarchy of open spaces in the city this will lead to improving the green system in the city. This research suggests that the image of the city would be enhanced by improving links between the open spaces, such as the waterfronts, and reduce the dependence on car usage that would encourage more people to walk between these open spaces. There are leftover spaces around schools, mosques and other services within the neighbourhoods in Jeddah. If these sites were designed and planned to be part of the integrated open space system, it would improve the context of these neighbourhoods and achieve a good hierarchy of open spaces within neighbourhoods, as well as improving the streetscape. This also can improve people’s experience whilst walking to mosques and schools.

This study has finds that planning for open spaces in Jeddah is isolated from the urban context, as open spaces are not often linked with the surrounding buildings. It has already been mentioned that there is a need to create an open spaces system in the city, which could promote the use and accessibility to and from these spaces. However, there is an urgent need to link open spaces with the surrounding environments, such as residential areas, schools, mosques and shopping malls. If this were achieved, the planning of open spaces would be part of the urban context that would improve various important issues within the community.

**Desertscape**

The desert is part of the city’s recreation and leisure activity, and it is part of the open space system. The findings from this study reveal that it is mostly Saudi residents who use the areas outside the traditional city boundaries, but these areas have not been managed or planned. This lack of design and planning could have contributed to recent tragic events for some visitors to these wild places. It is essential to apply management policies for these sites, which will maintain their environmental qualities, but provide protection of their ecology and improve accessibility for visitors.
The desert has the potential to become another city scale park like the Corniche. However, more consideration to access and planning of specific desert locations would enhance visits by both Saudi and migrant’s users. There are many good examples around the world regarding access to wilderness areas, such as the US National Park System. Other examples include the Dubai Desert Safari, which has become an important destination for many tourists. This could include a visitors’ centre and designed trails that would help local people and others from different nationalities to experience and appreciate other aspects of the country. Such projects can contribute to an educational programme for school visits that may help to educate children about the nature within their country.

**Streetscape**

The creation of an open space hierarchy and provision of a network of green spaces will lead to the need to improve the streetscape within the city, which is currently neglected in Jeddah. Well-planned and designed streets play an important role in providing easy access to open spaces. The current streetscape in Jeddah is poor; according to one interview with a municipality officer, people in Jeddah do not walk so there is no need to spend money on streets. Study findings reveal the opposite; people do walk and they are willing to walk if pavements are designed and planned to high standards.

Jeddah municipality must provide streets with the appropriate width, because there are examples within the city with pavements of 0.45m wide, which have been designed and built without considering required standards and dimensions. In addition, the height of some pavements within the city is not easy for elderly and disabled people to access. The reason for the height of these pavements is to prevent cars from crossing them as a shortcut, which is a violation of traffic laws. However, this is not the solution, because it is difficult for pedestrians to walk and cross streets, especially the elderly and disabled.

It is important to consider the climate of the country when planning and designing sidewalks for pedestrians. There is a range of techniques to provide shady walkways with trees or shaded structures to protect people and give them shade whilst walking. Shaded structures, planting, spacing between the trees, tree pits, shade structure columns, and the height of the shade structure all need to be taken into account.
Outdoor activities

The review of literature reveals that physical activities in open spaces play an important role in promoting the use of these spaces, and so the municipality should consider different types of activities that could take place within open spaces. There is a need for different activities that could attract people to different sites based on these activities, and it is important to consider physical activities and recreational activities when planning and designing open spaces. It is crucial that these activities meet the needs of females, males and children.

The findings of this research indicate that people take part in a range of different activities in open spaces. However, there is no evidence that any planning process has taken place for the activities within open spaces. There are playgrounds for children, but these areas are placed randomly. For instance, in some sites, a small playground is provided, but the actual number of children using it is greater than the capacity of the playground, which leads to several problems, such as congestion and children waiting for a long time to play on the site. There is an urgent need to provide these busy open spaces with different types of playgrounds for children to use.

It has been mentioned earlier that open spaces are used for physical activities. However, there is potential to provide different open spaces for exercising and physical activities at the district level. The length, width and structure of the walking trail for exercising must be considered in order to accommodate all ages and genders. In addition, provision of exercise equipment could be included with sporting activity provision in open spaces.

Football is popular for Saudi and migrant residents. However, the findings indicate that most play football in neighbourhood streets, open spaces that are not designed for this purpose, incidental lands or on private football pitches. Provision of football pitches in neighbourhoods and at regional levels is essential to discourage people from playing where it may cause conflict with other users seeking to relax and enjoy their time peacefully. This could also raise the status of this sport, as the provision of good facilities could encourage more formal sporting events.

Sport also has a cultural dimension, and cricket is very popular among Indian residents. Currently the only place to play is on incidental land. There is a need to consider
migrant’s activities in the urban context of the city, because they are also part of the community. There is a need to plan and design open spaces within the city that can accommodate such sport, which can enhance their experience and life within the city.

8.4.2 Recommendations to improve open space design

The survey of open spaces reveals poor examples of landscape design. It is important that the design of open spaces considers social needs, access to the site, aesthetics of the design, variations of landscape elements and the safety and security of the site for the users.

Government departments and the private sector have a part to play in enhancing and improving the open space design in Jeddah. Both sectors have experts and practitioners in landscape design and planning that are able to provide well designed and planned open spaces in the city. As with any other building project, the designers must have appropriate knowledge of how to design open spaces that effectively meet the needs and requirements of intended users.

Design for social requirements

There are numerous studies (Van Herzele and Wiedemann, 2003; Warde et al., 2004; Parr, 2007) that find that public open spaces are very important for social inclusion, which can lead to social cohesiveness. Designers need to be aware of the social interaction that occurs in open spaces revealed within the findings of this thesis. This can be achieved by more contact between the designers and the community and appropriate activities that could take place at different sites according to the social structure for each neighbourhood, and on the city scale for the regional and district open spaces.

The success of any open space is based upon the design of the recreational facilities provided for the community. The gender, age and physical abilities of users require a diverse range of facilities to meet all their needs, therefore the designer must be aware of the requirements of all intending users. Privacy is an important factor to be considered because, as discussed earlier, there are some Saudis within the community who are very conservative. Privacy does not mean complete isolation in the context of open spaces for gatherings or for sitting, but should also allow for private gatherings to take place, which are harmonious within the overall site plan.
Open spaces must be varied in the elements that are used, such as planting and water elements. The findings reveal that most participants want to see greener surfaces, as well as vertical green elements and flowering plants. These vertical trees are used in open spaces as territorial spaces to gather for families mostly. In addition, the sculptures and structures on the sites are used as shelter spots from the sun, and also for privacy. There are a variety of species that could be used in open spaces to provide greenery and flower structures that are currently not used in the open spaces, such as *Plumeria rubra* and *Callistemon viminalis*. Small trees and shrub groups can be also used to create spots for people to gather. Water features and the sound of water are very attractive when placed in open spaces. However, it is not necessary to have water features in each open space, but the balance between these elements is necessary. The provision of seating would meet the needs of users, as many bring their own seating for family gatherings, and as many users meet to cook food, the provision of water and toilet facilities would be useful. Designed spaces that consider the needs of those seeking places for prayer would also meet the needs of users when away from their homes.

**Accessible design**

The design of open spaces must take into account the physical accessibility needs of all users. The findings of this research reveal that access for disabled users and the needs of the elderly are not considered in the design of a variety of open spaces. Well-designed and easy access to all public open spaces for the elderly, children and the disabled must be a priority in any design. Careful design of open spaces that address safety issues, such as road crossings and traffic calming measures, will all help to increase the accessibility of such spaces for all residents.

The entry points to open space must consider people with wheelchairs and mothers with baby pushchairs and elderly by having ramps and appropriate curb height to allow them easier access to the site. In addition, the provision of parking spots for them is urgently needed within these spaces by identifying parking spots designed according to the international standards for disability.

**Aesthetics of the design**

The aesthetic concept plays a critical role in attracting people to use open spaces. Jeddah Municipality should consider creating attractive open spaces distributed within the urban and residential context of the city. The aesthetic approaches must take place
not only in open spaces but also within the streets and within the scope of vision for the city residents, because it improves their visual arena. Maller et al. (2002) indicate that the provision of attractive and beautiful open spaces enhances people with a sense of surprise, and in the better designed spaces, like the Al Rawdah Garden, the visual qualities of the space are much appreciated by users.

The aesthetic principles can be achieved by using the appropriate plants and variation in landscape elements. The variety of colours that are used in the hardscape and in the planting structure is very important to be applied in the design of open spaces. In addition, the use of the site topography like Al Rawdah Garden site that provides a gentle climbing sense for visitors. The reliance on cars in the city is producing open spaces surrounded by mass of cars like the Hilton walkway and alongside in the Corniche. There is a need to provide screening in some parts of the sites, and provide parking areas to allow users to enjoy more within the context of open spaces, and the landscape surrounding the site rather than watching cars, which could also be combined with improved public transport infrastructure. The high quality maintenance of the open spaces and streets also play a critical role in providing an aesthetic surrounding, and is mentioned in section 8.3.4.

**Landscape elements**

Currently, most public open spaces in Jeddah lack good quality landscape design. The Corniche is a good example where insufficient focus on water has resulted in landscape design features that in many parts prevent users from directly connecting to the sea. The design stage of public open spaces needs to consider the typology and nature of the site, and how the design process could apply these to this landscape, so that they meet the needs of users better.

Trees and plants play an important part of the life of any city. The open spaces survey reveals that the types of plantings that are used in the streets and open spaces are very limited and repetitive. This repetition of the same planting structure has given the city’s open spaces and streets a uniform appearance that reduces legibility. The use of a variety of planting scales when designing the planting structure of the site could improve the image of the city and provide differences in the visual arena. Designers must be aware of the different scales of palms, big trees, small trees, big shrubs, small shrubs, groundcover, succulents, climbers and grass. There is diversity of the planting
species under each category of planting type. Geoffrey Ricks (1992) published a landscape plant manual for Saudi Arabia with a variety of planting species that could grow in hot and humid weather like Jeddah. This manual could be used to identify and use variation when conducting planting design for streets or open spaces. In addition, in the case of Jeddah, the planting of drought-resistant species of plants around Jeddah’s streets would make them pleasanter by providing shade, as well as helping to reduce dust and glare. Integrating a water-use strategy for irrigation, such as grey water systems, would help with the challenges of a sustainable environment.

The use of appropriate and high quality landscape elements is very important to enhance open spaces in Jeddah, which is not currently taking place within the surveyed sites. The quality of the ground, the walkways and the pavements are very important to facilitate accessibility to and within open spaces. The scale, colours, rhythm and themes can enhance the use of open spaces and make them more attractive and useable for all users. The provision of attractive open spaces should improve the visual quality of the city. This can be achieved by providing an efficient maintenance programme to ensure that these spaces are clean and maintained.

**Safe design**

The design of open spaces and pedestrian walkways must consider the safety and the security of the users when they use the site or when they access the site. The achievement of this will improve the user’s perception of safety. Designers must be aware of that the provision of open spaces in cities can reduce anti-social behaviour, but the design of these spaces also contributes to promoting a sense of safety. For instance, the sites and pavements that are surrounded by residential and commercial buildings could improve natural surveillance, so that people would feel that they are not isolated from the surroundings to some extent. This could be achieved by designing open spaces and pavements within the scope of vision, and not to be totally isolated from visual permeability. However, it is important to balance this consideration with the desire for privacy.

Traffic is a significant problem in terms of safety for pedestrians in Jeddah. For long-term planning, it is essential to design open spaces that are far from heavy traffic to ensure safety, and overcome the problems of noise and pollution. For existing open spaces, there is a need for policies to control traffic speed limits around heavily used
open spaces and sidewalks to ensure the safety of the users from vehicular traffic. Planning for open spaces should also consider the siting of play areas for children, so that they are not near to roads and pollution noise from traffic. Designs should also formalise sites of leisure activities, such as sports with ball games, away from traffic.

8.4.3 Recommendations to improve open space management
The recommendations regarding the planning and design of open spaces implies the need for a set of rigorous quality standards for management, together with clear specifications that will determine which investment to upgrade and the facilities that are needed to improve it. The involvement of the private sector, as well as the voluntary sector can play an important role in the maintenance and management of public open spaces. Enhancing these areas in Jeddah would not only make them more inviting and benefit residents and businesses, but would also improve the local economy by attracting more investment and tourism.

Maintenance strategies
Municipalities must be aware that the work in open spaces does not finish after the implementation of the site, but is an ongoing commitment. Once the quality of the site becomes degraded it can deter people from using the space. Saudi Arabia in general fails to provide sufficient regulations for using open spaces and good quality maintenance programmes for open spaces.

In regard to the maintenance programmes, currently there is an involvement of private sector contractors in the provision of open spaces implementation or maintenance (Mandeli, 2011). However, because the cost of maintenance is high in comparison with the profit margins, maintenance work currently taking place in open spaces is limited to collecting rubbish. There is a need for extra consideration of planting maintenance, lighting maintenance, paving maintenance, playground maintenance and other site furniture and facilities. Municipalities should cooperate with the private sector to create a maintenance plan and techniques for each public open space, such as gardens, waterfront, sidewalks and squares. This plan must consider all the site facilities and amenities. These amenities must have good quality maintenance to protect the site from deterioration and enhance user experience.
Community awareness
Having open spaces available to use is of course vital; however, according to the observations and some of the interview responses, some users do not care sufficiently about the cleanliness of open spaces after and during their use. Significant discussions about policies should take place, and greater consideration of the importance of educating people about how to use open spaces appropriately. This could be achieved by raising awareness of the value of open spaces to people’s lives, and how these open spaces could enhance their lives in different aspects, such as economic, physical and mental values. It is important to mention that there is a law that exists in Saudi Arabia with regard to dumping waste in the street or open spaces, but this is not applied effectively. There is a need to enforce this law to reduce the phenomenon of dumping waste in open spaces and the lack of care in the cleanliness of public spaces. To some extent this issue requires cultural change in norms of behaviour, which would take time and require a mixed approach of ‘carrot and stick’.

Open spaces programming
The need for more consideration of outdoor activities during planning processes has been mentioned previously; however, after site implementation considerations, there are special seasons when there is a need for greater consideration with regard to temporary activities, such as bazaars, exhibitions, folklore dancing performances and many other events that could take place in different open spaces across the city. In Jeddah old downtown (Al Balad) there are various temporary activities that take place, especially during Ramadan (the fasting month), but these activities could be take place in different parts of the city. This would reduce crowding and traffic jams, which are significant problem in the downtown during Ramadan. Consideration could also be given to extending programming to other festivals and times of the year, and increase community events in public open spaces.

Provision of amenities
Especially in Jeddah, and generally in Saudi Arabia, there is high demand to use open spaces, and the time that people spend in open spaces is usually longer than that found from the review of the literature on leisure and recreation (see Chapter 6, section 6.3.3 and Chapter 8, section 8.1.3). As a result of these findings, there is a need to provide open spaces with amenities that can ensure the convenience of users, such as toilets,
kiosks, and prayer zones, which could be based on the number of visitors and the scale of the site.

Planners and decision makers are responsible for providing comfort for all users in open spaces in their planning and management of open spaces. This study finds that many people, and especially migrants, often prefer to bring their own plastic chairs and tables when visiting open spaces, but open spaces could provide facilities for hiring equipment, such as chairs and tables, barbeque equipment and other items.

8.4.4 Enhancing Jeddah Municipality’s role in planning and design

According to Mandeli (2011), studies that have evaluated the Jeddah Municipality and its structure for creating and maintaining public open spaces in the city reveal findings that are important for this study, as they argued that there is insufficient awareness by the Jeddah Municipality that citizens’ lives could be enhanced by the benefits offered by public open spaces. The Jeddah Open Space Strategy identifies its obligations to provide and maintain public open spaces, but greater awareness is needed of the benefits that these offer to its citizens. Achieving this greater awareness of open space benefits for local people could be carried out by seminars and workshops for decision makers, designers, planners and officers of the Municipality to provide better education and knowledge of these issues. This could be achieved more successfully if all associated stakeholders cooperate in the training process, such as the Landscape Architecture Department, the Town and Regional Planning Department, King Abdulaziz University and private sector organisations. This cooperation between private sector organisations and experienced academic staff at the University should enhance the knowledge of the Municipality, as well as to improve the quality of planning for the provision and maintenance of open spaces.

The current situation of open space planning and design is managed by the general department within the Municipality structure rather than specialists. The planning, design and management of open spaces should be assigned by the Jeddah Municipality to those with knowledge of field planning, architecture and landscape architecture. This step should improve the quality of open space provision, which should lead to improved legislation, policies and strategies for open spaces within the city.
Currently, there are insufficient open spaces and leisure facilities in Jeddah to meet residents’ demands, so that informal spaces are used for gathering and recreation. It is important that the Municipality actively follows a programme of open space development, in order to increase the amount of open space and to provide a greater range of opportunities for recreational activities. Any increase in the amount of open spaces must be planned to link and create a network of open spaces in the city. Careful and imaginative planning and design can enhance pavements, as well as improving and creating a range of different ideas for city transport, which is appropriate for the hot city climate. A survey of the current open spaces needs to be conducted by the Municipality, in order to identify a variety of ways to improve existing open spaces and to link them with new open spaces. This would help planners to identify those districts and areas within the city that should be regarded as priority for open space provision.

Jeddah Municipality and government departments need to establish legislation, policies and strategies to promote the design, planning and management of open spaces. In addition, there is a need for collaboration with the residents and society, because they could improve the Municipality’s knowledge when planning and designing open spaces, because these are for public use. The Jeddah Municipality should consider long-term achievements based on the urban expansion of the city.

The review of landscape planning and design practice in London, for instance, reveals that each city or country has its own open space strategy guidebook or manual. This guidebook collected information, and planned according to people’s needs and their pattern of using open spaces. From this viewpoint, there is an urgent need that the Municipality of Jeddah should take into account the experience of specialists in the field of landscape architecture, environmental planners and designers of open spaces to create a guidebook for the design and implementation of open spaces in Jeddah. This guidebook should be based on the studies that have been undertaken in the area of open spaces in the city of Jeddah; for example, this research offers a wide range of patterns of use of open spaces in Jeddah, as it presents users’ experiences, behaviour and attachment to open spaces. A more critical and thorough understanding of open space practices should inform improvements in the open space system in the city.
8.5 Summary

It is intended that this chapter addresses the three aims of the thesis. The first aim is to investigate how residents use both the planned and incidental public spaces in the Saudi Arabian urban context. The first section of this chapter presents the patterns of use of open spaces in the Jeddah context. This section differentiates how open spaces are used when compared to the body of literature that examines the subject in the Western and European context.

The second aim addresses the dimensions of place attachment in shaping the values and meanings of public open space across diverse identities. The second section indicates that the findings relating to place attachment broadly support the literature review findings. The findings explain how place attachment is experienced within the context of Saudi Arabia.

The third aim of this research identifies implications for improved planning and design of public open spaces that meet the requirements of local users in the Saudi Arabia urban context. Recommendations are made regarding the planning, design and management of open spaces in order to enhance the quality of open spaces in Jeddah. These suggestions derive from observations in open spaces, together with interviews with a range of people using these spaces.

8.6 Overall summary

This chapter discusses the findings of differences in the patterns of use of public open spaces in Jeddah according to speciality, temporality and identity. These findings support the aims of this study by investigating how residents use designed and incidental public spaces in the Saudi Arabian urban context. Other findings address dimensions of place attachment in shaping the values and meanings of public open space across diverse axes of identity. This chapter also discusses the implications for improved planning and design of public open spaces to meet the needs of users within the Saudi Arabian context based on these findings. These findings examine streetscape, desertscape and green space provision, outdoor activities, designs for social requirements and accessibility, landscape elements and safety, as well as suggesting how open space management could be improved by maintenance strategies, community
awareness, open space programming, provision of amenities and enhancing Jeddah Municipality’s role in planning and design.

The following chapter presents the conclusions of this research and its limitations.
CHAPTER NINE

CONCLUSION
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9.1 Introduction
This thesis has presented work that is novel in its field, in particular with regard to patterns of use of public space in Saudi Arabia, and in looking at dimensions of place attachment in this context. The research study was conducted at case study sites in Jeddah using a mixed method approach which included observations, on-site interviews, and interviews with practitioners. In this concluding chapter the significance and impact of this research is presented, outlining opportunities for dissemination, and reflects on the researcher's own experience in conducting this research.

First, the key findings that relate to each of the research aims are summarised:

1. **Research Aim 1:** To investigate how and why residents use designed and incidental public spaces in the Saudi Arabian urban context.

2. **Research Aim 2:** To address dimensions of place attachment in shaping the values and meanings of public open space across diverse axes of identity.

3. **Research Aim 3:** To identify some of the implications for improved planning and design of public open spaces to meet the requirements of local and migrant users within the Saudi Arabian urban context.

In the summaries of key findings, priority is given to aspects that differ from commonly observed findings in European and North American research.

9.2 Key findings with relation to how and why residents use designed and incidental spaces in the Saudi Arabian context.

Saudi and non-Saudi users often visit designed open spaces that meet their perceived needs, and residents also use incidental spaces, such as pavements and roundabouts, but desert areas are mostly used by Saudi families, where greater freedom is possible for women. Public awareness campaigns to encourage males and females to lose weight and improve fitness enhance the findings of Sallis and Owen (2002) into social and environmental influences on behaviour, and improved mental wellbeing suggested by Guitea et al. (2006). Although the planning and design of these open spaces often fail to
meet design standards and quality, these still provide users with the benefits of open spaces.

The research generally found positive experiences by women using public open spaces, in particular being able to walk for exercise in comfortable clothing, implying a broad desire by women in this country to undertake more outdoor physical activity. The factor of gender has a significant influence in terms of how places are used in terms of temporal and spatial dimensions, and how people are motivated to use specific spaces from the review of literature. This research enhances knowledge of patterns of usage for males and females in open spaces in Saudi Arabia, an Arab country that follows Islamic law and has a number of laws relating to gender. This research found that, though the activity and movement of women are undoubtedly restricted by the legal situation, both women and men made adaptations to their use of public open spaces to conform to cultural norms by using separate areas, and women tend to use open spaces less in the evenings, when men make more use of these spaces. Ilahi (2010) suggests that the experiences of males and females are different in terms of social space in Islamic countries, and greater use of public open spaces are often challenged by religious leaders.

Many respondents suggested that public open spaces could be a valuable factor to encourage the integration of migrants into Saudi society, but the patterns of use observed indicated that Saudi and non-Saudi groups tended to remain within their own cultural demographics. Patterns of use of study sites showed that Saudi users visited in family groups, in groups of friends of the same gender and as individual users. In contrast, the patterns of use of open spaces by migrants often showed that they met with others from the same country to share a common language and to share memories of their homes. This contributes to previous research into how the environment helps migrants integrate into a new society (Powell and Rishbeth, 2012).

This study found that culture was an important factor for creating place attachment bonds within the context of an Islamic country, which enhances the findings of Altman and Low (1992), who argue that people associate places with cultural attributes. These findings are associated with previous studies into person and place relationships and migrants seek to regain memories of their homes from elements of open spaces that motivate relationships with places, and provide valuable new information to support the
findings of Scannell and Gifford (2010) that explain that the size and type of attachment vary and are based upon features, such as size, scale, characteristics, together with people’s ages, gender, social life and relationships.

This study shows significant use by residents of Jeddah of incidental and unplanned spaces for recreation and gatherings to share food in small spaces at the sides of roads, which challenges the findings of Hilldson et al. (2007) that excluded smaller open spaces in their study. These findings are supported by previous studies of the sense of place within the context of Western countries, but offer valuable insights into temporal and spatial dimensions that are different for many countries in the Middle East, and particularly for Jeddah. The study indicates that whilst there are differences in the pattern of usage of open spaces that exist between the research findings and the European and North American body of literature, the benefits and value of open spaces described share common ground, but challenge the findings of Kathiravelu (2013) that open spaces in cities with diverse communities promote socialising between immigrants and residents, as migrant and Saudi users tended to gather separately.

9.3 Key findings addressing dimensions of place attachment in shaping values and meanings of public open space across diverse axes of identity.

Despite being an area of interest in other disciplines, there are insufficient studies of place attachment within the Saudi Arabian context, and other Arab countries. However, this research concludes that patterns of place attachment have many similarities when comparing Western studies of place attachment and the findings of this study, which suggest that this theory has cross-cultural relevance.

The contribution of place attachment to this study is the provision of a clearer understanding and dimension of place attachment in the sites studied. This study found that the theory of place attachment in open spaces could be applied to diverse cultural situations, such as for special qualities of place attachment that relate to transnational migrants, gender and religious practice, and provides additional information for investigations into population growth and ethnographic factors for rapid urban expansion in countries of the Middle East and North Africa (Nagy, 2007; Malecki and Ewers, 2007), as there have been few research studies into this topic.
This research provides the foundation for future studies of place attachment in open spaces in other non-Western contexts. It is hoped that this study of a culture, other than Western and European cultures, will be of use to other researchers in this increasingly important area of cross-disciplinary research, with specific regard to place attachment.

Wellbeing and place attachment are shown to have a strong relationship in this study, which provides more information to the findings of Owen et al. (2004) and Thompson (2013) regarding walking for a reason that contributes to improved health outcomes due to physical activities, and also challenges the risk factor of lack of exercise reported by Carroll (2014) in Middle East and Gulf Region countries. This study found that users at various study sites, and especially the Hilton Walkway, demonstrated place attachment to open spaces where they could walk for exercise in response to campaigns to improve fitness in the country. Female respondents emphasised the importance they placed on open spaces where they felt safe with other female users due to social and cultural traditions that separates gender in public open spaces, and several female respondents also explained that when walking to improve their health, they also felt greater freedom from the normal restrictions placed on females, which enhanced their place attachment.

9.4 Implications and impact of these findings for improved planning and design of public open space in Saudi Arabia and similar geographic and cultural contexts.

Preferences for public open spaces have been widely researched in previous studies, and the findings from Western countries have some value for Jeddah and other cities in the Middle East. Users of open spaces often have no opportunities to share their needs with decision makers in planning departments, so that public open spaces often fail to meet the identified needs of a diverse range of users. According to Carroll (2014), there is a need for collaboration between different sectors within the government and the community, such as ministries, municipalities, urban planners and media, and the establishment of sports societies that could motivate physical activity among residents. Open spaces that were poorly maintained were researched by O’Brien & Tabbush (2008), who found that respondents complained about litter and graffiti, which were seen as contributing to worsening of neglected areas with increased anti-social behaviour. The findings of this study indicated concerns about poor maintenance of public open spaces, as well as anti-social behaviour of litter and graffiti.
The findings of this research are of potential value to landscape planning, design and management practitioners in Saudi Arabia and other similar Middle Eastern and Arabic countries. The key finding of the research is that the needs of users of public open spaces should be recognised when making decisions about creating, designing, planning and managing open spaces, so that these needs are fully met. The case studies indicate that this does not happen at the moment: there is little thought to strategic planning of green infrastructure, the design of public open space often fails to support an inclusive range of activities, and the management of this is near non-existent. Below more detail is given on the impact of the findings in these three areas, and strategies for dissemination are outlined.

The findings of this research into place attachment for public open spaces have implications for planning scales for the Municipality of Jeddah, and could also be considered by decision makers in other cities of Saudi Arabia that are responsible for the design, creation and maintenance of open spaces. Responses in this study show that there is a need for diverse public open spaces that meet the full range of expectations of users. Therefore, open spaces in Jeddah need to provide opportunities for physical activities and wellbeing, mental wellbeing, social wellbeing, and to recognise that patterns of usage are different in designed and unplanned open spaces. Peri-urban spaces, such as the desert, are important for Saudi users that visit with families, but favourite spots often lack safety warnings about potential dangers and regular maintenance. That may be a problem, but as not really connected to issues of Place Attachment. A problem which might be more relevant to cite here is that as the region is increasingly urbanized, pressure on peri-urban wilderness areas inevitably increases, potentially damaging the beauty and special character of these places. These areas need careful future analysis of patterns of use to inform integrated strategies of landscape planning and management. For example, planners also need to overcome the problems of access to public open spaces, as insufficient parking for cars causes frustrations and inconvenience for users.

These findings also have implications for landscape design of public open spaces in Jeddah, as current hardscape and softscape features often fail to meet the needs of users. There are simple and cost effective solutions to meet these needs, such as the provision of toilets, food kiosks and access to water, which are important for all users, but especially for those with young children or elderly users that may require more frequent
access to toilets. Planners also need to address the use of unplanned sites, such as pavements, sides of roads and tunnels and roundabouts, where many residents meet for social gatherings, but face potential danger from traffic and lack of facilities.

Responses to interviews revealed a pattern of complaints regarding poor maintenance of the study sites, such as litter, unpleasant smells and damage to site elements that remains unrepaired. Some migrant users indicated that litter and damage were often due to Saudi users, who showed insufficient care for the environment, but others complained that the Municipality should be responsible for improving levels of maintenance. These findings also have implications for the management of these public open spaces that fail to recognise the needs of users. These problems could be overcome with additional funding to achieve higher quality standards of maintenance, as well as a greater public awareness campaign to encourage better environmental awareness and care for public open spaces. In addition, managers and decision makers for public open spaces should involve users’ contributions when planning site developments and improvements.

These findings need to inform those responsible for making decisions about public open spaces in the context of Jeddah, and other cities in Saudi Arabia and the Gulf Region of the critical importance of talking to users about their experiences and needs. The researcher will ensure that the findings can be understood and applied in a range of professional contexts and has devised the following three point dissemination strategy:

**9.4.1 Improving the educational agenda of landscape architecture to more fully address social commitments**

The findings from this research can inform and improve a range of teaching modules and design studios within the landscape department where the researcher is based. The pattern of using open spaces in Jeddah, the meanings and bonds that people have with open spaces, the value and benefits of open spaces, and the planning, design and management of open spaces are all subjects that can enhance the current curriculum. Nurturing a competent and culturally aware new generation of landscape architects is key to being able to deliver high quality design of public spaces without the need to rely largely on Western landscape practices.
9.4.2 Influencing policy and strategic decision making at local and national levels
This research could contribute to improved decision making by the relevant government and municipal departments with responsibilities for public open spaces by encouraging users to share their opinions and experiences, so that designers, planners and managers of public open spaces could respond better to the needs of users. The researcher intends to communicate the contributions of this study by presenting his findings to government and municipal departments, as well as writing a summary of good practice for publication in professionally focused journals and websites.

9.4.3 Develop the capacity and quality of open space research projects in the Middle East
There is more that landscape architecture academics could do to ensure that practitioners recognise the needs of users of public open spaces. Initially the research will be presented at a seminar within the university. It will be important to submit this research as papers to respected peer-reviewed journals to ensure appropriate ‘reach’ for the findings. The researcher intends to use his position as a member of the academic faculty to develop socially focused research programmes within his department (for example through dissertation topics) and in attending conferences and networking with academics in other Arabic countries. The research methods adopted for this study could be adopted as a ‘toolkit’ in future research studies, as they are novel and relevant for the Saudi Arabian and Middle Eastern contexts. There is scope to promote and develop case study based work in further research programmes, potentially developing projects with multiple sites across different countries.

9.5 Methodological reflections and future direction of the research
This research reflects one point in time by looking at one city, Jeddah as unique in terms of geographic and religious contexts, but also this city has urban landscapes typical of many countries in the Gulf region. The researcher of this study is a Saudi male in his late twenties, and by undertaking qualitative work of this nature explicitly situates the researcher within the research context. This has strengths and limitations and requires a reflexive practice. He was unable to approach some parts of the community, such as conservative families and individuals or groups of females. Despite using appropriate modification to aim to achieve a good range of participants, the individual-based research structure of PhD study could not reach the same breadth of users as might be achieved with a multi-researcher project.
The interviews with users of these case study sites were intended to discover more about patterns of use and place attachment than issues of public safety and possible sexual harassment. It was thought that this could have made interviewees feel uncomfortable. However, a new law introduced regarding anti-sexual harassment may expose serious issues in the city that have not been discussed publically before, and potentially highlights the need for more research on this topic. Gender issues have a significant impact within Saudi Arabia, and undoubtedly could more explicitly shape future research.

There are important opportunities to investigate the wider environmental planning of the city. This study did not give specific attention to environmental planning, natural resources of the city and climate change. Future research that combines social and environmental dimensions of sustainability could play an important role in looking at possible future scenarios of place change. Equally, many changes are taking place within the democratic process in Saudi Arabia. There is a need to understand and investigate the implications of greater democratic involvement, and the participation of stakeholders within countrywide planning and design policies.

Another possible direction for this research would be to develop a regional research project, involving researchers in other Arab or Muslim countries. It would be particularly useful to test and refine the open space typology over different national contexts. There is a need to examine and develop comparative studies between different countries in order to identify the factors that are unique about Jeddah and Saudi Arabia.

The researcher has learned much about the principles and challenges of researching open space over the course of this PhD. The researcher learned both scientific and practical methods of how to conduct a research related to public open spaces. The methodological approaches were the most important element, because these helped to gain better understanding and awareness of how the research could be designed to meet the research questions and aims. At a personal level, the researcher gained confidence to approach users of public open spaces and encourage them to talk about their needs, and used storytelling methods to encourage the sharing of memories in greater detail that would provide valuable knowledge for this research.
In summary, the research presented in this thesis has the potential to make a significant contribution to academic research on uses and values of public open space, and on transnational understanding of place attachment. For both of these areas the focus on Saudi Arabian places is a rare perspective, and helps in some way to address a Western and North European bias in academic literature. The implications for practice are also important. The research highlights the need to improve open space planning, design and management in order to better address social requirements. However, despite the many weaknesses of the open space provision in this city, the research confirms the strength of positive attachments between the residents of Jeddah and their city’s public spaces.
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APPENDIXES A

Participants interview questions

OPEN SPACE INTERVIEW QUESTIONS

1. Questions related to today visit
   - What is the reason for coming today?
   - Who you with?
   - How long have you been in here and how long you will stay?
   - What is your plan for the food?

2. Questions related to history with the site
   - How you find out about this site?
   - How often you come to the site?
   - Are there any other places you visit? Which is your favourite?
   - What do you like and not like in this place?
   - Is this typical how you visit this place? Or sometimes you come with bigger/smaller group?
   - When you always visit this place? Weekdays/weekends/celebration

3. Questions related to Place attachment
   - Do you think this place is a good example, representing the public space city of Jeddah?
   - If you have a friend or family member, someone visiting Jeddah do you bring him/her to this place?
   - Do you think this place has the facilities that you need?
   - What does this place give you from the everyday life? How does coming here benefit you?

4. Questions related to behaviour in public spaces
   - Do you think there are any rules or law affecting your use of this place? (Such as parking, setting locations and barbeque)
   - Do you think you can be yourself on this site?
   - Are there any restrictions to your use of the site? You put into your family and/or children’s
   - How do you choose the spot where you sit? According to what?
   - Do you think this is a safe place?
   - Who else is using the space?
   - Have you ever observed any problem between different groups?
   - Does this space have a different people from different nationalities and gender?

5. Questions related to residential area
   - In which neighbourhood you live?
   - Are there any open spaces in your area? Do you use it?

THANK YOU FOR YOUR COOPERATION

Abdullah Nidal Addas
Postgraduate Research Student, University of Sheffield
APPENDIXES B

Participant’s personal information form

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**PERSONAL INFORMATION**

PLEASE FILL THE FOLLOWING:

1- Age
   - 18-29
   - 30-44
   - 45-60
   - 60 years and over

2- Gender
   - Male
   - Female

3- Education
   - School
   - Undergraduate
   - Postgraduate

4- Job
   - Governmental
   - Private sector
   - Own business
   - Other

5- leaving with
   - Family
   - Friend
   - Other

6- Country of birth

If not Saudi – length of stay

7- Nationality

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ALL PERSONAL DATA AND INTERVIEW RECORDING WILL BE PROTECTED AND WILL BE DESTROYED AFTER FINISHING FROM THE RESEARCH PURPOSE

THANK YOU FOR YOUR COOPERATION

Abdullah Nidal Addas
Postgraduate Research Student, University of Sheffield
### APPENDIXES C

**Interviews spreadsheet**

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<thead>
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<th>Area</th>
<th>Date</th>
<th>Nationality</th>
<th>Gender</th>
<th>Age</th>
<th>Length</th>
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APPENDIXES D

Practitioners interview questions

Dear Respondent This interview is part of an academic research for the Ph.D. program in Landscape Department at University of Sheffield, United Kingdom. It will try to collect some information about the residents in city of Jeddah and their way of using, enjoying and feeling the public open spaces. The findings and analysis would be presented to concerned decision-makers who hopefully would utilize them for future provision of public open spaces. The interview will be between 20 to 30 minutes. No name is required and in this study, all respondents will remain anonymous in accordance with the University of Sheffield research guidelines and the Data Protection Act 1998.

ALL PERSONAL DATA AND INTERVIEW RECORDING WILL BE PROTECTED AND WILL BE DESTROYED AFTER FINISHING FROM THE RESEARCH PURPOSE

1. Do you use public open spaces? What are these spaces you visit?
2. Do you know of any research regarding the use of POS in Jeddah? Has your organization carried out any research in this area? Do you have any plans to carry out this kind of research?
3. How would you evaluate the public open spaces in Jeddah as: resident, practitioner and decision maker?
4. In your opinion what are the main achievements and main problems?
5. In your authority, what are the main stages or steps taken in providing open space? (e.g., field survey, public consultations, case study, social study etc.)
6. In the meanwhile which one do you consider to be the priority providing new open spaces or management and maintenance to the current spaces?
7. Do you have minimum requirements in respect of the activities and recreational facilities to be provided in each open space?
8. How do you measure the needs of the user’s needs?
9. How do you measure the effectiveness of open space and its facilities in satisfying the needs and preferences of the users?
10. What are the most significant problems facing your work in design and management of open spaces?
11. Do you consider the value and quality of open spaces in design and management of these spaces?
12. Do you think public participation in the decision making process regarding the design, planning, management and maintenance of the local parks and public spaces would improve the existing situation?
13. What do you think would help the most in improving the existing situation of public spaces in Jeddah?

THANK YOU FOR YOUR COOPERATION

Abdullah Nidal Addas
Postgraduate Research Student, University of Sheffield