

University of Nottingham

Rethinking Public Spaces in Urban Residential Neighbourhoods;

a case study of traditional and contemporary
developments in Misurata, Libya

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This thesis is dedicated to the soul of

My Father

Abstract

Public spaces of a city's neighbourhoods and residential areas are one of the key indicators of urban quality. In Libya, in 2005, the government introduced a redevelopment scheme to provide new homes to the local residents and to build thousands of new housing units around the country. This initiative was to offset the shortage in housing numbers due to the rapid population growth and urbanisation. In 2011, 79% of the country's population lived in urban areas. This high demand for housing by Libya's citizens drove significant changes to the urban planning composition of the country, particularly the residential areas. The government claims that this new strategy aims to fill the shortage of houses within as short a time as possible. This research focuses on two examples of a typical neighbourhoods as case studies in Misurata City, Libya. It investigates the role of public spaces in the traditional neighbourhoods (TNs) and the governmental neighbourhoods (GNs). It compares the conditions of public spaces in both types of neighbourhoods in terms of physical and intangible qualities and examines the relationship between the residents in terms of social integration and community cohesion. In addition, the researcher examines whether this new strategy has affected the social relationships within the local community or not and assesses the extent of the possible impact on the daily activities of residents. Furthermore, the thesis discusses the extent of interaction among the residents regardless of their age, gender and cultural background.

The main aim of this research is to examine the satisfaction of the public spaces' users through measuring the social value they ascribe to it, and the level of interaction they engage in. The research includes a case study to draw a clear picture of the existing situation and contributes a framework for future studies. It has been suggested by many scholars and professionals that the appropriate research approach in such a study is the mixed methods approach which combines quantitative and qualitative methods in the case study. The research compares the results of the questionnaires that were distributed to an adequate sample of the neighbourhoods' population, and in-depth interviews with three categories- a) residents b) decision makers and c) professionals. Additionally, site observation was used to focus on the residents' activities in the public space which might be difficult to collect by the former tools. Data were analysed using Statistical Package for the Social Sciences (SPSS) to find out the significant correlations of the main themes of the study, and NVivo was also used to analyse the in-depth interviews which suggested several important findings. The case study includes two sites, 1) 9th July Governmental Neighbourhood (GN) and 2) Almegawba Traditional Neighbourhoods (TN) in the city of Misurata, Libya.

Two hundred (200) questionnaires were distributed to the two sites, Almegawba neighbourhood and 9th July neighbourhood, and 158 forms were returned, 78 from GN and 80 from TN. The questionnaires include a number of open-ended, closed and multi-choice questions. Sample selection was obtained using a snowball technique. Participants were recruited to take part in the research through an invitation from other residents and so on. The next step was conducting the interviews for further in-depth information. In-depth interviews were conducted to provide a further understanding of the existing situation as well as to reveal clearer features about the quality of the public space of the case study. Moreover, they enabled the researcher to collect appropriate evidence that clarifies the research issue and contributes to solving the research matter and creating a coherent framework to be used in the future policies. A total of 16 interviews conducted during the field work with four Decision makers, four Professionals, four Residents of Governmental Neighbourhoods (GNs) and four Residents of Traditional Neighbourhoods (TNs).

Results have shown that public space plays an essential role to strengthen the relationships between the residents of the neighbourhoods. The findings highlight that residents in traditional neighbourhoods feel more attached to their community, socially satisfied and comfortable while this perception was lower in the governmental neighbourhoods. Findings also highlighted that when public spaces of the neighbourhoods are well-prepared and provided with an appropriate range of physical settings, this will have a positive influence on the social satisfaction of the residents. The research also found out that relationships between the residents of the neighbourhood play an essential part to improve and promote the social satisfaction of the residents which lead to high-quality communities. Hence, they contribute effectively to the development of the urban quality throughout the city. A new future direction is to find out how the neighbourhoods of the city can be linked together, and how urban designers can create schemes that can improve the relationship between the communities of the city as one linked/integrated community.

Research Publications

1. Abaid, I. Tang, Y. 2016, LIFE IN PUBLIC SPACES OF NEIGHBORHOODS, A CASE STUDY OF MISURATA CITY, LIBYA. 12th International Symposium on Urban Planning and Environment, 31 May – 3 June 2016 Lisbon, Portugal.
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Preamble

Why neighbourhood public spaces?

For a long time I was interested in public spaces in general and specifically the public spaces of the neighbourhood: (their role in the community, impact on the residents' life and social satisfaction and why the interaction of the residents seem more vital in the public space of the traditional neighbourhoods). I grew up in a traditional neighbourhood as one of a large family consisting of fourteen members including brothers, sisters and the parents. I was the second youngest child in the family which enabled me to see a number of role models among my siblings throughout my childhood. I had experienced how families live in different parts of the city and in different types of the neighbourhood when I was spending days/weeks of school breaks in my brother's/sisters' homes. Some of them lived in public governmental neighbourhoods and some lived in traditional ones. All these places are different in terms of the social interactions and the neighbourhood quality.

When I graduated from architecture school in 2000, I began to open up to the life in other countries through a numerous of visit trips all around the world, I managed to visit around 30 countries including the USA, China, Russia, Europe and the Middle East. The rhythm of life and the nature of the communication between the residents in each place depends on many local characteristics such as the cultural background, environment, weather conditions, historical background, education levels, social relationships and even economical aspects. Then, through my experience in working for the Central Projects Management of the Misurata City Council CPM from 2001 to 2005 and for the Housing and Infrastructure Board HIB from 2006 to 2009, I realised that the residents' satisfaction was not always a priority from the government's perspective. The first priority of the government was to provide housing units to the citizens of the country, but is it really meeting the *social* needs of the residents? The value of social aspects has not been a centre of attention as the focus is often is to build the highest number of houses to meet the rapid increase in the city's population. The public spaces were poorly designed and located which impact negatively on the residents' opportunity of sharing, interacting and engaging in daily activities.

In light of this, I became more motivated to undertake a research study that based on a deeper investigation of the social relationship between people particularly those in the public spaces of the neighbourhood where most of the residents are seeking the

comfort and satisfaction. In order to achieve that, there is a need to examine the quality of these neighbourhoods not only in terms of the physical settings and facilities' provision, but also the intangible elements such as interaction, social value, privacy and sense of community. Finally, I presume that the outcome of this research will contribute in many ways to the similar cases especially in the region of North Africa and the Middle East as well as some other regions where same urban concerns are taken place.

Acronyms and Abbreviations

N.	Complete words	Abbreviation
1	Traditional Neighbourhood	TN
2	Government Neighbourhood	GN
3	Public Space	PS
4	Housing and Infrastructure Board	HIB
5	General Services Company	GSC
6	Gardens Office	GO
7	Ministry of Urban Planning	MUP
8	Central Projects Management	CPM
9	Housing Utility Office	HUO
10	Public Open Space	POS
11	Physical Elements	PE
12	Intangible Elements	IE
13	Residents Satisfaction	RS

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PART 1: THE THEORETICAL ASPECTS AND RESEARCH METHODOLOGY

CHAPTER ONE: INTRODUCTION

1.1 Introduction

This chapter presents the background of the research and explains the key points of the research purpose. It illustrates the research gap and the main factors of the relevant links to the significance of the research enquiries. Moreover, it shows the important facts of the case study city such as the population figures and the urban growth as well as the housing projects policy in the government plans. Finally, this chapter describes the outline of the research and all the main points included in this study and their distribution to the thesis chapters. In addition, it presents the research map in a diagram that shows the main stages of the research process and conduction.

1.2 The Research Topic and Background

According to Jan Jacobs cited in Cabrera and Najarian (2013b), a reliable social network can be gained from the creation of strong and healthy communities' bonds. Therefore, focusing on the improvement of social integration and a sense of community within the public space is one of the essential methods which should be considered in designing housing complexes. Thus, the quality of the intangible elements that related to the social and mental comfort is an integral factor in the physical quality (Pancholi et al., 2015). This context identifies the main key of improving the quality of both elements, the physical and the intangible to improve the overall quality of the public spaces and the urban quality of these neighbourhoods and that should lead to better urban quality for the entire city/country.

Public spaces of the neighbourhood play a fundamental role because it is the place of gathering and applying daily activities by their inhabitants (Ambrey and Fleming, 2014). This role lies on the provision of many opportunities and activities for its users to communicate and interact in everyday life as stated by LeVine and Upton

(1994, p. 37) that, 'Many urban theorists state their significant roles as one of the principal components of a healthy urban setting'. Particularly, from the social perspective, as it is a valuable indicator of measuring the urban development of cities. This is not a new role for the public space as it has been central to the inhabitants' lives since the Greek and Roman eras (Kurniawati, 2012). Recently, the public space has been paid more attention by the specialists and government policies in recent urban developments (Jalaladdini and Oktay, 2012, Koohsari et al., 2015). It has been a concerning issue not only for the urbanists but also to planners, political scientists, geographers and even sociologists. It is widely considered that regeneration of public space is taking place to a large extent in many countries, both developed and developing countries (Cattell et al., 2008, Zhang and Lu, 2015).

From an urban design view and according to the general standards of each individual country, there is a minimum limit of public space that should be provided within the neighbourhood projects (Carmona et al., 2003, Madanipour, 1996). The size and form of this space depend on many factors such as the local environment, culture background, nature of the community structure and local weather conditions (Mehta, 2014). This open public space has more than one function: it should include physical elements such as chairs, playground, statues and designated spaces for a variety of other activities (Tanaphoom and Bart, 2015). Moreover, it should enhance the social value of the neighbourhood and improve the environment attraction. Therefore, to create an appropriate efficient public space, there should be a balanced combination of the quality of community design and the creation of their public space (Lopes and Camanho, 2013). Additionally, the integration of the pedestrian and the creation of the urban sphere that accommodates different activities and uses throughout the whole area should be considered (Madanipour, 2003).

Local context

The main motivation of this research is to investigate a very important issue regarding the urban quality of the public spaces in the residential neighbourhoods. Referring to the latest policy of the Libyan government to construct a large number of housing units, around 200,000 units, not only in Misurata city but in the entire country of Libya. In Misurata alone, the target housing that government intended to provide is 20,000 units. This policy was set by the Housing and Infrastructure Ministry of Libya, mainly to offer a solution to the shortage in the housing units as well as to regulate the rapid urbanisation within a developed plan for a period of 15

years from 2007 to 2022, (Housing and Infrastructure Branch in Misurata HIB). The aim of the construction of new housing units by the government is to implement comprehensive neighbourhood projects in line with the increase in the population growth. Figure 1-1 shows the total population of Libya, it can be seen that the population grows every year as per the Chart, this increase has led to a significant demand for houses. As a result, the government adopted a new strategy of building new complete neighbourhoods to speed up the mechanism of housing provision instead of the traditional way that is an individual effort by the inhabitants through the private sector.

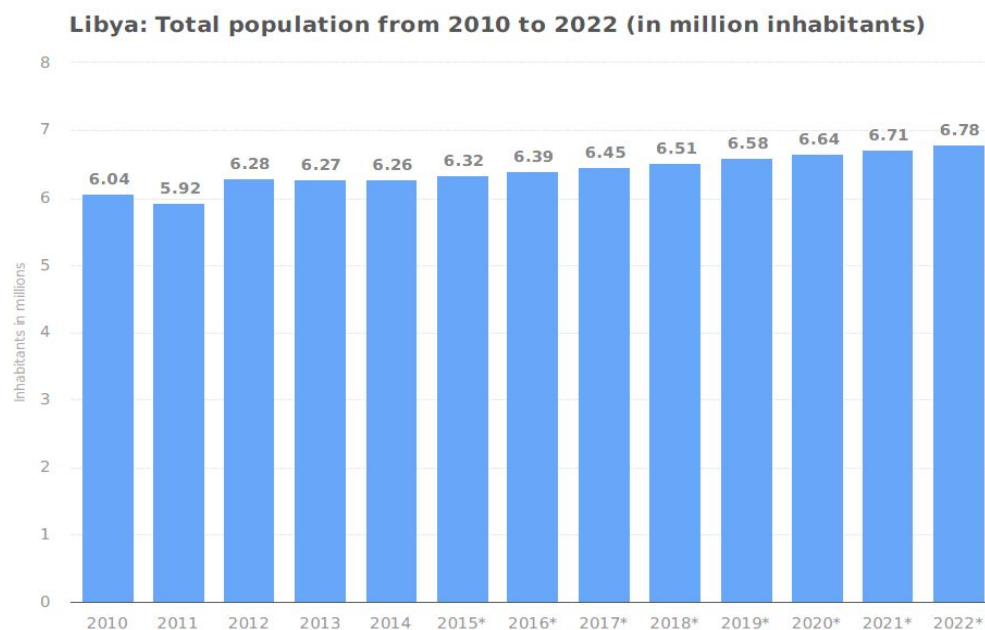


Figure 1-1: The current and expected population of Libya from 2010 to 2022 and the population growth rates, source: Statista online website, accessed 25/12/2017 11:13 am

This new strategy aims to fill the shortage of houses within the shortest time which is the period of 5 years as a first stage by around 100,000 houses, then will continue to provide more houses for the next 10 years but in a less number of projects regarding the houses demand. Therefore, a new neighbourhood which is known as a governmental neighbourhood (GN) become a new type of communities that have started to become a popular place for the local inhabitants to move in and live. These new neighbourhoods shaped and constructed by the government as a new place for a living may have different characteristics compared to the common existing traditional neighbourhoods. This difference can be in terms of the cultural background of the residents and also in the community structure regarding the

residents' relationship to each other. This is what the research is going to focus in order to find whether there is a social impact on this new form of communities and to what extent is this plan going to be a successful development with regard to the social satisfaction and the quality of these new neighbourhoods.

The Traditional Neighbourhoods, TNs, often include families who have lived together as neighbours for long periods of time and where all residents know each other very well, and this form usually has strong community cohesion, while the Governmental Neighbourhoods, GNs, are the residential projects built by the government for people from different regions, either from Misurata city or other cities of the country. This type of neighbourhood usually includes mixed residents in terms of cultural background, behaviour, traditional characteristics and mentality. This research sets out to assess the quality of both types of the neighbourhood (GN and TN) from a social perspective through deep qualitative discussion in order to establish a specific framework of the future neighbourhood projects which may contribute to the urban development of the city and, hence, to the other cities of the country.

1.3 Identifying the Research Gap

First, it is important to state that there is massive lack of research regarding the field of urban design in the country of the case study, this fact can be seen very clear with regard to the available literature of the research issue, especially in the country of Libya and also in the region of North Africa. Although, there is a reasonable amount of research in other regions such as the Middle East, South Asia and Latin America (Ghoomi et al., 2015, Wang and Li, 2016). The purpose of this research is to examine the quality of public space in terms of social interaction within the neighbourhoods of the city due to growing concerns of change in the neighbourhood quality, especially their public spaces as the main place of the residents' social and daily interaction. The investigation is applied to sites of neighbourhoods of Misurata city, Libya. It can be seen in the literature chapter that research on the high-quality public space is a crucial element in improving the residents' well-being and life quality which has been proved by many scholars such as Kim and Kaplan, 2004, Gehl, 2011, Tibbalds, 2012, (McGirr et al., 2014, Behrad and Bahrami, 2015, Gómez et al., 2015, Kim and Kaplan, 2004, Gehl, 2011, Tibbalds, 2012). More research has been conducted to examine the quality of the public spaces in terms of the physical elements, but less research has been conducted with regard to the social aspects such as residents' social interaction and

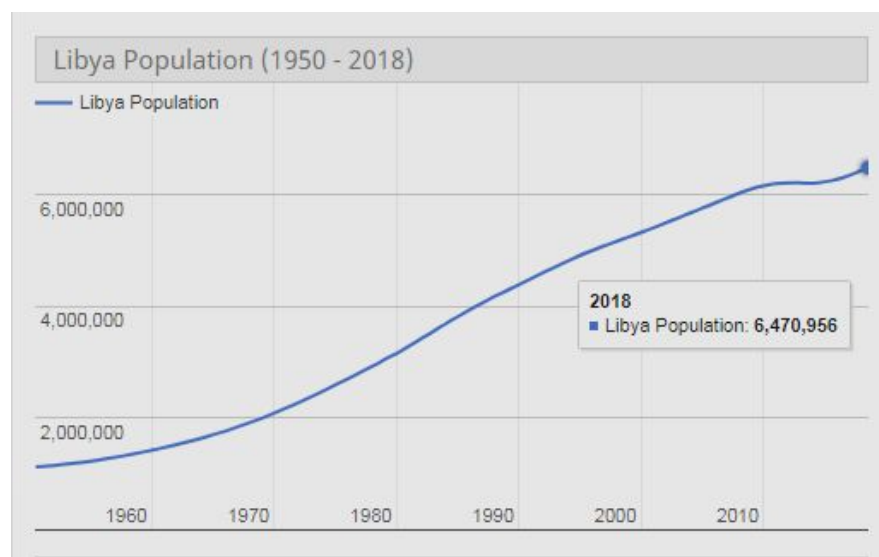
community cohesion (Elshehtawy, 2004, Yung et al., 2016, Hespanhol and Tomitsch, 2015).

In Libya particularly, in the available literature and in the knowledge of the author, there is no research that has been conducted in this area of study. In this context, this research contributes to establishing a developed framework that can be the foundation for future studies. In addition, the focus on these case studies illustrates further understanding about the social value of the public space in residential areas. The specific aim of the research is to find out the social role of the neighbourhoods public space in both types of the neighbourhood: the TN and GN. From this detailed and comprehensive investigation, the findings can contribute to the urban development across whole cities throughout Libya. Moreover, it gives a new form of research as it investigates the quality of the public spaces of two different neighbourhoods—the TN and the GN, and in terms of two different elements – the physical and the intangible. This can be a new contribution to the field because these elements usually discussed separately in most of the research as it has been found in the literature such as (French et al., 2014, Zhang and Lu, 2015), although, there is less research in the literature combining these elements together such as (Ghoomi et al., 2015). Therefore, this research provides a clearer understanding of the public space role by referring to the social dimensions and also creates a framework for similar projects that can be based on this study in order to achieve a better-qualified production of urban development.

1.4 Research Rationale

In 2005, the Libyan government announced a comprehensive housing and infrastructure development programme that aims to improve and enhance the life of Libyan citizens in all the parts of the country by providing houses and improving the infrastructure network. The programme's budget with the value of a contract of more than US \$36 billion was approved by the organisation of the Housing and Infrastructure Board (HIB). The capital budget programme is expected to exceed the US \$100 billion addressing critical housing and infrastructure needs throughout the country (HIB, 2007). This policy includes a long-term strategy to provide thousands of housing units all over the country's regions due to the high population growth and rapid urbanisation as 79% of the population live in urban areas in the year 2007 (Meters, 2007).

The population of Libya is 6,470,956 in 2018 as shown in Figure 1-2, the rate of population growth in Libya is 1.51% in 2018 and expected to rise in the next years (Worldmeters, 2018). Referring to this source, it can be stated that the population will increase in the following years; this is due to the high rate of births in the last few decades, it is registered 18.4 in 1000 population in 2014 (Graphs, 2014) and (Misurata city council Archive). This is one of the key reasons for the housing demand with taking in account that there was not enough response from the government since the 1970s to offer houses or even to support the investment of housing projects in any way that could have decreased this massive demand on houses (A Z from the MUP interview).



Figures 1-2: The Libyan population in 2018 and the increased line of the population each year, (Worldmeters, 2018)

Although there were a few examples of housing projects initiatives in the past, they were built for limited projects in some new villages or small towns around the country. The results of the interviews and questionnaires of this research show that residents prefer to build their own houses on their land through the private sector due to social reasons, as they feel more attached to their original communities and need to be close to their relatives and neighbours. At the same time, the number of people who cannot afford this choice has increased in the last 10 to 15 years according to the high cost of the private construction compared to the people's income.

The large growth in the population of the country has led to rapid urbanisation, sharply increasing the need for houses. As a result, local citizens started to accept

the idea of living in a government neighbourhood even though it is likely to be a great distance from their original community; as the available land for housing projects is mostly beyond the suburbs of the city. In fact, they accepted it as a temporary period of 5 to 10 years. They are accepting this solution because it is much easier than individual construction in terms of low cost and time saving, as the government can prepare houses in a shorter time and with an instalment sales system. In the last 10 to 15 years people have become more familiar with the public houses and the idea has become more and more acceptable for a large category of citizens. Gehl (2013, p. 229) illustrates the influences of the rapid growth in the population in the developing countries, and the economic dimensions to the development of the urban quality and use of the outdoor spaces, asserting that 'in both cases making city life viable will require careful work with people's conditions for walking, bicycling and using the outdoor spaces'.

This research investigates the situation of the public space within these new forms of the neighbourhood in terms of social satisfaction and sense of community. It seeks to measure the level of interaction between the residents and whether they are contributing to the public spaces by assessing the challenges regarding social integration and community cohesion (Zhang and Lu, 2015). The research examines the quality of the public space in these types of neighbourhood, comparing it to the traditional ones and identifying the most significant changes that affect new urban development. The aim of this research is to create a clear framework and assessment of public space in new neighbourhoods, illustrate the concerns that should be considered during the development stage, and guide future development.

In addition, research focuses on the public space that used and shared by all the people who live in the city regardless of their age, gender, status and cultural backgrounds. For instance, public space types in neighbourhoods include parks, streets, gardens, children's playgrounds and green spaces (Madanipour et al., 2013, Koohsari et al., 2015, and Kurniawati, 2012). These types of public spaces play a significant role in the urban development and quality of life (Das, 2008). This research investigates the social satisfaction of people within the public space of their community. In other words, one of the research tasks is to measure the level of social satisfaction and the psychological comfort of the users. Furthermore, it explores the quality and effectiveness of the public space within the neighbourhoods such as range of facilities, supportable activities and strength of feeling of integration between the residents are examined. In particular, this research focuses on open public space (outdoor space) in neighbourhoods

regarding the case study of Misurata city in Libya, taking account of the advantages of climate conditions in this region as it is warm and comfortable throughout most of the year (Ahmad et al., 1985, and O'Hara et al., 2006).

The policy of constructing residential projects to provide a large number of houses within a short space of time, might impose some social disturbance, as the aim is to create new neighbourhoods occupied by people from different places and from different cultural backgrounds. This possible disorder in the social cohesion and residents' relationships is one of the focal issues in this research. The new neighbourhoods contain hundreds of housing units, occupied by users from various backgrounds, who then share the public spaces and facilities in this community. It is important to know how people feel about themselves and others, how they use the open space around their houses, and what activities link their interests. Watson and Kessler (2013) state that there is evidence showing that the design concept, green areas and aesthetics have a fundamental impact on the users in these neighbourhoods in many aspects such as their health, comfort and feelings of safety and security. Thus, the investigation addresses concerns about the physical characteristics of open spaces in order to gain a full picture of the community composition. On the one hand, we should know how the social life and sense of community are affected by such factors. On the other, there is a need to find out the impact of these elements – identified as either positive or negative – in order to ensure the best design and manage the impact.

1.5 Research Questions and Concerns

In order to clarify the research enquiries and to establish a specific framework that contributes to creating an effective future plan for the urban development of the case study, there should be clearly detailed answers to the following questions:

- a. To what extent are the public spaces of existing neighbourhoods successful in terms of **social characteristics** such as **interaction, community cohesion, sense of community** and **social satisfaction** to all the residents of the neighbourhood?
- b. Are **residents' relationships** and the levels of **social interaction** in the public spaces of governmental neighbourhoods (GNs) different than in traditional ones (TNs)? **How** does this public space **influence** the residents in their communities with regard to the **social dimensions**?

c. **Research hypothesis/enquiries**

Public outdoor spaces within the new governmental residential neighbourhoods' development in Misurata, Libya does not encourage social integration and sense of community compared to traditional residential neighbourhoods. This research should investigate deeply to either prove or disprove this statement and in addition to that, it should provide clear results that illustrate the quality of each type of neighbourhoods and the key factors of both physical and intangible elements of the public spaces conditions and qualities within these neighbourhoods.

1.6 Research Aims and Objectives

This research aims to investigate the role of public spaces in residential areas, or 'neighbourhoods', in terms of social values and sense of community. In addition, to identify the existing public open space POS provision in TN and GN. In order to fulfil these aims, there is a need to examine the impact of public space on the neighbourhoods, social coherence and community interaction to judge the social satisfaction of the residents in their community. This study also compares the two main types of the neighbourhood within the city – Governmental Neighbourhood GN and Traditional Neighbourhood TN – as an additional tool to find out the differences from social perspectives which might impact on the psychological comfort of the residents. The findings should provide a clear evaluation of whether the governmental and private projects have considered these dimensions with regard to the residents' social needs during the design stage of similar projects, or whether there is a need for further consideration of the social value and residents' social satisfaction.

This study also attempts to gauge the efficiency and the function of public space of the new neighbourhoods that have been built under particular specifications to compensate for the shortage of housing units in the city. The investigation measures the level of integration and the sense of community among the residents in that neighbourhood in order to find out the information that can support the study hypothesis.

Main objectives in highlights

- 1- To find out whether the public space of the governmental neighbourhoods GNs has succeeded in providing a reasonable level of sense of community among the residents compared to the previous traditional neighbourhoods TNs.
- 2- To understand the impact of public space of neighbourhoods on the social integration of the residents, and how the design of public space can enhance the sense of community, which should improve the quality of people's social lives.
- 3- To draw a clearer concept of the social dimensions and their role towards the variety in and the interaction of the community. As well as, to find out whether public open spaces POS are enabling the residents to contribute equally in the public realm or not.
- 4- To gauge the social satisfaction of the residents with regard to the quality of public space and the level of physical elements' provision. Finally, to establish a developed framework for future development in terms of integrated communities with an appropriate level of social interaction and community cohesion.

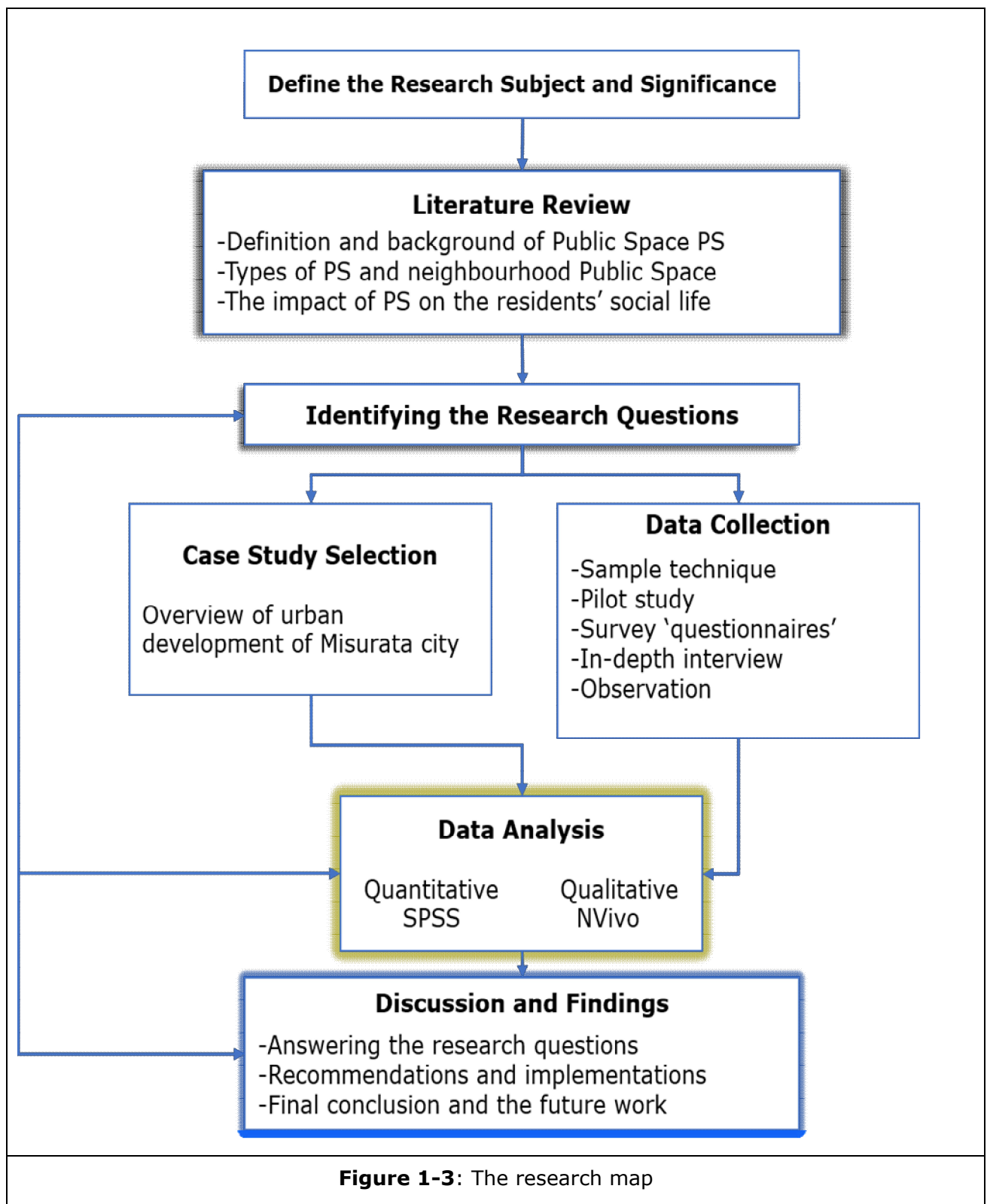
1.7 Research Limitations

Limitations of the research stem from difficulties revolving around data collection. For instance, there is a lack of database information about the local standards, population growth, similar studies and demographic information. This appears due to the weaknesses of the management system of the country. Accordingly, to minimise the risk of this limitation, the researcher needs to acquire most of the essential and appropriate key information. These efforts can be achieved by contacting the relevant local consultant authorities and effective use of the researcher's experience during the work period in involved firms. Further efforts are made through the (in-depth) interviews which are designed to include three main groups: decision-makers, professionals, and residents. These difficulties are not due to the lack of information itself but rather to the poor documentation systems and limitations in updating the government database. Although this matter is a challenging issue, at the same time it increases the value of the research to contribute effectively to future studies in this field.

In addition, there might be limitations to the reliability of the data collected from participants, as some data are collected by the questionnaire method. There is evidence that participants might not be completely aware of the exact function and purpose of the public spaces and their use due to the lack of attention about this field from the responsible organisations. Therefore, the researcher prepared three different forms of a questionnaire which were distributed to three categories of participants: residents, decision-makers and professionals. This initiative increased the level of the accuracy in the data collection process. It also provides a wide range of suggestions from the participants, which can conclude a deeper understanding and good evaluation of the quality of the existing situation of the public spaces.

The author planned to conduct a pilot study which included a sample of the residents of Misurata city. This approach helped him to amend and edit the questionnaires before the official distribution to ensure that the questions are appropriate to collect the needed data from this tool. In terms of the in-depth interview questions, the researcher selected the semi-structured strategy to give more room for the research to dig deeper into the significant details and valuable information. This strategy can help overcome part of the research limitations.

1.8 Research Map



1.9 The Structure of the Thesis

THE STRUCTURE OF THE THESIS			
	Abstract		
	Research Publications		
	Acknowledgements		
	Preamble		
	Acronyms and Abbreviation		
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	List of Figures		
	List of Tables		
Part 1: The Theoretical Aspects of the Research			
CHAPTER 1: INTRODUCTION	CHAPTER 2: LITERATURE REVIEW	CHAPTER 3: RESEARCH METHODOLOGY	CHAPTER 4: THE CASE STUDY
Part 2: The Practical and Analysis part of the Research			
EVALUATING THE PUBLIC SPACE QUALITY		THE SOCIAL SATISFACTION OF THE RESIDENTS	
CHAPTER 5: PHYSICAL ELEMENTS	CHAPTER 6: INTANGIBLE ELEMENTS	CHAPTER 7: RESIDENTS’ SATISFACTION	
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CHAPTER 8: THE COMPARISON BETWEEN GNS AND TNS		CHAPTER 9: FINAL CONCLUSION	
Comparison between 9 th July GN and Almegawba TN	Scaled Maps for Comparison	The key Findings	
		Answering the Research Questions	
	The Physical Aspects	Recommendations for similar future projects	
	The Intangible Aspects	Practical proposal for future development	
	The Satisfaction of the Residents	Research Contributions	
	Suggestions to improve the POS based on needs	Suggestions for Further Research	
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APPENDICES			
Table 1-1: The research structure includes all the key themes of the research			

CHAPTER TWO: THE LITERATURE REVIEW

2.1 Introduction

This chapter broadly discusses the public space in the urban context and provides definitions and general understanding of the types and forms of public spaces within the cities. Then it explains the concept and content of the public spaces especially the neighbourhood public spaces. Moreover, the chapter focuses on the most significant issues such as the importance and benefits of public space, social dimensions of public space, sense of community, and the quality of public open spaces. In fact, one of the literature review tasks is to cover these areas in order to illustrate the strength of the relationship between the research aims and the theoretical knowledge of this domain, explaining the purpose of examining the social interaction and residents' satisfaction in the neighbourhood public spaces.

2.2 Public Space

2.2.1 The Historical Background of the Public Spaces

Public space is a space for everyone, not for one person or particular groups of people – in other words, it is a space for no one but everyone (Bondi, 1998, and Southworth, 2014). To indicate more critical and reflective descriptions and detentions, Roger S. Ahlbrandt (1986) highlights that the word 'public' has more than one meaning; the origin of this word comes from the Latin '*populus*' which means 'people'. The definition of the public seems similar in all contexts, but what it means in terms of urban space is the main issue, as we need to establish a clearer definition to put it in the right context that can help understanding the concept, meaning, function and social value of the public space.

Historically, public space has played an essential role in all the great cultures of the world. For instance, in Ancient Greece, a crucial function of the public space was to educate residents to contribute to the public activities which occurred in many places such as the 'Agora' (Figure 2-1), the theatre, and in the main parks. Similarly, in the Roman era, when the great public space called the 'forum' was the most vital place to all classes of people with many important activities that all

citizens interacted with, it formed the centre of public life (Kurniawati, 2012). Therefore, the role of public space might have slightly changed in terms of its structure and physical setting, but with regard to its importance, it has been always the most vital axis of people's daily activities in the public realm.

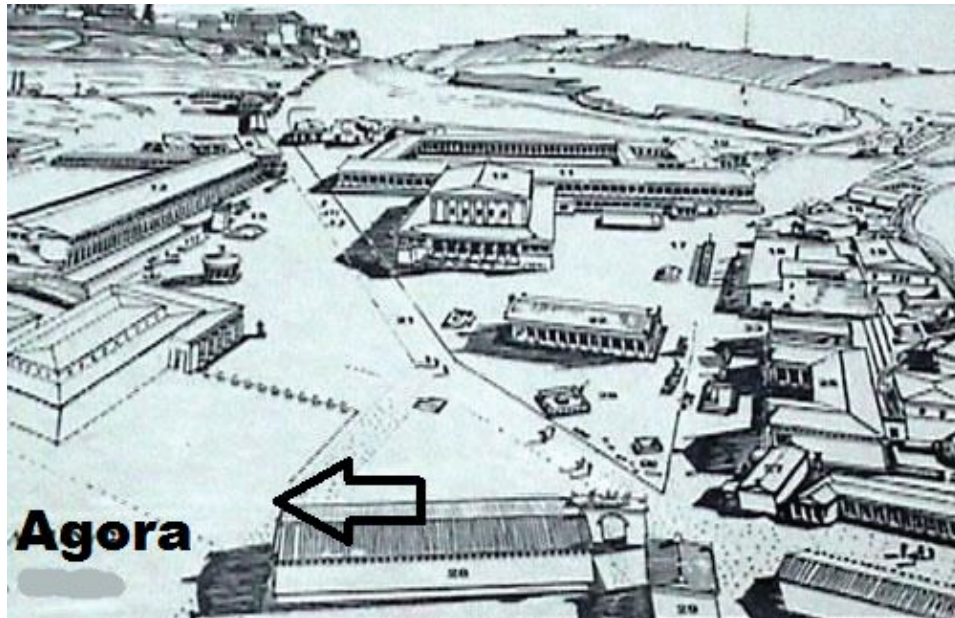


Figure 2-1: Greek Agora, source: (Kurniawati, 2012, p. 477)

It is not always a simple task to highlight the boundaries of the public spaces of cities; in each environment with its specific characteristics, public spaces can be defined slightly differently as stated by Woolley (2006). From another view, Iveson (2011) defines public space as certain places that are or should be accessed by all the categories of people, such as sidewalks, streets, squares and parks. In such places, the public expects to have their opportunities to interact with others, but in some ways these vital activities have recently become points of concern as a result of the contemporary urban changes which can be seen from the exclusion of people from many spaces in the city (Langstraat and Van Melik, 2013). Mehta (2014) states that public space can be defined differently with reference to the issues of its usage, accessibility and ownership. Some authors defined it as a space that is open to all groups and individuals and not controlled by private firms or organisations (Madanipour (1996) cited in Mehta (2014)). Others referred their definition to the matter of access and use; that public space is accessible and shared by all categories of people (Carr (1992) cited in Mehta (2014)).

Oranratmanee and Sachakul (2014) state that streets and their footpaths, the main public places of a city, are some of its most vital parts. Hence, if these vital organs

are effective, the city structure will also be good. In a simple definition, Sampson and Raudenbush (1999a) describe the public space such as streets, footpaths and squares as belonging to nobody and therefore to everybody. Public space is a place for everybody; it is a place in which people of all categories are mixed and there are no specific rules to control the user's movement and activities except being there. Public places play a crucial role in the most easily accessible places to find people who one can communicate with, and to share the public life (Gehl, 1989).

This research focuses specifically on the public space of the neighbourhoods including open areas, spaces around the houses, streets, car parks and the public gardens. These spaces can be described as areas where most of the residents can practice their daily activities such as sports, biking, walking, sitting and having a drink with a spontaneous chat (Wang and Li, 2016). In this particular form, the type of public space differs from the public space of the city centre such as public squares where the users are mostly anonymous whereas, in the public spaces of the neighbourhood, residents know each other and can recognise each other (Poortinga et al., 2016). Most of the users of these spaces are familiar with the residents; however, the relationship level might vary from one neighbourhood to another, and one of the tasks of this research to find out and explore more information regarding the form of these relationships between the residents in different forms of the neighbourhood.

2.2.2 Definition of Public Spaces

Public space has been defined in many different formats according to its usage, location, time and purpose (Woolley, 2006). Below are some of the most relevant definitions by scholars in this field which describe the most significant meanings of the public space. (Woolley, 2003, p. 3) defines the public space in an academic context as:

'Public space is space where we share with strangers, people who aren't our relatives, friends or work associates. It is space for politics, religion, commerce, sport; space for peaceful coexistence and impersonal encounter. Its character expresses and also conditions of public life, civic culture, and everyday discourse'.

However, this definition for the public spaces of the city might not be applicable to all the cities from different regions. In Libya, the spaces inside the residential area are mainly used by the residents themselves or someone who is known by the residents but not everyone. Moreover, streets, car-parks, sidewalks and pavements

are used in different proposes for social activities as will be presented in the case studies Chapters (5, 6 and 7). Woolley (2003) importantly categorises the public spaces from the user's point of view into three groups.

'Domestic, neighbourhood and civic...domestic spaces include housing areas, private gardens, community gardens and allotments. Neighbourhood open spaces include Parks, playgrounds, playing fields and sports grounds, school playgrounds, streets, city farms, incidental or 'natural' green spaces. Civic open spaces are deemed to include those relating to commercial, health, education, transport and recreational applications' (Woolley, 2003, p. 56).

Nevertheless, definitions of public spaces are varied particularly from an academic literature perspective due to subjectivities in many cases (Madanipour, 1996). In another view, Gehl (1989, p. 17) states that,

'A public place is a place for everyone. It is a place in which you do not have to know anyone or do anything, in particular, except be there. Public places serve an important role as the most easily accessible places to meet people and to take part in public life'.

It can be seen clearly that many scholars in this field concur about the free access to the public space, although they have different concepts of the form and the use of the public space. This is because there is a significant link between the public space and the time, the environment and the culture of that place. For instance, (Kurniawati, 2012, p. 477) states that 'Public space is commonly shared and created for open usage throughout the community. Everyone has a right to access and use public space'. This, however, does not mean that the free accessibility of public space has no control and management. Carmona (2010, p. 5) points out that, 'Within urban design research, public open space is defined as 'managed open space, typically green and available and open to all, even if temporally controlled'. For the purposes of this research, public space is taken to mean all the open areas of the neighbourhood including parks, streets and green areas, courtyards between the buildings, sidewalks, and marginal areas.

Other scholars have pointed out that it is important to define the public space in its precise context in order to apply the appropriate criteria and achieve a valid outcome from the research. For example, Madanipour (1996, p. 7) states that one of the space definitions is "to make space distinct" because sometimes, and in some regions, public space can be preserved as a space of gathering. Another example is offered by Edwards et al. (2013, cited in Koohsari et al. (2015, p. 76)

who are interested in the environment and green areas and works with planners and policy-makers. They defined the public spaces as 'spaces reserved for the provision of green space and natural environments, accessible to the general public free of charge'. The definition of public space varies according to many factors; thus, it can be broad in terms of its users but might be narrower in terms of its function and physical features.

2.2.3 Public Space in the Urban Context

Firstly, the premise of urban design is to create a good place for people, making a better environment. Carmona (2010) points out that the term 'urban design' contains two questionable words that can obscure accurate meaning. Taken individually, 'urban' refers to the features of the city or town and 'design' describes the tool of doing something such as creating, planning or pattern making. Urban design is still one of the most complex disciplines (Montgomery, 1998) (Lang, 2014), not only because of its ambiguous boundaries but also because it depends on many overlapping patterns. There are many aspects involved in the urban design context; according to Carmona (2010, p. 6), the substantive dimensions of urban design are 'morphological, perceptual, social, visual, functional and temporal' see Figure 2-2. In this study, there is more focus on the social dimensions and less on the visual and functional aspects of urban design.

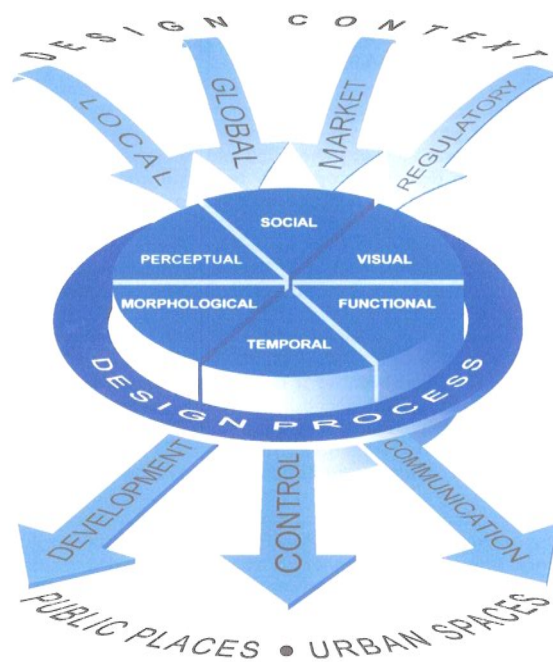


Figure 2-2: Public places and spaces in an urban design (Carmona, 2010, p. viii)

Along the same line, urban design is generally used to incur a wider meaning such as the process of providing developments and improving the places in cities and villages as well as in aesthetic physical approaches. As a confirmation of the role of the public realm in the development of urban design Jacobs et al. (2012) state that the active public domain contributes essentially to the vital urban design. Additionally, urban design is everything about designing open spaces, organising directions, providing creative local attractions, and finding economic choices to improve the urban vitality of the communities.

2.3 Exploring the Public Space in Misurata, Libya

The public space generally in Libya and particularly in Misurata city which forms the case study of the research is a complex matter. Many problems have arisen in the public space in terms of quality, function, size, location, number and design. Since the first comprehensive plan of the city which was designed for the period of 20 years from 1980 to 2000, no serious study has been conducted; however, there have been some individual studies addressing some cities in Libya including Misurata city. These studies are not completed and Libya has struggled with recent changes to the existing plan. According to the experience of the researcher during his work period since 2001 in several relevant positions at the government central committee of Housing and Infrastructure in Misurata City Council, it is clear that the third generation of the city's Master plan for the period from 2000 to 2020 is not completed and has been modified many times due to the uncontrolled changes that citizens and private sectors have made in separate strategies which do not always match the proposed Masterplan.

Unfortunately, there is a lack of sources that illustrate the existing situation of the public space areas and not enough databases about the public space of neighbourhoods. Nevertheless, this research attempts to collect an adequate range of data that enable the researcher that afford the researcher appropriate control over examining the research issues in order to create a new framework for identifying where the deficiencies and imbalances are in the recent context of the public space under investigation the research issues and to create a new framework for identifying the places of deficiencies and imbalances in the recent context of the public space. Furthermore, a case study is used to investigate in depth the concerns that residents face and to find out the urgent social needs of the users. In order to conclude a clear picture of the advantages and disadvantages in the place of the

case study, the research should establish revised points that contribute effectively to the future development of the public space design in the city.

2.4 Categorising the Types of Existing Neighbourhoods

Basically, there are two main methods of procurement in the housing projects policy in Libya. According to the composition of the neighbourhoods, they can be divided into two main phases. **Type 1:** called a spontaneous action, where the people build their own houses on their land as self-funded projects. **Type 2:** where the government owns the land and builds a whole project which usually contains a large number of houses, approximately 500 up to 10,000 units, to be handed to the residents on completion.

Type 1: there are concerns over creating a successful public space, because residents tend to use most of their land and, hence, will probably not provide any extra space to be used as a public space for the community. On the other hand, this type of neighbourhood is more likely to be more coherent and valuable in terms of social aspects. This is because of the strong relationship between the residents and the harmony among the traditional and culture features.

Type 2: this type of neighbourhood is based on the strategy that government controls the whole construction of the project, from the design to the handing-over to the customers. One of the most important advantages of this strategy is that the public space is gaining more consideration from the design stage to the end of the project. Public space in this type of neighbourhood is usually allocated a large area of the site which allows more access points and walkable paths from/to the housing units. Nevertheless, due to the relatively low cost of the houses in this type of community, it is more likely to contain people from a variety of places, from both inside and outside of the city. This will create a mix of the users who move into these houses, and there are usually lower levels of social cohesion and interaction among them.

Recently, with regard to the government strategy of providing new residential areas to a large category of the citizens around the country within a short time, there is a high concern over the increase in the social value and the traditional practices. The new neighbourhoods should be designed and located carefully and should be based on a specific requirement to meet the social needs; otherwise, they may become less active and may contribute negatively in protecting the social characteristics of

the local community. As the Type '2' choice has approved by the public sector to provide a faster solution for the shortage of houses, many neighbourhoods have already been built based on this concept. This situation needs to be explored to be clearer and to discover the advantages and disadvantages, in order to maintain the quality and the continuity of the urban development. Therefore, this research aims to examine the satisfaction of users in these Type '2' communities and to investigate whether or not this policy is recommended to be continued in future projects.

2.5 The Role and Importance of Public Spaces

Public spaces are a fundamental component of cities. They represent sites of sociability and face-to-face interaction, and at the same time, their quality is commonly perceived to be a measure of the quality of urban life (Cattell et al., 2008). It has been widely stated by scholars that public space at neighbourhood level plays a significant role in people's everyday lives; it is an everyday space of community (Chitrakar, 2016). According to Madanipour (2010a, p. 107), 'public space is intertwined with everyday life in neighbourhoods' in this way it is linked to the quality of people's day-to-day experiences.

Public spaces depict the aspects of sociability and direct communication between the users; also their quality is often considered to be a gauge of the quality of urban life (Cattell et al., 2008). It has been broadly noticed that urban design either in the city centre or in neighbourhoods has become a key concern in many countries (Das, 2008), not only because of its physical benefits but also according to the social interaction aspect. To go even further to assert that a high level of quality of public space is fundamentally necessary to everyone, there should be no exception to any categories of people (Kurniawati, 2012). The demand for public open space has risen rapidly in the last few decades as a result of the population increase in many countries (Grose, 2009), (Woolley, 2006) which highlights the crucial role it plays in promoting a vital urban community.

The role of public spaces in our lives is not only to improve the quality of our cities and their physical setting but also to enhance the social interaction and the sense of community (Jacobs et al., 2012) and (Poudyal et al., 2009). People use public space every day when they go to the work, home, school and go shopping, but the main usage of public space that when people use them for their life activities and social communication. Woolley (2003, 2006) illustrates that public open space is

very important for people in many ways; it increases the quality of life, provides economic opportunities, and promotes the sense of sociality among the residents, thus it has a positive impact on the quality of life in our communities.

In most of the public spaces literature, the social perspective has been strongly cited as one of the main elements that are linked directly to the use of public spaces (Chitrakar, 2016, Carr, 1992). The relationship between the people and space explains clearly the importance of the space and what it means to these people. In many cases, the arrangement of the space can determine the pattern in which space is used by the people, whereas in other cases the use of the space also can reform the type and shape of the space (Pancholi et al., 2015). In all cases there are three main factors that must be considered in terms of identifying the function of public spaces as Carmona (2010, p. 137) highlights; these are 'ownership, access and use'. In order to evaluate and assess the quality of the public spaces, there is a need to identify these three factors and explore the correlation between the space and the users. Cattell et al. (2008) cited in (Chitrakar, 2016, p. 214) states that 'public space is not just a physical setting but it also has a host of subjective meanings for its users that accumulate over time'. Therefore, it can be concluded that physical and social elements play a significant role in assessing the public space quality and identifying the users' needs and levels of satisfaction.

2.6 Content and Benefits of Public Spaces

'Public spaces are at the heart of democratic living' (Carr, 1992, p. 19). The researcher starts with this statement to highlight the importance of the public space as indicated also by Worpole and Greenhalgh 1996, cited in (Pancholi et al., 2015, p. 1) that, 'Public spaces are the main stage of urban life and facilitate encounters, exchange of experiences and foster a tolerant urban society through the exposure to different people and their traditions'.

In order to have an effective and successful public space, it is crucial to understand the role that such a space plays in people's lives (Kurniawati, 2012), and what exactly space should contain and provide to those people. As explained previously, it is vital to address physical and social dimensions in the stage of creating such spaces. The literature on this topic illustrates that the content of the public spaces of the city as well as in the neighbourhoods depends on the users' needs which can be determined by exploring the nature of people's everyday lives, the uniqueness of

the local relationship of the users' categories, and finally the forms of public space usage and practical activities (Yung et al., 2016).

The design standard guidance for the specifications of public space varies from region to region. For instance, in London, UK the main criteria of the public open spaces include the following points, as it is summarised in (CABE, 2011b):

- The area that is required for each space should be considered in the public space design.
- The accessibility into and from the space, the clear linking points to the public transportation of the city.
- The range of facilities should be provided in which to guarantee the comfort of the people staying in the place.
- The physical settings, visual, psychological and functional aspects such as lighting, vegetation, site furniture, boundaries, footpaths, architecture features, and maintenance and play facilities are important for the quality assessment.
- The public open spaces should provide not only the previous points, but also should contribute to the user's sense of convenience, condition, usefulness, and appropriateness.
- The social aspects are some of the main features that should be considered, such as a sense of personal security, safety related to the visibility, exit points, hidden corners and accessibility.
- Aesthetics-value is very important in terms of public open space quality; this can be measured according to the following aspects – scale, enclosure, texture, colour, diversity, unity, stimulus and pleasure.

In general, these criteria may apply for most of the public spaces, although there should be particular attention to the points that are related to the local environment and cultural background, where there might be some differences. This research consistently focuses on social aspects of the public spaces as well as its quality assessment and finally on measuring the satisfaction of the residents. Therefore, there is a massive need to identify the benefits of the public space and find out to what extent public space impacts on the quality of life for the inhabitants. Davoudi and Strange (2008, p. 39) state that public open spaces contribute to our communities by delivering the following benefits:

- ❖ Creating a high-quality park with suitable amenities and facilities supports restoration, increases the sense of place and attracts the visitors to participate effectively.
- ❖ Open spaces and green areas can play a fundamental role to improve the wellbeing and healthcare and reduce diseases.
- ❖ Public open space 'as it is free or should be' is a good alternative to the low-income residents as they might not afford other places to contribute to their leisure and social activities.
- ❖ From a pedagogical view, open space and green space create a suitable domain for learning and work practices which provide the chance of developing social communication, especially for the younger aged users.
- ❖ Public open spaces are significantly important in heritage and cultural value, as many festivals and celebrations are held in these places.

2.7 Public Space of Residential Areas

Public spaces in the residential area usually attract many concerns such as a low sense of security, economic segregation, and lack of community cohesion (Walker, 2015). One of the concerns in the public space of the neighbourhoods is the small chance of investment by both the private and the public sectors. This might result in less quality in the public space of the neighbourhood than the quality that exists in the public space of the city centre. Furthermore, as the concerns of the public space are not only related to the physical aspect but also to the social and intangible dimensions with the fundamental overlap between them (Chitrakar, 2016), the investigation of this research adopts the two aspects in which to find out the correlation and the relationship between them and their affection on the public space quality.

This issue has been addressed by many researchers such as (Obama, 2009, Joseph, 2008, Foster-Fishman et al., 2007) in different regions with regard to more than one aspect. Most of the results highlight similar interpretations which are attempts to improve the quality of the residents' lives in their neighbourhoods. In order to achieve that, research suggests a policy of developing the public space to meet the residents' needs particularly the social ones. Friedman (2014, p. 4) convincingly highlights that,

'Neighbourhoods must be regarded as a vital block of society. Their successes will often determine how well a city and even a country will

perform. Therefore, the need to include a social perspective in their conception needs to be a part of the planning processes'.

Thus, the social dimensions are very important to the people's lives and their daily activities, which is the key focus of this research. In order to explore that, there is a need to review related information about the housing projects and the factors that play an important role in providing new residential neighbourhoods.

Housing projects essentially are not only a matter of providing homes, but also a creation of all the services and facilities for promoting a quality of life and good links to the broader community (Towers, 2005, Carmona et al., 2003). In addition, housing projects are often provided by one of the following sectors: the public sector which refers to the government organisations, or the private sector which can be identified as local private management firms or international investments (Carmona et al., 2003). Public spaces in residential areas are different from those in the city centre. They are usually designed to meet the needs of residents and provide an appropriate space to improve the quality of the community. Therefore, public space in neighbourhoods has different functions for a certain purpose, while in the city centre the public space is designed for a wider range of users who live in the city and people who come from its suburbs and other cities (Hanibuchi et al., 2012b). Thus, public space of the city centre has other elements to meet different requirements and needs, and the distinction between both spaces leads to the importance of knowing this element of each one. In this research, the focus is more on the community public space.

In any of the previous conditions described above, the residents of the community need to have the benefits of easy access to the facilities of this neighbourhood such as open space, shops, service centres and other education and health services (Southworth and Owens, 1993). Towers (2005) argues that housing settlements are more successful when they are built as a part of the older urban fabric in a way that makes them more connected to the surrounding facilities rather than to increase the resource consumption (Irwin, 2002). For instance, in a national survey conducted by Butler et al. (1969) cited in (Lee et al., 1994), respondents were asked which house they would choose: a high-quality house in a less eligible community, or a lower-quality house in a desirable neighbourhood, at an equal price. The second choice was preferred to the previous by 69% to 27%. This clearly points to the significance of the public space and the facilities in neighbourhoods.

The public space is one of the most considered aspects of recent urban development. Although each region and country has its own determinants to establish a particular framework that supports the improvement of the neighbourhood quality, there are also general standards that can be discussed which show the hierarchy of service created in different spaces of communities (Table 2-1 and Table 2-2) (Towers, 2005). In the following tables, it can be seen that there are a variety of distances that residents have available to walk varying from small spaces inside the neighbourhood to the bigger urban spaces in the central parks of the city. Therefore, the provision of public and semi-public spaces should be distributed to an appropriate size and within a reasonable distance from the houses in order to be reachable and meet the residents' desires of use.

	5-minute walk	10-minute walk	20-minute walk, short journey	40-minute journey
<i>Open space</i>	Communal garden	Local open space	Small urban park	Major urban park, country park
<i>Education</i>	Nursery, child minder	Primary school	Secondary school	Further and higher education
<i>Health</i>		Doctor's surgery dentist	General hospital	Specialist hospital
<i>Shops</i>		Daily needs	Weekly needs	Occasional needs
<i>Communal activities</i>	Meeting room	Community centre, library	Sports centre swimming pool	Sports club
<i>Entertainment</i>	Pub/café	Restaurant	Cinema	Theatre

Table 2-1: Example of the hierarchy of facilities which can be reached at different distance in an urban area, source: (Towers, 2005, p. 63)

Age	Provision
0-3	Toys in private garden or balcony
2-6	Small-scale equipment in local open space or communal garden
5-12	Robust and complex equipment in small urban park or adventure playground
8+	Outdoor games in major urban park specialist activity centre/theme parks

Table 2-2: Provision for children play-place. Source: (Towers, 2005, p. 63)

From Table 2-1, it can be seen that the size and function of the public space also depend on the distance from the houses. For each age group, there should be a certain type of physical equipment which can match the needs of these categories. The Tables (2-1 and 2-2) clearly show the time needed to arrive at different types of facilities. The time shown reflects the expected category of the residents according to their age. In this context, it can be concluded that meeting the local needs of the users by making these facilities in the public spaces available within the appropriate distance and created to several zones according to the age groups

of the users can help improve their quality and satisfy these residents with meeting their needs.

2.8 The Quality of Public Spaces

The quality of public space has been a concern of many scholars, architects, landscape designers and even the management policies of cities for a long time (Mehta, 2014). This is due to the important role that public space plays in urban development with regard to the aspects of economic well-being, environment, health and safety (Beck, 2009). Beck (2009, p. 241) Beck (Ibid, p.241) indicates that the quality of life for the people in their communities is linked to the quality of public space; with reference to a meagre range of studies and research in this issue. However, the evidence of Das (2008) suggests that a high degree of public space areas affects the quality of life and well-being in a positive way. High-quality open space of neighbourhoods can provide places where people can practice their activities and spend their leisure time in walking, sitting and reading, playing and socialising with others (Achmad Delianur Nasution , 2014). This supports the idea of the research in which the public space is a fundamental value that effectively contributes to the success of the communities especially in the social satisfaction and community cohesion.

Many scholars, however such as (Francis et al., 2012b, Das, 2008, Mehta, 2014), argue that before identifying the quality of public spaces, there is a need to determine the public space itself in terms of shape, use and function. Furthermore, many scholars such as Zhang et al. (2017) and Mehta (2014) clearly state that there is no gold standard against which to measure the quality of public spaces but there are several points in different studies that have been highlighted by some researchers to point out the main elements that can be examined in terms of exploring the level of quality in public spaces. For example, Mehta (2014, p. 57) research suggests a framework to evaluate the quality of public space, 'Good public space is accessible and open, is meaningful in its design and the activities it supports, provides a sense of safety, physical and environmental comfort and convenience, a sense of control, and sensory pleasure'. This framework in fact ties with the concepts of Gehl (2011) and Carr (1992) of how the public space is divided into categories regarding its use and function to: '*necessary, social and optional*'. Figure 2-3 illustrates this framework which is based on five main dimensions of the public space; these aspects are suggested to be the essential

elements that can be investigated in order to evaluate the quality of the public spaces.

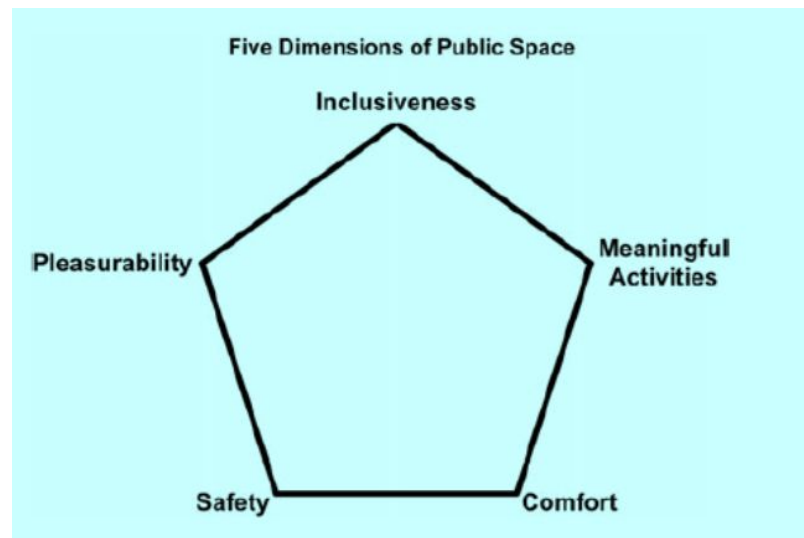


Figure 2-3: The five dimensions/aspects of the public space suggested by (Mehta, 2014, p. 58)

According to (Mehta, 2014) explanations, these five aspects can be summarised to the following key meanings:

"inclusiveness"	The ability of participation and sharing
"meaningful activities"	The feeling of attachment and sense of familiarity
"pleasurability"	To be physically observed and imageable
"safety"	Feeling of safety
"comfort"	To comfort physically and mentally including the environmental protection and physical settings.
Table 2-3: The key interpretations of the main five dimensions of the public space	

The five key elements stated in Table 2-3 are the main aspects which can be divided into several more sub-aspects in each individual one. Chapters 5, 6 and 7 illustrate in more details the quality of public space and how it has been measured in this research in parallel with the research findings and discussions.

2.9 Physical Elements

The physical elements of the neighbourhoods' public space are all that can be seen in the place including the creation of these physical settings. Physical features which are the result that people see are the production of the planners who create

the design for the place to serve the users. In order to create a vital lively place for the people to use and enjoy their time in, there should be a consideration of the place and understand the needs of these users. Soholt (2004) cited in Cilliers et al. (2015, p. 1370) importantly highlighted that,

'We need to envision the future life of an area first. This way we can form nice spaces that are inviting for people and take in consideration people's needs and behavioural patterns, and when the spaces are formed we can develop guidelines for the planning of buildings'.

The physical characteristics of a place refer to its built environment and can both encourage and discourage neighbourly interactions. This issue has been a point of investigation for the planners, architects and even the psychologists (Wilkerson et al., 2012). In this research, the investigation includes the physical and intangible elements to examine the level of the public spaces quality because in many cases, using high technology and physical quality are not enough to improve the quality of the neighbourhoods. Yet, there are some other aspects should be considered such as social value, human practices and local culture, and these aspects are different in priorities from culture to another and from region to another as (Mullagh et al., 2014, p. 2) state that 'Empirical evidence demonstrates that all values are held by all people, across cultures all of the time, but their importance is ranked differently within each individual'. Therefore, a deep local study is required to understand the residents' needs which should be applied relevantly in the urban development. For instance, in Libyan community, there is a widespread wisdom or 'saying' that 'buy the neighbour before the house' which show the importance of choosing to whom are you going to live next, instead of what quality is the house or the value of the property that you want to live in. This context also shows the fundamental role that society is playing in the local community.

2.9.1 Design

The term 'design' here refers to the process of creating a lively, practical, usable place for everyone in the neighbourhood. Many theories have been proposed in different research that vary in terms of their approaches and concepts but seem more experienced and suggested by scholars such as (Cilliers and Timmermans, 2014, Gehl, 2013, Ghavampour et al., 2015). The residents need to be included as a part of the place; therefore, Gehl (2004) suggests that design or planning of the neighbourhood spaces should be upside down; that is, plan based on the lifestyles and the ways that people use the space first then create the appropriate spaces for

that. In the last step, the buildings can be located in a way that considers these spaces (Figure 2-4) (Cilliers et al., 2015, p. 1374).

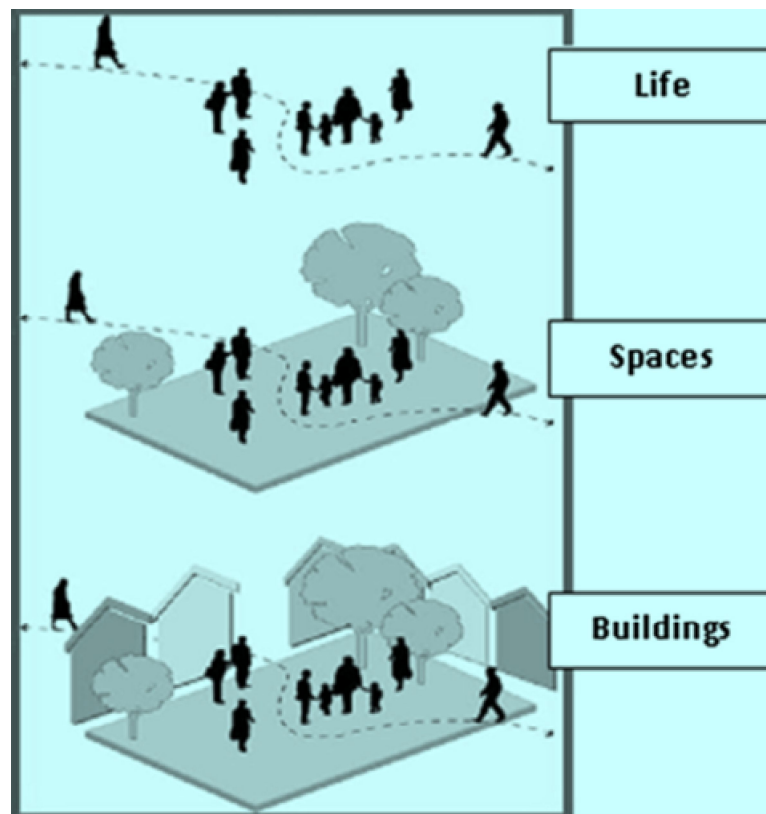


Figure 2-4: Turning the traditional urban planning process upside down. Source: adapted from Gehl (2004, p. 31)

Recent research has recommended that new compact cities which contain a number of neighbourhoods become more and more in need of the well-designed public spaces; 'The move toward compact cities increases the need for well-designed small open spaces' (Chiesura, 2004) cited in (Ghavampour et al., 2015, p. 4). This is because the compact cities seem to have a more variety in their inhabitants and a large number of population, it can be one of the effective action is that to provide more places for those residents to socially interact and involved in daily activities. These activities often include people of all ages and provide a chance of meeting and connection between the residents which can all happen in public spaces within these neighbourhoods. This proposal can be seen successfully achieved in similar cases such as in the study of Zhang and Lu (2016) in the Nanluo and Ju'er neighbourhoods in Beijing, as concluded that providing more public spaces can improve the quality of those neighbourhoods and therefore the satisfaction of the residents of these neighbourhoods which are a compact part of the city.

2.9.2 Size

One of the most basic features of public open space design is identifying the area size. Each type of open space area has a specific function and it is provided to a particular amount of users (Goličnik and Ward Thompson, 2010). Shi et al. (2014, p. 31) state that, 'The design of open spaces goes far beyond providing just a crossing place; it should also be healing – serving functionally as well as mental needs'. The standards of public space design can vary from region to region and from one country to another, which is because of the variables in each individual place. For example, in London, there are seven different types of open spaces according to their size, (Table 2-4) (CABE, 2011a), starting from regional parks with a size of 400 hectares which are provided to be used by all the regional residents and reducing in size until the linear open spaces with a size of less than 0.4 hectares which are usually located between the buildings.

Open Space Categorisation	Size Guidelines	Distance from homes to open spaces
Regional Parks	400 hectares	3.2 to 8 km
Metropolitan Parks	60 hectares	3.2 km
District Parks	20 hectares	1.2 km
Local Parks and Open Spaces	2 hectares	400 m
Small Open Spaces	Under 2 hectares	Less than 400 m
Pocket Parks	Under 0.4 hectares	Less than 400 m
Linear Open Spaces	variable	Wherever feasible

Table 2-4: Hierarchy of public open space POS in London 2011, (CABE, 2011b)

The size of the public space can be categorised by the physical elements such as equipment and landscape. On the other hand, the users of these spaces may consider the space as small or large according to their needs and the common activities that they usually apply in those areas, and so can be categorised by use. In this context, the official organisations and the responsible authorities normally have specific standards which should provide the appropriate size of each individual public space. Hence, the local specification should be designed and updated frequently regarding the users' needs and local society, and the communication between the people of each specific location.

In the same line, (CABE, 2011b) suggest that wide discussion with the residents should be held in order to identify their needs within the public space of their neighbourhood. Furthermore, this discussion can be of benefit in terms of the physical features that can satisfy the users. Figure 2-4 is an example of the users' levels of satisfaction according to the quality of their public space including the physical elements provision. According to the Figure 2-5, it can be seen that there is a priority of needs in the public spaces such as the parks. These elements as explained in the figure in three circles show the levels of the space quality. In the first circle it can be seen that well designed and good access are important, the following circle, it appears that secondary elements play a significant role such as events, quiet areas. In the final circle, it can be noticed that the park provided with only basic elements which put its quality as a satisfactory park. According to these research findings, where the order of categorising the element might differ slightly in other regions and community backgrounds (Zhang et al., 2017).

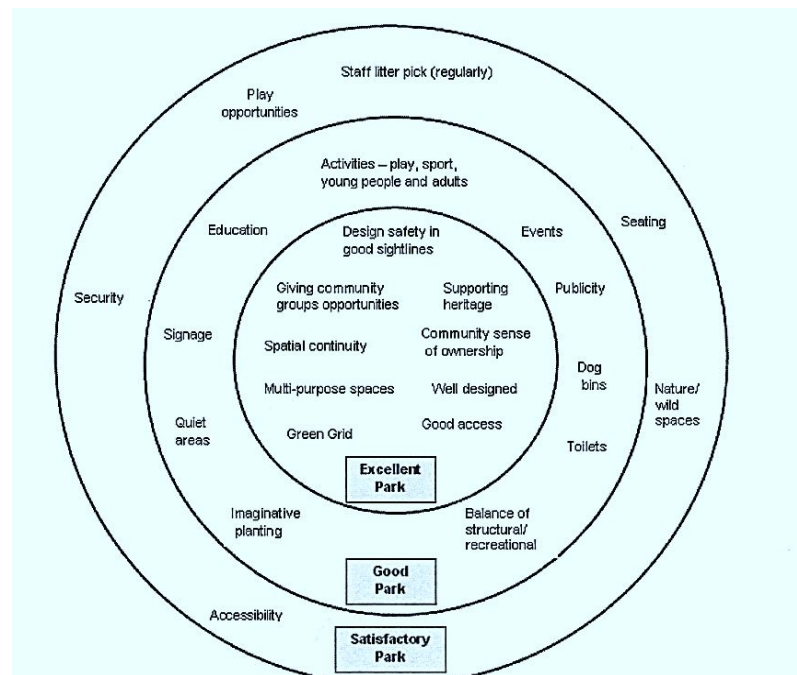


Figure 2-5: The users' suggestion of what elements should be included in the public open space, (CABE, 2011a p. 34)

Public space is a broad realm of discussion. It is often defined as including all the areas of the city except the roads and buildings as explained in chapter 2 in this research. Moreover, public space should be open and accessible to everybody at any time as long as it is safe and prepared for general use (Nasution and Zahrah, 2012). Based on the former, the accessibility of public open space is one of the most significant features for it to succeed in what it is intended to achieve. In terms of social aspect, all of the former elements are directly related to the relations of

residents and their behaviour in public spaces. Moreover, it is basic information that the design and physical settings of the space can be significant to shape the form of the residents' movements (Hansen, 2014). For example, the design and provision of playgrounds for children determine the function of this space, as they are not intended for use by other age categories to practice a different type of activities. To conclude, there is a strong link between the social value and the physical setting which cannot be separated from the same community.

2.9.3 Location

Location of the public spaces is one of the main factors that can indicate the level of the public space quality alongside with the location of their physical content inside the public space. It is related directly to the physical elements which are significant particularly in the design process of the public spaces as parks, squares and locations for sports activities. Much research has focused on the size, scale, facilities provision and design of the public space, while less research examines the location of public spaces as (Holtzclaw et al., 2002, Kaczynski et al., 2008) explained in these articles. Another research focuses on the appropriate distance of the going and coming journey from/to the parks and sports places or even the nearby fields (Kaczynski et al., 2008). The importance of public space location lies on several points such as the distance that residents need to walk, bike or drive from/to their houses and these places; the connection to the paths and the visibility for the users (Carr, 1992).

For instance, Cohen et al. (2007) in the Article 'Contribution of Public Parks to Physical Activity' which about examining the importance of public spaces location such as parks to their residents and the distance that people often make from/to the public spaces for physical activities. (Ibid. p. 513) conclude that 'These findings suggest that communities should be designed so that all people have a park within at least 1 mile of their residence', because they observed that more people go to the parks within 0.5 Mile and even more within 0.25 Mile while fewer people go to the parks which are within 1 Mile or more. Thus, the location of these public spaces including parks should be within the reasonable distance to encourage people to participate and to be active in visiting and enjoying their activities within these spaces. Although these figures of distances may vary from country to another, still there is a specific standard in each region/country that should be taken on the account in the design process to ensure providing the best quality for the users and meeting their needs.

The location of the public spaces are not only important for the surrounding houses but also because this location should be linked to other public spaces of the next neighbourhoods and then to the main public spaces of the city centres (Thompson, 2002). In this regard, the location of the small public spaces of the housing groups/clusters should have a connection to the larger spaces such as main central parks between the neighbourhoods and then to the more public spaces of the city as per Figure 2-6. It can be seen that in order to have a vital and continues public spaces which can be more successful and active, there is a need to be all connected and linked physically with designated footpaths and landscape. In this example, it can be concluded that location of public spaces are important as a key factor of the design process and should have a attention in terms of the public spaces quality in creating an integral urban fabric.

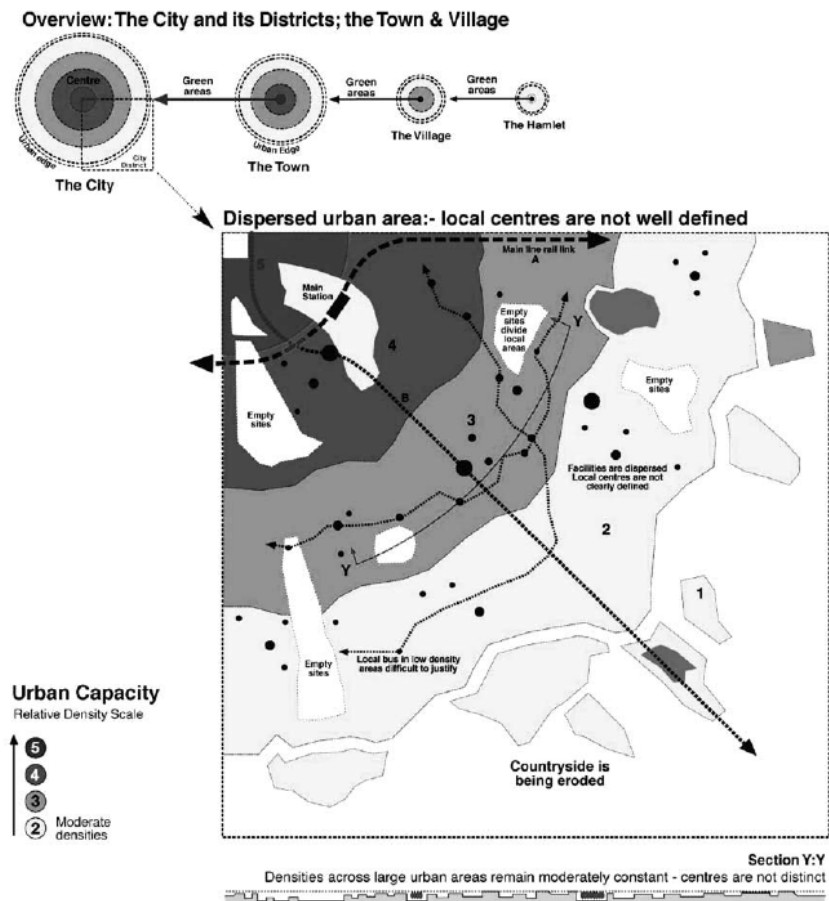


Figure 2-6: The hierarchy from the neighbourhood public space to the main large public spaces of the city, adopted from Rogers, 1999, source (Thompson, 2002, p. 62)

2.9.4 Accessibility

The following definition of accessibility may be the most sensible one referring to the literature of this part of the research.

'Accessibility is an important factor which impacts all aspects of public space in both direct and indirect ways. Accessibility can be defined in different ways, and once more objective and subjective dimensions are important. Objective accessibility is a key factor and physical distance is still important in Developing Countries' (Lotfi and Koohsari, 2009, p. 133).

More important than identifying the local features of the neighbourhood is selecting the most appropriate measurement tool to evaluate the quality of the site/space accessibility. The quality of public space and its use depends very much on good accessibility, Pasaogullari and Doratli (2004) highlight that the good use of public space depends on how it can be accessed by its users such as through footpaths, stairs, levelled floors. This can impact on the use of the space and the pedestrian flow from/to the public spaces. Therefore, this research focuses on examining the quality of public space by measuring the efficiency and the range of accessibility from/to these public spaces of the neighbourhoods. As highlighted by many urban theorists, poor accessibility to the public spaces might lead to less popularity of these spaces (Tsou et al., 2005, Wendel et al., 2012) because people prefer to use the easy way to move from place to another. This movement by the natural sense of the users who usually follow the easiest way to save time unless if they mean to access to places for a specific reason such as shopping, going to work and other necessary journeys.

2.10 Intangible Elements

The intangible elements of the public space are the elements that are invisible and cannot physically recognise, but they can be felt and can impact on our daily life. These elements such as social interaction, the sense of community, attachment, privacy and equity. Most of these elements can be felt and applied in the public spaces where people have their time of interaction with others and during the social activities within the community and in the public spaces of their neighbourhoods. The intangible elements are highly important in the creation of these spaces. Carmona et al. (2008, p. 14) state that, 'Research undertaken by DEMOS (2005) has shown that many of the needs that determine how the public environment is perceived are often intangible, reflecting the diverse motivation, needs and

resources available to different groups and users'. Promoters of the creation of neighbourhood parks believe their communal spaces help to create a better society and contribute to the solution of many of the social problems impinging on the private sphere of the users, such as family violence, social disintegration, a lack of interest in others, and a lack of family and community values. Hence, public spaces are seen as places of integration and inclusion (Bonilla, 2013, p. 42).

In the same way, Beck (2009) indicates that the most positive indicator of recognising the quality of life is the public space quality. In order to increase the quality of life for the residents, there are many significant points to be considered in the public realm; if addressed, these can contribute effectively to promote the level of comfort in public places (Ballas, 2013). The first point is the place of living in that people's perceptions highly depends on the place and its surroundings. The second consideration is the satisfaction of residents towards their own houses, as well as their feelings and attitudes about the sense of attachment and belonging to the place (Goličnik and Ward Thompson, 2010).

Beck (2009) concludes that the following points are the most fundamental issues to focus on: safety, security and feeling of enjoyment result from how safe these communities are perceived to be. When residents can move around freely and participate in their community in a safe and enjoyable atmosphere, they are in a safe place.

2.10.1 Social Aspects

Beyond the numerous benefits of public space on well-being, planning development and entertainment needs of the cities, there is also an obvious apparent value in promoting the social life and community cohesion (Southworth, 2014), in which people adapt their lives to the common daily activities (Gehl, 2011, and Hansen, 2014). The time that people spend or should spend in the public realm regardless of whether the place is in their neighbourhoods or in the central spaces of the cities, there is a need of a sense of integration and social interaction in parallel with gaining the appropriate level of safety, comfort and security (Achmad Delianur Nasution*, 2014, Parkes et al., 2002).

2.10.1.1 Residents' Interaction

On the other hand, social interaction evidently could unite and harmonise the community in their neighbourhoods. The term 'social interaction' in this research as

the bonds or relationship between two or more individuals in a community, particularly in the context of multi-cultural diversity (Rasidi et al., 2012).

In the context of the public space of the communities, residents need to be comfortable and satisfied for them to be deemed successful. In this section, the focus is on the social evaluation of the public space of neighbourhoods. Kamalipour et al. (2013, p. 130), Baum et al. (2009) and other scholars believe that 'the public places do not meet the people's needs any more', due to the change of dwellings policy and/or the population growth. Not all of the former opinions refer to the social needs, but to the design, physical elements and the area of the public space. In the case of Misurata city, the most significant issues that can show the level of public spaces quality in the neighbourhoods are the provision of appropriate facilities and the consistent program of a regular maintenance on the one hand; on the other, the resident's participation to and interaction within this space in a way that enhances the social value and create a coherent community is another critical factor.

Consequently, the potential interactions between place, residents and space are highly important in terms of evaluating the sense of community. Both within Libya, as elsewhere, the main roles of local community are to satisfy the residents by providing services which meet their needs; for instance, providing a high range of activities, meeting the needs of all categories of residents, and the creation of all the categories of the residents and the creation of attractive amenities that encourage the locals to participate positively (Baum et al., 2009). In order to adopt an effective approach to measure the satisfaction of the residents of the neighbourhoods, the relation between the three former elements should be analysed, not only because of the strong link between them but also due to the differences among them from region to another.

Another significant value is the group of outcomes that are available by positively involving the residents to participate in the public spaces. Residents need to contribute effectively to the development and creation of their community by being asked about their preferences and needs. They should take part in the discussion along with the decision makers in the consultation, schemes and environments that impact them (Talò et al., 2014). For instance, distributing a questionnaire or conducting a survey among the people who are registered to live in a certain neighbourhood about their priorities and needs, particularly the social aspects, is an effective method to receive suggestions and recommendations which should be

considered during the design process. Therefore, community participation is one of the most important elements that could make a huge difference in adding positive value to the quality of the community. In the case of this research, the available signs and evidence show a significant gap between the decision-making level and the residents' level. Therefore, the research uses a mixed method to overcome this issue and benefit from important data that were collected from the residents of each neighbourhood.

2.10.1.2 Residents' Behaviour

It is probably a common perception that people's activities, movements, behaviour and daily routine are all indicators of the quality of our life. From this point of view, this section addresses important characteristics and attempts to illustrate the relationship between two main elements. On one side are the physical settings such as the space furniture, seats, fountains and statues. On the other side is the people's contribution in the space; for example, social activities, children playing, sports games and sitting around or having conversations in the public space. Additionally, it is crucial that public space needs a control and strict management, in order to maintain its intended function effectively (Carmona and De Magalhaes, 2006). Therefore, all the three elements are very important to the public space quality: design, management and activities.

Looking back at the illustrations of Gehl (2004), he highlights that to design good public spaces in the neighbourhood there should be three main factors to be identified and studied see Figure (2-4), life, people and buildings. The people who use the space is one of the main focus of the designers, it is important to understand their behaviour, needs, movements and what they like and dislike, and finally how they connect and act to each other (Kirby, 2008). For example, the users have different behaviour at a different time during the day, they can use several activities such as walking, sitting, jogging and playing. These activities depend on other factors such as the time, weather, gender and age of the users (Shaqra'a et al., 2015, Sandoval and Herrera, 2015). For instance, in Muslim country women have to be provided with a special space which is mostly separated from the spaces of men, women behaviour in Muslim and Arab regions is different than non-Muslim regions (Al-Bishawi et al., 2017) in terms of connection and participating in the public spheres. In this regard, local characteristics play a crucial role to the need to identify the local behaviour of the users to be taken under consideration in the design stage to ensure meeting the residents' needs and therefore a successful space.

2.10.1.3 Diversity and Mixed-use Neighbourhoods

One of the most important aspects that need to be known in this research is the characteristic of the users who are living in the community. In this section there is a brief explanation due to the mixed use and diversity phases in residential areas, to achieve a better understanding of examining the social value in mixed-used communities.

The meaning of 'diversity' in this context is to enhance the space and the place to be shared by all categories of people. In many specific studies, diversity refers to a specific characteristic of people's behaviour (Duranton and Puga, 2000). In particular cases, studies examine the gender, age, ethnicity and/or status of the users in the community or a certain group of one of these categories within the community (Mugnano and Palvarini, 2013, Cabrera and Najarian, 2013a). According to many studies such as (Cabrera and Najarian, 2013b), (Bondi, 2013) and (Bolt and van Kempen, 2013), many urbanists suggest that diversity is crucial to make valuable, vital, healthy and vibrant communities. Cabrera and Najarian (2013b) argue that many urban designs have failed due to a lack of awareness about diversity in the design process. Furthermore, they state that a diverse community provides a great opportunity to the wide range of people and contributes to its development; urbanists hope that design features and mixed-use zoning in neighbourhoods and centre of cities will promote diversity and integration.

Policies of mixed neighbourhoods vary from one region to another depending on what is meant by mixed: ethnic groups, gender, age categories and social status. Whatever is meant by a mixed community is meaningful in this investigation due to the social relevance (Bolt and Kempen, 2013). It is widespread among researchers that greater social diversity in poor neighbourhoods would have positive effects on the economic viability of infrastructure and services (Lel  vrier, 2013). Similarly, policy-makers have optimistic views about the mixed communities in terms of social cohesion as a positive creation (Bolt and van Kempen, 2013) and (Arthurson, 2012) argue that creating mixed neighbourhoods reflects more social benefits. For instance, enhancing cohesion might prevent problems or even have positive impacts and increased chances of communication between all types of groups, or encourage high levels of social mobility and practising activities. In contrast, academics may not always agree with this evaluation, as much evidence highlights that in mixed neighbourhoods there are probably numerous issues that can be discussed which might not be always positive (Baum et al., 2009). Therefore, this

aspect is very important in this research due to its relevance to the criteria of measuring the satisfaction and residents' interaction.

2.11 Policies and Management

This section focuses on the management and policies of residential areas including their public spaces and open areas. It provides several cases and examples that illustrate a clearer explanation of the construction process of the housing complexes as 'neighbourhoods' with a focus on issues of their public spaces.

Historically, the delivery system of houses has gradually shifted all over the world, from the public to private sectors (Hipp, 2012). In England, for example, the provision of social housing has been transferred from local governmental policies to the private and voluntary sectors; there was an increase of the registered landlords to 2000 in the year 2003. The funding system of the social houses programme also changed from 'open-ended subsidy' to a bidding system which continues to today (Carmona et al. (2003), (Vasilevska et al., 2014). In most of the developed countries, the private sector through new investment schemes has become more dominant in housing projects (Carmona et al., 2008). In this research, because it focuses particularly on the public spaces of the neighbourhoods, the investigation includes the residential area as well as the spaces inside the neighbourhoods which usually face challenges in management and policies' quality as summarised in (Carmona and De Magalhaes, 2006). This is mainly due to overlapping areas between the public- and private-managed spaces.

The privatisation strategy in many cases such as in developing countries has affected the quality of housing complexes and the neighbourhood projects, due to failure to provide the required area of open space which has become an issue as the land cost has a direct impact on the project budget. Therefore, the lack of quality regarding the public spaces support in housing projects will minimise the success of such projects because of limitations in providing the appropriate land size for the required physical elements or the shortage in supporting spaces for the residents as intangible elements (Towers, 2005). This challenge can be seen in private- and public-funded projects once the management and policies of these places are not very clear (Chitrakar et al., 2016). From the literature, the management of public spaces has been of real concern and posed challenges which are highlighted by many scholars such as (Carmona et al., 2008, Cochrane, 2007)

and (Geoghegan, 2002) as the quality of public space is linked in many strands with the quality of its management and policy.

First, we need to illustrate the concept of public space management and the evolution of the public space policy. According to Carmona et al. (2008, p. 65), there are four main interlinked dimensions for public space management; these are: 'The coordination of interventions; the regulation of users and conflicts between users; the definition and deployment of maintenance routines; and investment in public spaces and their services'. This conceptual framework was established by Carmona to drive new possible alternatives in management models regarding the latest changes in public space forms. Moreover, there has been increasing awareness of the multidimensional nature of the public space management as it is linked to the quality of people's lives and their daily activities. Figure 2-7 presents the key dimensions of the public space management which explains 'whether public space management activities undertaken by public-sector agencies, by voluntary bodies or community organisations, or by the private-sector companies' (Carmona et al., 2008, p. 67). Along the same lines as the quality of the public space, a wider consideration of the urban design quality is needed as public spaces contribute to the urban qualities (TURRENT, 2000).

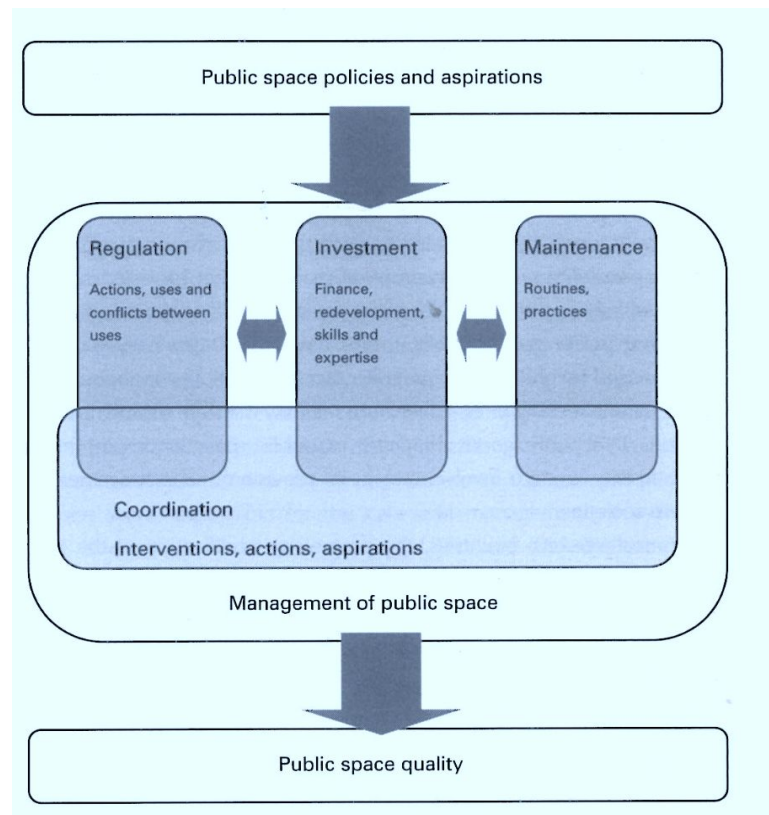


Figure 2-7: The key dimensions of the public space management. Source: (Carmona et al., 2008, p. 67)

In terms of the quality of urban design, Carmona and Tiesdell (2007, p. 22) indicate that developers, investors, house builders and householders in some way are involved in urban design process and development: 'The checklist of design consideration was a research device to define the scope and concerns of urban design, the consideration provides a surrogate measure of quality'. In order to gain a better urban design quality, these categories above need to demand environments which present the urban design features and are not basically a selection which offers short-term benefits to the immediate client.

The overall situation in Libya and specifically in Misurata is even worse due to the weaknesses of the management policy and the lack of government control. The attention has been always drawn to the quantity instead of the quality of housing. Government attempts to provide houses in standard neighbourhoods within the shortest time, while the social dimension and quality of life in these communities are often neglected. Therefore, this research investigates the impact of that policy and how it can be changed to a new framework that contributes to improving the quality of these communities. Consequently, the public space and its social effect in the community is one of the most important aspects to be discussed.

2.12 Types of Public Spaces

Public space is a broad domain; generally, it is everything except the buildings and roads. Nevertheless, the focus of public space has often paid attention to the highly crowded places which means the places where activities occur (Kurniawati, 2012). Gehl (2011, p. 11) divides the public spaces activities according to the people's behaviour into three main categories which are: 'necessary, optional and social' activities – see Figure 2-7. 'Compulsory activities' are the daily journeys people make to reach their place of work, school/university and medical centres, which cannot be cancelled (Gehl, 2011, p. 12). Therefore, there is no choice but to participate regardless of the time, place and weather conditions. '*Optional activities*' are related to the time that people choose to spend in their individual interest such as going for a walk, visiting places for fresh air and lying on the beach. These activities occur only when one has the time and the location to undertake them, and therefore, will take place only if all the determinants are suitable to the comfort of those concerned. 'Social activities' include all movements that depend on other people who are sharing the same public space. This category is related to the other two types because it can react with the activities that are happening in the same place among other users who are on a necessary or optional journey. Social

activities include children playing, elderly sitting and chatting, people greeting each other and standing around, and many other activities in private areas, gardens and flats' balconies where people communicate and integrate (Gehl, 2011).

It can be seen from Figure 2-8 that there is a level of necessity for different types of activities for people. Although this information is related to a city's public spaces, it can also give an indication of the neighbourhood public space with relative variations in percentages and the order of demand. In general, there should be a deeper study to identify the activities and find out their level of necessity to the users; as a result, the decisions on locating and providing them will be more sensible. With this strategy, the requirements and needs of the users 'residents' are more likely to be met. This issue contributes to this research in terms of analysing the actions of residents and their movements in the public space of the community, as observations of their activities such as walking, playing and sitting in groups or individuals are made.

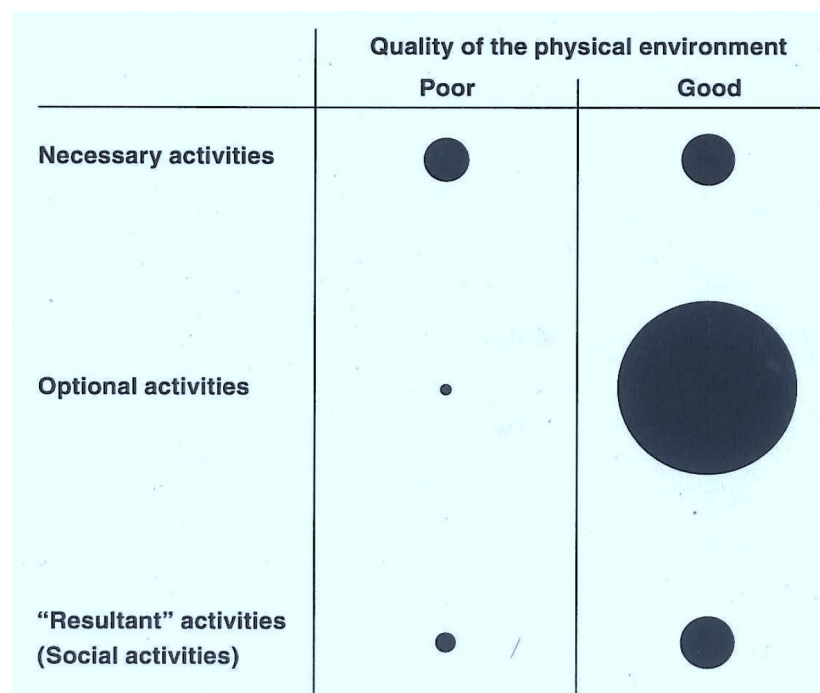


Figure 2-8: The quality of the physical environment in three different types of activities. Source: (Gehl, 2011, p. 11)

In the same line, Kaźmierczak (2013) conducted a research in Greater Manchester to examine the social interaction and relationship development among several neighbourhoods. Particularly, it was to measure the role of public space such as parks and squares and their contribution to the quality of social life. In Figure 2-9 it is clear that the activities are divided into three categories. The optional activity is

the highest rate which confirms the desire of people to spend their time in public spaces. Hence, this conclusion and many studies (Maas et al., 2009) emphasise the importance of public spaces for people, which helps to improve the quality of life and increase the sense of community (Kaźmierczak, 2013).

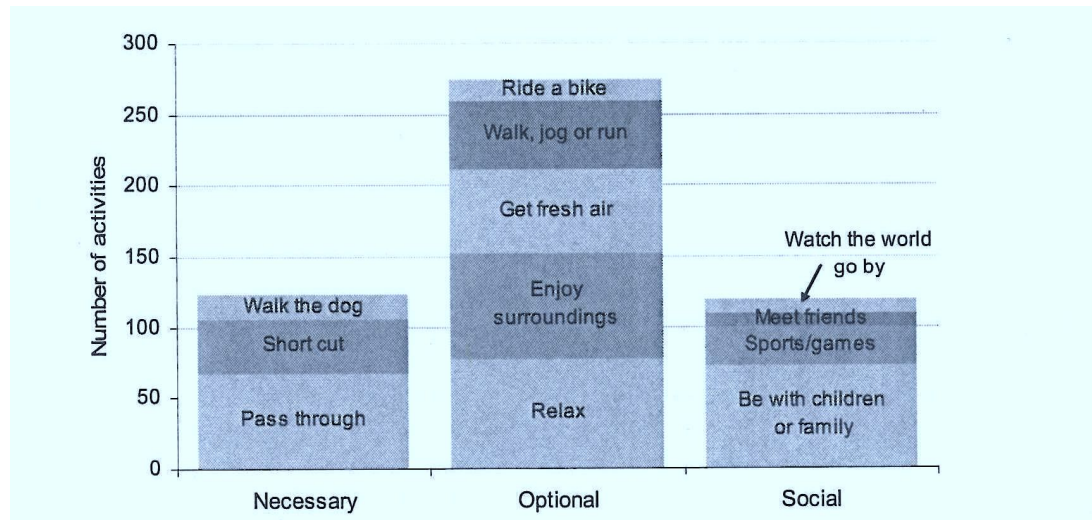


Figure 2-9: Type of activities in public spaces. Source: (Kaźmierczak, 2013, p. 38)

Based on a former review, identifying the activities in the public realm of the communities is an important task which illustrates the complex relations and clarifies the types of communication inside the neighbourhoods (Irwin, 2002, Bolt and van Kempen, 2013). This contributes to the data analysis of the research and also explains the features of the social network and community interaction. Using observation as a research methodology supports the researcher to find out the characteristics of the residents within the public space of their communities. Thus, this will lead to more valuable data to address the research issue than reliance on existing data alone and will provide a deeper understanding of the social structure in the community. All these support and strengthen the argument of the research and help provide the appropriate evidence.

2.12.1 Private or Public

In the public realm, according to the economic changes, it is a fact that the overlapping areas between the private and public have become more and more ambiguous (Loughman and Montias, 2000a). This is not only because of their users and uses but also due to who owns the place and how it is managed. This section investigates the main key information of the publicness and the privatisation of the

public space and how that affects the social network and the community interaction.

Public space is a wide area in the urban domain, and debate among the specialists and researchers about the boundaries of public and private spaces continues. Kohn (2004) claims that unclear boundaries of the area that we share with strangers could be public or private; it depends on many determinants in which context this area is presented to the users. (Kohn, 2004) states that people often understand the public as anything linked to the government programmes, while they assess the private as investments and individual projects.

Similarly, Grose (2009) defines private and public spaces as those places that people cannot access unless on payment or on being selected to specific and small groups who have permission to enter certain areas such as private golf clubs, owned parks, and gardens. This mixture of several concepts makes the distinction of the space, whether public or private, is related to the research matter from various angles (Kirby, 2008). For instance, it affects the types of activities, the gender of users, age and times of accessibility to the public space. This is particularly the case in neighbourhoods as they are owned by private sectors in many countries or at least managed by a private management company in other cases.

Additionally, Madanipour (2003) identifies the understanding of public and private spaces as a transition area in our daily routines; people start their journey every day from their homes to the schools, workplaces and shops; they move from the intimate space of the home to an interpersonal one of the mixed space and busy streets of the city. Consequently, people react to each environment differently, in the way that best comforts them as their feelings vary from place to another. It appears that the relationship between public and private spaces is a universal feature of nearly all cities as there are always lines and divisions between the public and private realms in all cultures and in all periods of history (Madanipour, 2003, Kirby, 2008).

In the city of the case study, Misurata, most of the public spaces of the neighbourhoods are publicly owned and managed. However, this is not particularly the case in the public space of private-funded and built neighbourhoods and in the main public space of the city centre. Therefore, this research focuses on the management and ownership of the public space inside the neighbourhoods to find

out the aspects that reflect the social features and how that impacts on the research issues.

In this regard, (Banerjee, 2001, p. 18) makes an important statement that,

'It is clear that there are some fundamental shifts underway in the manner in which the public realm has been traditionally conceptualised. Whether we call it a shrinking of the public realm or something else, the distinction between the public and the private will continue to blur, as intersectoral ventures among the public, private, and non-profit sectors in solving societal problems will inevitably increase'.

Adopting another perspective, (Banerjee, 2001, p. 12) points out that,

'It is clear that our public life increasingly will occur in private places or in cyberspace, as more and more people get connected to the Internet and benefit from the information and communication technology revolution'.

Therefore, while debates of distinguishing the area between the public and the private spaces may continue, this research attempts to find out the most important aspects which are the values of these spaces and how they have been used in social perspectives.

2.12.2 The distinction between Public Space and Private Space

First, there has been a wide range of arguments about the publicness and privatisation of public space among the designers and the decision makers particularly at the level of planning policies (Drummond, 2000). This difference in views has created concern over the future features of public space which can be seen from several perspectives. Some claim that public space is under concern from the new investment projects and corporations that focus more on the profits more than on the use of public space while others argue that public space is under threat because of the authorities' policies and the planning schemes which impact on the previous features of the publicness of space (Iveson, 2011). In such narratives, there is a concern about the structure and the use of public space which encourages urban designers to investigate the most effective method that can create a framework to contribute in protecting the importance of public space.

According to Hernández Bonilla (2013) design, management and developments are the most common elements of measuring the success of public space and the users' satisfaction due to their purpose which can reflect the quality on the spaces. The

quality of the spaces when they managed and developed a high level of physical and intangible recreations can contribute positively to make the residents satisfied. Thus, there is a direct influence on whether space is public or private due to the policy and the investment system in that place (Drummond, 2000). Relevantly, Madanipour (2010b) and Bondi (2013) indicate that public space becomes less valuable and produced more privately as a mere commodity. However, many research critiques allude to the death of the true public space in temporary urbanism, although there are still many supported ideas that acknowledge the importance of public space in many dimensions of the city such as economic, social and political (Hernández Bonilla, 2013).

It is important to identify the term 'public' and its meaning in the context under discussion. If we use the word 'public', does it mean *being* in a public place? Or a matter of self-feeling that makes people present in a specific site of the city which is considered as a public place? And yet, the distinction between the public and private spaces is a complex issue, but people can recognise their moves from public space to private space due to the different physical settings and the kinds of visibility offered by each individual place (Iveson, 2011). Figure 2-10 depicts two sets regarding the meaning of the distinction between public and private spaces; one refers to the social dimension and the other is related to the ability of its application (ibid). This gives the possibility of the spaces as a private or public and its impact on the social life to be applied as a prescriptive or descriptive. It is very important to identify the space, its belonging and its function to control the involved elements that contribute to the public spaces creativity.

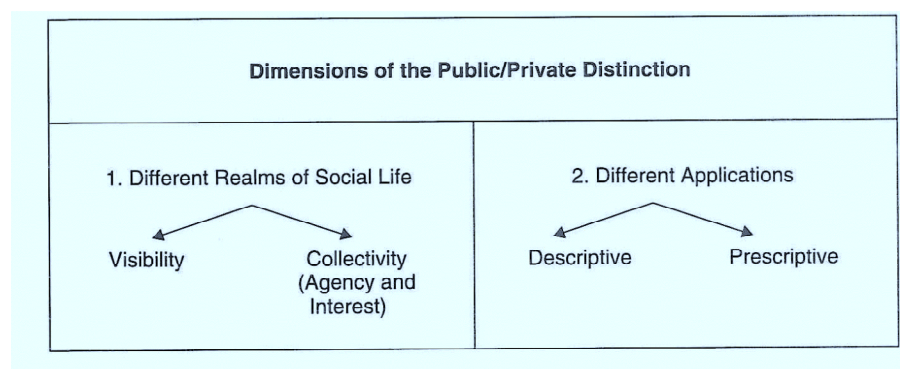


Figure 2-10: Dimensions of the public/private distinction.
Source: (Iveson, 2011, p. 15)

In contrast, Gehl (2011) argues that the open space of the centres of cities and towns is totally public, regardless of its use and its physical elements. At the same

time, the level of privacy varies in the case of open space of the residential areas which are considered as semi-public. Figure 2-11 shows the proposed transition from public to private spaces and the parallel areas between them. For example, people tend to be outdoors and in the open space undertaking daily activities in their gardens or on their balconies, and they are not in the public realm which differs from the centre of cities where everything belongs to no one (Gehl, 2011).

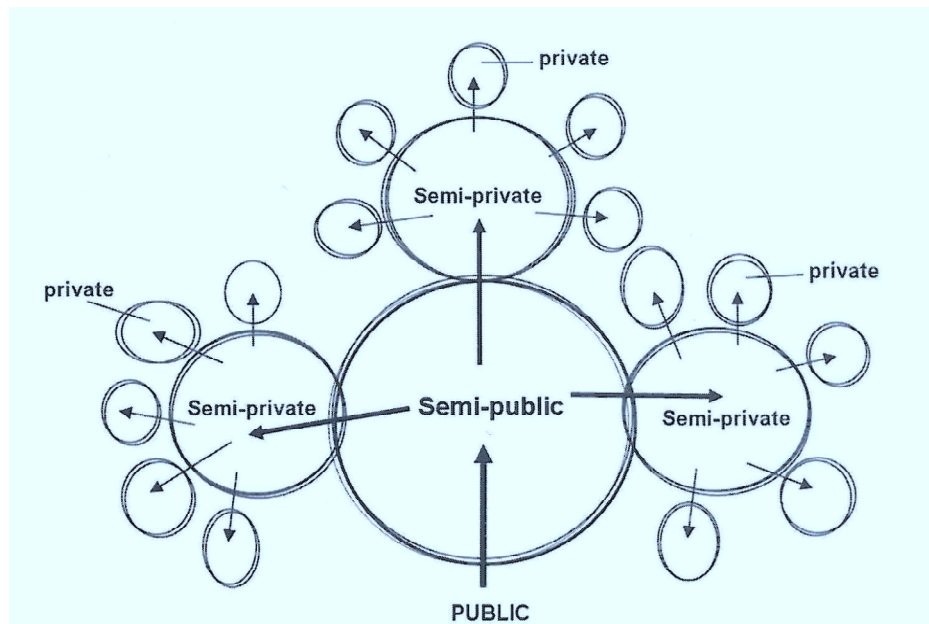


Figure 2-11: The gradation level of the hierarchy from the public to private. Sources: (Jacobs et al., 2012, p. 203) and (Gehl, 2011, p. 59)

Arguably, there is a strong match in terms of identifying the publicness of the spaces between the study of (Hernández Bonilla, 2013) in Mexico and the situation in the city of Misurata, the case study of this research. Hernández Bonilla (2013, P. 35) states that,

'Consequently, there is no public authority responsible for them; ultimately what define spaces as the public are the use and improvement actions that inhabitants carry out in the space. In the colonies, public space is mainly made up of streets, as result of the allocation of private space for housing; however spaces for recreation and social purposes such as parks, playgrounds, gardens, sports facilities and other forms of spaces for collective used are often lacking and have to be fought for by residents'.

Therefore, the social events and the residents' activities play essential roles to determine the function of the public space and how it is going to be shared and when.

In fact, this issue is one of the motivators of this study, in Libya, with regard to the cultural background, social fabric and the regional characteristic. There is a unique mixture which cannot be equated to other different cases. People consider the space that is attached to their homes and properties as a private one, and they consider the rest of the space around and between their houses as a public space. However, there are still many private spaces which are owned and/or controlled by a private sector and might be designed to be used by a certain category of people. This matter has a direct link to the research issue particularly in how the use of public space impacts on the social network and the community cohesion.

2.12.3 Ownership and Belonging

Ownership is one of the essential factors that connected directly to the relationship between the public and private spaces. According to Kohn (2004), the private ownership decreases the range of activities, private owned spaces not obliged to allow activities such as religious-based programmes and political speeches unless asking for permission from the owners. It is important to find out why there is now a greater demand for private spaces than was the case decades ago. Loughman and Montias (2000b), (Webster, 2007) and many other researchers state that the economic determinants play a fundamental role in how public space is been structured. Sampson and Raudenbush (1999b, p. 604) briefly summarise the perceptions of people towards the public spaces: 'the streets, parks, and sidewalks still belong to no one and therefore to everyone'.

Private-owned spaces such as shopping malls, commercial centres and entertainment places become more desirable to the people than the central public spaces in the centre of cities. This is due to economic reasons as the private sector becomes more profitable than the classic central places (Costa and Lopes, 2015), but the profit attraction is not the only factor that leads to the neglect of public space; another is the attention for more control of such places (Kohn, 2004). In each region/country there are different methods and strategies that depend on land ownership and management, but generally, the gated, private and enclosed spaces have become more common in recent years (Tedong et al., 2014) which is the most focused concern on the value of public space.

In the same way, the residential communities are affected either positively or negatively by the system of ownership, as the area of public space varies depending on the place owners and the cost of land in that part of the city.

However, Southworth (2014) argues that there are clear boundaries between public and private ownership; the public life should take place in the public controlled space while recently the area of open space has become more difficult to be identified as a public or private. Thus, it seems that the strategy of offering an appropriate public space has become an economic burden to the cities. For example, temporary activities and short-term installations may have a positive impact in encouraging residents to use the pavements and enhance their access to the public places, therefore, enriching the public life and increasing the social communication.

2.12.4 Control and Management

In the last few years, particularly in the UK and most of the EU countries, there have been some challenges about what is called "the end of public space" (Langstraat and Van Melik, 2013) due to the major changes of the recent urban policies and the economic factors. There has been an acknowledgement from many urban specialists that urban space has come under threat as indicated in many sources such as Mitchell (1995, 2003), Banerjee (2001), Voyce (2006) and Madden (2010). It has been argued that the reason for this threat is the privatisation of the public space as a result of the private sector growth in modern economy investments. According to the London Assembly (2011, p. 13) that, 'Public life in private hands – public space It can be increasingly difficult to know who is responsible for what looks like a public area but is actually privately owned or managed'. It is clearly indicated that the housing committees and the planning system were called to create alternatives due to the private control of public space in order to reduce the concern of what might lead to excessive restrictions or exclusion. The formal authorities have found that people often do not get involved in how running public spaces in their neighbourhoods are run. Therefore, the local management reacts to this matter to ensure that public open space is open to all with no with no possibility of exclusion.

Similarly, De Magalhães (2010) accurately states that public space has changed in the last three decades. He argues that the transfer of public space management and control from the state to the social organisations, particularly to the private sector, has usually been depicted as a lack of public realm. Apart from a widespread expansion of the privately owned public space which has become more common, the government responsibilities have changed through time from publicness to privatisation in a recent public space sphere. Literature predictions suggest that the public space provision will continue to intensify with regard to the

latest economic and financial crisis. In more recent studies, many scholars such as (Sagalyn, 2007, Ahlbrandt, 1986) indicate that, due to these changes to the public space form, new types of public space have emerged with different functions, which can provide variety and high levels of interaction and social value (Mehta, 2014).

2.13 Residents' Satisfaction in Public Spaces

In the context of the public space of the neighbourhoods, residents need to be comfortable and satisfied. This section focuses on the social evaluation of the public space of neighbourhoods. Kamalipour et al. (2013, p. 130), Baum et al. (2009) and other scholars believe that 'the public places do not meet the people's needs any more', due to the change of dwellings policy and the population growth. They argue that there is a gap between the urban development and protection of the local and social features. This context explains that there is less consideration of the residents' social comfort which often occurs due to business and economic reasons. The fact is that not all of the former opinions refer to the social needs, but to the design, physical elements and size of the public space, shown in Figure 2-12.

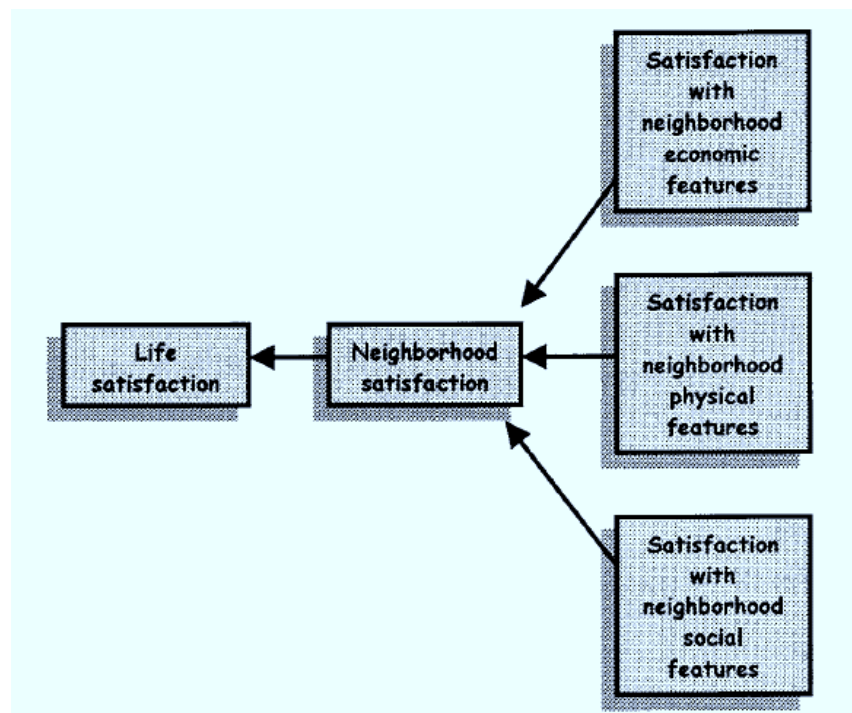


Figure 2-12: The impact of the economic, physical and social features on the residents' satisfaction. Source: (Sirgy and Cornwell, 2002, p. 83)

In the case of Misurata city, the most critical issue that affects the quality of public spaces of the neighbourhoods is the lack of physical settings, facilitated public

spaces, and maintenance; also the low level of the residents' contributions and interaction to be involved effectively in these spaces because of the few initiative actions taken by the local residents. Therefore, the need to improve and enhance the social communication in the public spaces of the neighbourhoods between the residents is important in order to create strong links that develop the social cohesion and enhance the relationships of the residents within the spaces of the community.

Consequently, the potential interactions between place, residents and space are highly important in terms of evaluating the sense of community because these three elements are linked to each other especially in terms of social aspects (Peters and de Haan, 2011). In Libya, similar to elsewhere, the main role of local community spaces is to satisfy the residents by providing services which meet their needs; for instance, providing a high range of activities addressing the needs of all categories of residents, and the creation of attractive amenities that encourage the locals to participate positively (Baum et al., 2009). In order to obtain an effective approach to measure the satisfaction of the residents of the neighbourhoods, the relation between the three former elements should be analysed, not only because of the strong link between them but also due to the differences among them from one region to another.

Another significant value is the positive impact of involving the residents to participate effectively in the development and creation of their community. They should take part in the discussion along with the decision makers in the consultation, schemes and environments that impact them (Talò et al., 2014). For instance, an effective method to receive suggestions and recommendations which should be considered during the design process by distributing a questionnaire or conducting a survey among the people who are registered to live in a certain neighbourhood to find out their priorities and needs, especially the social aspects. Therefore, community participation is one of the most important elements that could make a huge difference in a positive value to be added to the quality of the community.

2.13.1 Psychological Comfort

In fact, the psychological perspectives of the community structure cannot be separated from the broader expression of the sense of community. The initial focus on the psychological sense of community was proposed by Sarason in 1974 (Sarason, 1974, Gómez et al., 2015); however, similar research was conducted

afterward with different terms such as 'capital social' by other scholars depending on the social and regional factors (McMillan, 1996, Pooley et al., 2005, Carpiano and Hystad, 2011). Chavis and McMillan (1986) proposed that 'psychological sense of community' refers to emotional factors such as a feeling of attachment to a certain place of the group. They classified the psychological sense of community into four aspects: 'a) membership, b) influence, c) integration, d) shared emotional connection' (Gómez et al., 2015, p. 389).

These are the most important aspects and they can be identified as follows: first, being a one of a group that can express the feeling of the membership. Second, the impact of a certain group on individuals is considered as the influence which made as a result of being a member of that group such as age group, activities groups, sports group and so on. The third aspect is the integration, this aspect actually presents the needs of a person which can be met by the resources of the group. Finally, the ability to share the background and history with the community, this aspect linked to the desire of getting involved and sharing the emotional connection with others which depends on the background of each individual person or family of the community.

2.13.2 Sense of Community

The sense of community is one of the recent issues of concern in many parts of the city including the public spaces, city centre and the residential areas. 'Sense of community' means feelings of safety and civic contribution, to be engaged with others in the local activities such as social events, and to share the feeling and responsibilities with the local community (Francis et al., 2012a, Talen, 1999, and Talò et al., 2014). To clarify this further, analysing the two words in greater depth, the term '*community*' has two different meanings: the first definition refers to a community as a neighbourhood, town or city, which is a geographical notion. The second definition is related to the quality of the human relationship (Chavis and McMillan, 1986, Gusfield, 1975). Chavis and McMillan (1986, p. 9) highlight four main elements to the definition of '*community*':

'The first element is membership. Membership is the feeling of belonging or of sharing a sense of personal relatedness. The second element is an influence, a sense of mattering, of making a difference to a group and of the group mattering to its members. The third element is reinforcement: integration and fulfilment of needs. This is the feeling that members' needs will be met by the resources received through their membership in the group. The last element is shared an emotional connection, the

commitment and belief that members have shared and will share history, commonplaces, and time together and similar experiences'.

Therefore, they suggest that sense of community is people's feelings of a need to share time and place with other people in their community; that they have a belonging to this place; and they matter each one to another – see Table 2-5 (Chavis and McMillan, 1986). From the Table 2-5, it can be seen that there are a relevant connection and impact between the physical boundaries of the space and the feeling of belonging which is an intangible element. In addition, it appears that the feeling of a sense of community depends also on how much the person provided with their needs and facilitate their environment for the best of use.

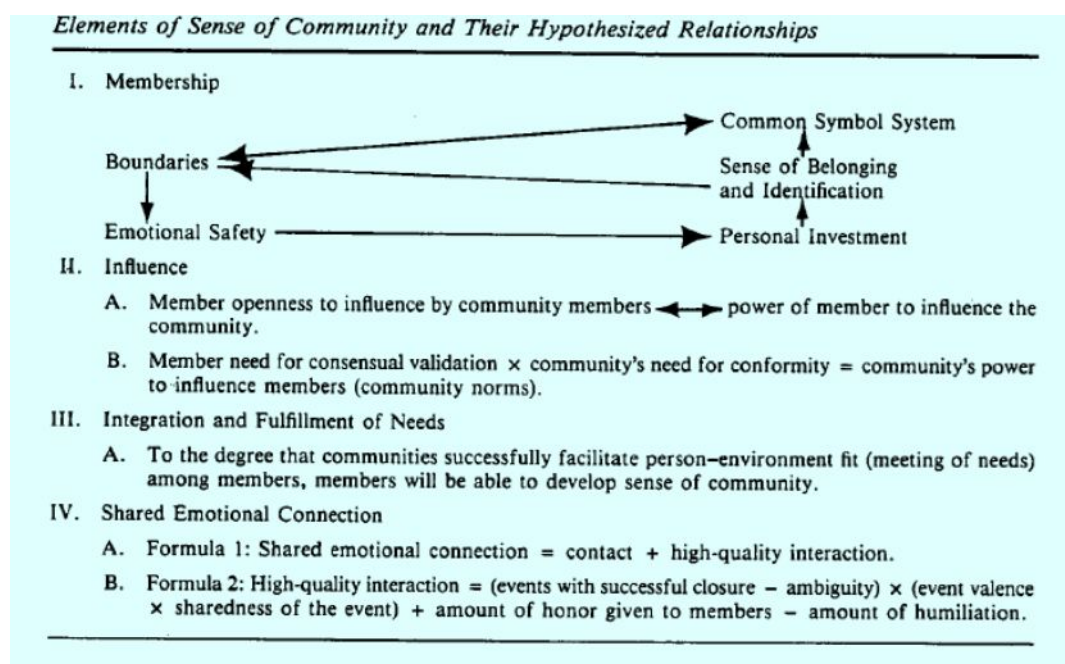


Table 2-5: Elements of a sense of community and their hypothesised relationship. Source: (Chavis and McMillan, 1986, p. 15)

The sense of community has a wide meaning. In this context, attention is drawn to the question of what makes the community successful – that is, why people focus on choosing the appropriate neighbourhoods rather than focusing more on the quality of the house itself. Hanibuchi et al. (2012b) suggest that the quality of life starts from the community scale as the unit that provides a range of comfort and pleasure to all the residents in that community.

The sense of sociality is a much greater association with those around them in the vicinity of their residence where people spend most of their time (Wood et al., 2010). Roger S. Ahlbrandt (1986) explains that the idea of the community is to

prevent individuals from feeling alienated and increase their level of sociability. Therefore, the main aim of creating a qualified community is to establish a proper context that can protect the residents from the impersonal world and enhance their feeling of engagement through several activities and interactions. Residential areas' 'neighbourhoods' are the middle stage of the organising space, decreasing the impact of the gap between the public and private realms (Madanipour, 2003).

In the last few decades, there has been much research conducted to measure the efficiency, accessibility, vitality and environment performances of the communities' public space from several aspects, particularly economic and urban values (Chaskin, 2013). However, fewer studies have been conducted in terms of integration and social interaction of communities and the sense of community with its relationship to public spaces of the neighbourhood (Francis et al., 2012a, Brown and Cropper, 2001) particularly the physical attributes of the neighbourhoods (Kim and Kaplan, 2004).

In Misurata, the city of the case study there is hardly any research in this field which helps place this research as a turning point for future investigations. However, there are some similar research studies in other countries such as Mexico where the population is far more than Libya. Also in Turkey where there is a variety of cultural aspects and multi-religion nation. This various study seems to have completely different rationales to this study (Saitluanga, 2014). For example, in the Europe region, there is a huge difference in climatic conditions and the cultural backgrounds to the region of this case study. In a similar vein, in the Asian region, the differences are not only in the weather and the cultural background, but are also very clear in terms of the density of the population which can also lead to varied findings compared with the situation in the country of the case study where the population is extremely limited compared with the land area of the country. Thus, the satisfaction level of the residents varies from place to place and depends on the backgrounds of each individual case.

According to Wood et al. (2010) and Francis et al. (2012a), the success of a community begins from the point that the design of the community should motivate and attract the residents to interact with each other as they own the community and can absorb a sense of belonging to that place. Particular attributes emerge in well-designed public places and neighbourhoods (Hanibuchi et al., 2012b), where the users can contribute to and share the space in their daily activities see Figure 2-13.

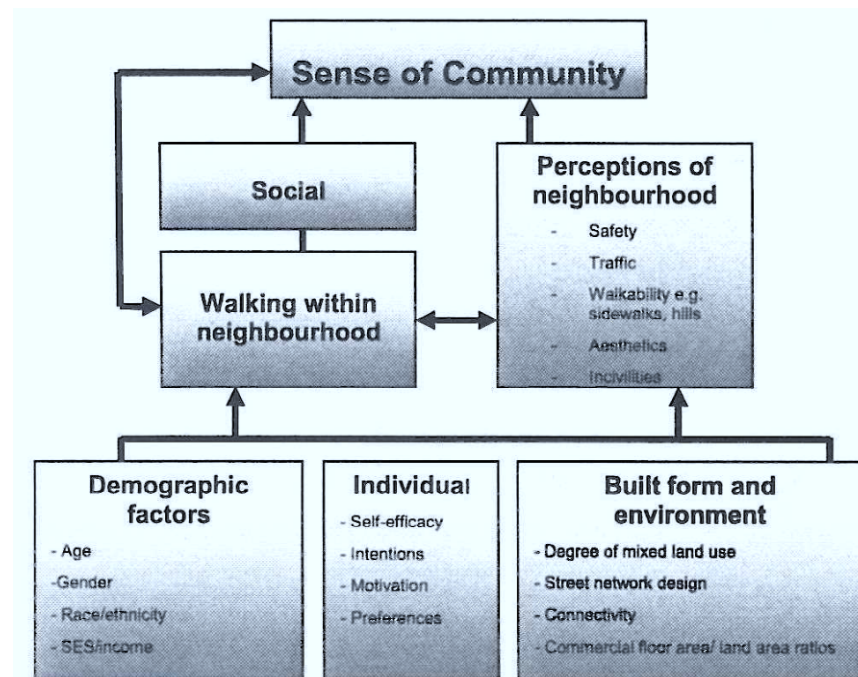


Figure 2-13: Neighbourhood environment, sense of community. Source: (Wood et al., 2010, p. 1382)

2.13.3 Feeling of Attachment

Attachment or community attachment holds a similar meaning to the sense of community, as both features are related directly to emotional values that touch on the feeling of belonging and connecting to a certain place (Carpiano and Hystad, 2011). Rogers and Sukolratnametee (2009) explain that the community attachment is the extent to which any person of the community feels attached/linked to and committed to other residents of the neighbourhood, which endures on a sense of safety and belonging. To measure the satisfaction of the 'residents' in one place, particularly from a social aspect, there should be an examination of their attachment and privacy feelings which are both connected directly to the sense of community.

Along the same lines, Greif (2009) states that extensive research and literature illustrate that neighbourhoods are one of the most vital places in terms of social interaction and sense of attachment. Many other scholars also highlight the importance of the neighbourhoods and their public spaces for the residents to get more active and to feel attached to their community (Jean, 2015, Pinkster, 2016, Bourdin et al., 2006). For example, Clark (2009) fairly argues that: 'the neighbourhood remains a valid scale for place attachment analysis' cited in (Jean,

2015, p. 2). Public space is thus a significant territory and residents are the most important players by interacting with each other in it.

2.14 Climatic Comfort

The impact of the climate on the city development is one of the most important issues that need to be addressed appropriately. In order to maximise the chance of a successful public space and accordingly has been a focus of many urban studies (Dodd and Jessell, 1988). According to Dodd and Jessell (1988, cited in Woolley (2003, p. 36) the impact of climate on the urban city can be seen on three different scales – macro, meso and micro. Woolley (2003, p. 36) explains that,

'The macro-scale is the environment of a town, city or region while, the mesoscale is defined as the environment of a village, parish or close-knit group of buildings such as those within a hospital or university campus. Finally, the micro-scale environment is described as relating to individual building or small group of buildings. There may be an overlap of microclimatic zones where adjoining building impact on each other'.

In this context, it is very clear that there is a sensible need for the designers and urban planners to understand the influences of the climate conditions and their consequences on the city development. In his book, *Urban Open Spaces* book, Woolley (2003, p. 37) indicated six main factors of the climate environment – 'airflow, air pollution, sunshine and radiation, temperature, humidity and precipitation'. As the climate environment is one of the factors that impact on the public space quality and residents' satisfaction, this research attempts to provide a reasonable background to this issue. However, there is not enough information and details in the concerned organisation in Libya regarding this issue. This limitation has been addressed as one of the challenges which the researcher need to spend more efforts in order to collect the reasonable information by different ways so that can help to provide enough data for the research literature. Therefore, in order to make/create a successful public space that meets the users' needs and can be vital and active to match their desires, there should be clear consideration of the weather condition and climate factors.

The literature on the weather conditions' and climate's impact on the urban areas such as dwelling zones and public spaces highlights several significant issues that need to be considered in the urban development and increasing the quality and comfort of people's lives. Feyisa et al. (2014, p. 87) indicates that,

'High temperatures in urban areas affect health, economy, leisure activities and wellbeing of urban dwellers. In particular, the health of vulnerable people, such as the old and poor, is highly affected by thermal stress caused by warming'.

From this point of view, it can be clearly suggested that in regions where undesirable weather conditions exist, there should be environmental treatments as an alternative protection to ensure the comfort of the users of these places. In each region, there might be a wide range of parameters which affect the comfort of the users of the space (Stathopoulos et al., 2004, Walton et al., 2007). In some cases, for instance in hot regions, cooling/shading solutions are required while in other locations, heating resources may be required in order to provide a suitable environment for people (Szűcs, 2013).

In all the environmental circumstances, the comfort of the human is the main requirement for the urban designers and the architects either in outdoor or indoors spaces (Lopes and Camanho, 2013). An overall conclusion is clearly stated by Mehta (2014, p. 61) in his article 'Evaluation public space' as he argues that,

'In a study of twenty towns and cities, (Hass-Klau et al., 1999) found that social activities occurred in places that had 'plenty of sunshine' and were protected from the wind. However, several studies concluded that while sunlight is an important factor in the spring, people seek shade during the warmer summer months' (Whyte, 1980, Zacharias et al., 2001, Mehta, 2007).

Therefore, it is important that public places should be supported by the physical facilities and equipment to provide comfortability and protect against the climate impact (Carmona and Tiesdell, 2007). This demand can be divided into two main areas of need: physical settings which refer to the furniture in the space such as seats, shelter and sufficient space for such activities and protection against weather conditions which cannot be changed rather providing protection settings (Farida, 2013). Chen and Ng (2012) argue that weather conditions have a fundamental impact on the people's desire to interact with the outdoor space; depending on the outer conditions such as sunshine, shadow, rain and wind, people decide whether they prefer to leave or stay. Therefore, the research focuses mainly on open public space as it is the most common place for residents to undertake their activities. People want to enjoy their time in public open spaces to communicate with others, spend a delightful time with their friends/families, and spending time sitting and resting.

As one of the intended purposes of the public open space is to increase the quality of life and promote the sense of integration among the users (Parkes et al., 2002), it is thus very important to ensure that the public open space creates a suitable level of comfort for the users. For instance, the provision of green areas within the open space of the neighbourhood can enhance a cooling impact by decreasing temperatures and rising humidity values (Cohen et al., 2012).

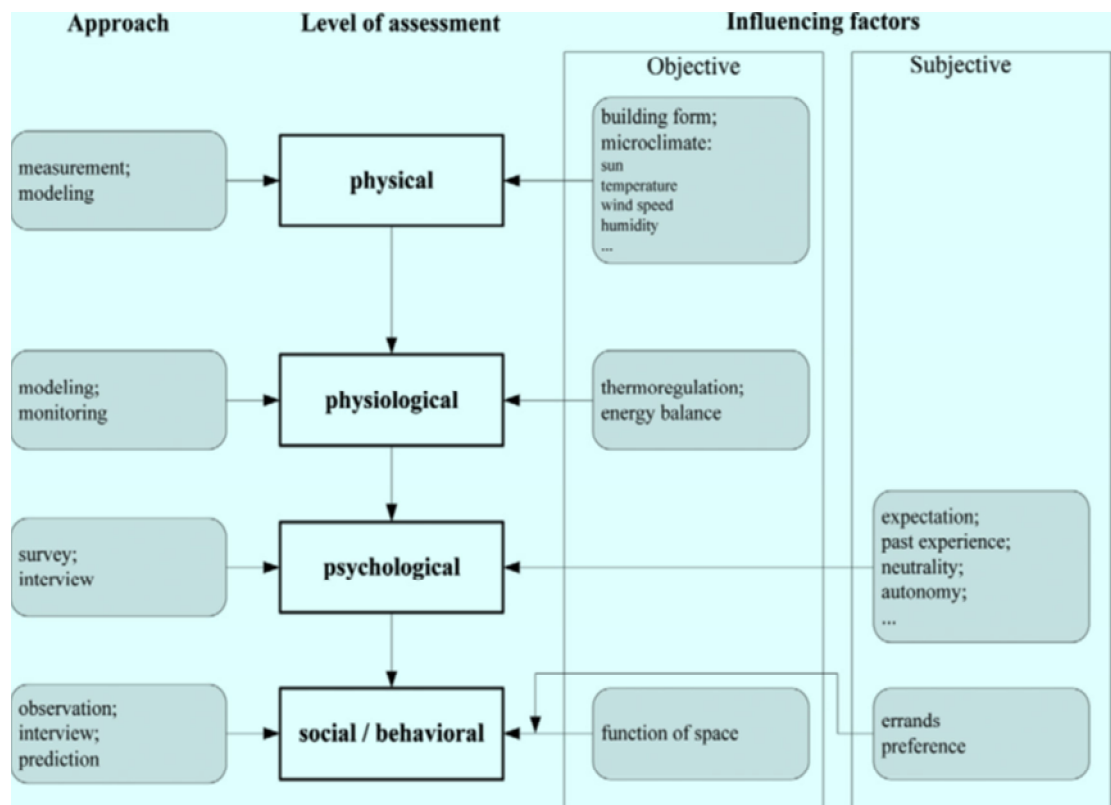


Figure 2-14: The behavioural dimensions towards the outdoor thermal comfort, (Chen and Ng, 2012, p. 123)

For example, they are often engaged in activities, either alone or with other people, and those activities might be associated with physical amenities such as street furniture, shelter, seating, or kiosk stands. Thus, the use of outdoor space is determined not only by the 'state of the body' but also by the 'state of mind', as per Figure 2-14.

In other words, it is not a simple task to provide the environmental comfort to the users, particularly, in regions with undesirable weather conditions. Not only because of the design and the physical settings of the place, but also due to the possibility of applying the appropriate options for the specific needs of protection from the weather and environment solutions.

2.15 Summary

This chapter has illustrated the main key aspects of the public spaces in general and particularly the public spaces of the residential neighbourhoods. Including detailed explanations of the public spaces definition and their terminology within the urban area of the cities. It has discussed both main elements of the public space quality, the physical and the intangible elements and all the sub-elements which impact directly on the level of the public space quality. This literature can prepare a solid foundation for the research investigation by providing relevant details for all the research concerns in which to guide the conduction in a clear scope. In addition, this chapter has explored the background of the housing projects and their impact on shaping the public spaces of the neighbourhoods and how that can influence the quality of these public spaces.

Furthermore, this chapter has presented a wide range of review on the management and policies of both sectors, the private and public and how these public spaces are controlled by the following aspects: the ownership, operation and the usage. It has also provided a reasonable illustration of the types of the public spaces in the city centre and in the residential neighbourhoods, this can make the distinction between them clearer so it supports the scope of the research which focuses only on the neighbourhoods public spaces. It has explained several elements that impact on the residents' satisfaction including the psychological aspects, sense of community and the climate conditions comfort. These major factors which are physically and intangible elements will be measured separately in the research context, however, they will be discussed and compared jointly in later stages to find out the links between them and whether there is any correlation that influences one another. Ultimately, it is one of the research tasks to evaluate the existing situation of the public space. In order to find out possible future solutions, to create a better understanding of the important role that public space usually plays in developing the quality of life and levels of social satisfaction of the residents in these neighbourhoods.

Finally, the satisfaction of the people depends on several elements, in this research the focus is mainly on the social aspects. Nevertheless, to understand the real needs of those people, deep and comprehensive explanations are required. In the literature review many areas that relevant to the public spaces' role, forms, activities and quality were illustrated, however, yet need to provide more critical discussion to conclude the appropriate context of the research. For example, in

North Africa region the understanding of PS can be quite different from Asian or Europe regions, this is probably obvious but questions here are: why there is a difference? What kind of different? And what are the relationships between the people, space and satisfaction? For instance, Alexander (1977) in the book 'a pattern of language' provided a massive data that demonstrate many forms of activities that are attached to the people's daily life in different types of spaces including small/big, low/high, in/out-doors...etc. The satisfaction and comfort of people vary from place to another as their needs are different from place to another. Therefore, the main key knowledge that can open the gate for the research is to understand the place of the research, the environmental aspects of the local context and what people of the place are looking to achieve. Knowing these facts as well as the local people behaviour, movement, relationships and cultural background is the core of the purpose of the research. Based on that, an implementation, suggestions and solution can be created.

With regard to the research questions and aims in the last chapter, and the appropriate methodology that is adopted in this research. Importantly, there is a need to explain how this research going to be conducted and to conclude clear and effective outcomes. According to the literature of similar approaches, to measure the satisfaction of the residents in a neighbourhood and to identify their social needs regarding physical and intangible elements. There are different strategies and mechanisms to achieve that in several forms of research. For instance, Sirgy and Cornwell (2002) summarise several relevant cases that involved in measuring the satisfaction of the residents in their neighbourhood including the use of POS and facilities ...etc. The following examples show the possibility of applying different methods to assess and measure the levels of people satisfaction whether it is a social, physical and economic satisfaction.

'The US Bureau of Census has measured perceptions of neighbourhood quality (through the 1976 Annual Housing Survey) in terms of an assessment of overall satisfaction with their current neighbourhood (Dahmann, 1981). Respondents were asked: "In view of all the things we have talked about, how would you rate this neighbourhood as a place to live – would you say it is excellent, good, fair, or poor?'

'Galster (1987) measured residential dwelling satisfaction using the following question: "How satisfied would you say you were overall with your neighbourhood?" Response scale was "very dissatisfied" (1), "dissatisfied" (2), "satisfied" (3), and "very satisfied."

'Another measure employed the following question: "How would you describe your neighbourhood as a place to live?" Response options consisted of checking one of five boxes, with the extreme labelled "very poor place to live" (coded as 1) and "very good place to live" (coded as 5).'

'Lu (1999) measured neighbourhood satisfaction by a respondent's answer to the question: "On a scale of 1 to 10, how would you rate the neighbourhood as a place to live? 10 is best, 1 is worst?" That study did not define the term "neighbourhood" to the respondents. It is what a respondent considers his or her neighbourhood to be.'

From these examples, Sirgy and Cornwell (2002) decided to use slightly different terminology in terms to gain richer data and comprehensive information. Respondents were asked more than one question includes their opinion about the quality of life, social interaction and how they feel about their life as a whole: 'This measure of life satisfaction has established reliability and validity in the quality-of-life literature'. This allows the results to be more valid and sensible as the research indicated.

On the other hand, many scholars such as Kim and Kaplan (2004) believe that using mixed methods research provides clearer and accurate results because they can emphasise the findings in more than one tool of evidence. Moreover, scholars such as Koohsari et al. (2015) uses site analysis through recording the movement of the users and their activities to conclude a certain conceptual framework in that specific context. Hence, to sum up, any research has to follow a designated plan to achieve what it needed to be achieved. The way of doing that may vary from method to method and from region to another but at the end is all about a process of the application need to be done in to conclude some results that help the development.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The purpose of this chapter is to give a clear explanation to two main issues, first, what types of methods can be used to conduct a project like this. Second, the reason for selecting the research method and the benefits of using this particular approach for this research. Furthermore, this chapter also explains the data collection methods employed in the case study. Moreover, it identifies the approaches of the used methods in this study. The chapter also enumerates the categories of the participants who are taking part in the research and how/why they have been selected as a significant data source for this study. Finally, it illustrates the methodology process including the pilot study, providing examples of similar research, and presents a sample of literature in the same vein as this research.

3.2 Research Methods

This section enumerates the common methods that generally used for conducting a research and provide a brief distinction between them in a general interpretation. Initially, there are three advanced approaches to collect research data: quantitative, qualitative and mixed methods (Neuman, 2002, Sarantakos, 2012). Nevertheless, although these three methods may seem separate, practically they are used in different research endeavours for different purposes, depending on the nature of the study and the elements of the research approach in which the results become more contributable (Creswell, 2013). The mixed methods research is placed in the central position between the two other methods because it integrates components from both **quantitative** and **qualitative** approaches (Patton, 1990). Additionally, the case study approach is usually identified as a qualitative study design; e.g., quantitative experiments or qualitative **case study** (Miles and Huberman, 1994, Yin, 2013). Figure 3-1 shows the overall process of the case study research which usually depends on the tools such as questionnaires, interviews, observation and content analysis.

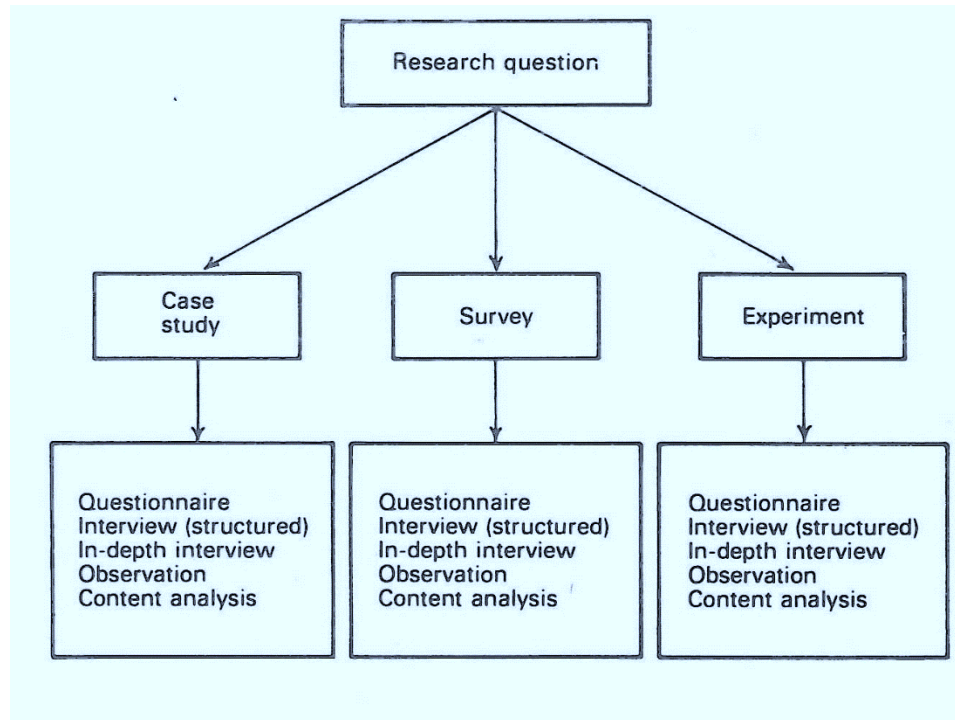


Figure 3-1: The overall process of the case study research. Sources: (Marsh, 1982, p. 4, De Vaus, 2013)

3.2.1 Quantitative Research

Quantitative research interprets its data through a statistical process, after collection and analysis. Usually, the data gathered are measured based on the relationships among the variables, which are produced as numbers (Creswell, 2013). It is not necessary that quantitative method gives data in a separate approach, in many cases such as the suggestion of Bryman (2015) states that quantitative strategy can emphasise the qualitative data or may provide a contrast evidence to the research. On the other hand, Davies and Hughes (2014, p. 9) highlight that 'distinction between the quantitative and qualitative methods has been the subject of extensive discussion in academic circles'. They and other scholars such as Rwegoshora (2016) and Gaus and Gaus (2017) suggest that identifying the purpose of the research to discover the answers to the questions is the main aim of selecting the most suitable and effective method.

3.2.2 Qualitative Research

In this type of research, data are typically collected individually from participants individually, or in groups. This approach is used to examine the understanding and the meaning of social or human matters among the users, and data analysis is structuring ranging from specific to broad themes (Creswell, 2013). The qualitative

research actually transfers the data to present the real world in a visible form as Davies and Hughes (2014, P. 38), indicate that 'the practices of the qualitative methods turn the world into a series of presentations, including field notes, interviews, photographs and observations'. So that is to explain the importance of the qualitative practices. The key point here is how this data can be useful and meaningful. In the same way, scholars such as Richards (2014, P. 35) significantly reports that: 'Making qualitative data is easy, the challenge is not so much making data but rather making useful, valuable data, relevant to the question being asked and reflecting usefully on the process of the research'. In this statement, the writer emphasises that the most important side of conducting the research is how to handle the data and find out things that did not exist before this research.

3.2.3 Mixed Methods Research

This term 'mixed methods' is increasingly used in the recent research such as social and psychological projects, it is basically a combination of quantitative and qualitative methods (Bryman, 2015, Brown, 2014). It integrates both quantitative and qualitative data and follows a certain structure to create a more comprehensive understanding of the research problem that would be achieved using a single method only (Creswell, 2013). This method can be very effective in a social research that needs to collect data from people through various tools such as questionnaires, interviews, focus groups and observations (Corbin et al., 2014). Therefore, as this research require a deferent type of data which can be collected through such more than one tool, so the research adapted this method as the best choice to provide the data needed.

3.2.4 Case Study Research

Denscombe (2014, p. 56) clearly explains that 'Case studies focus on one (or just a few) instances of a particular phenomenon with a view to providing an in-depth account of events, relationship, experiences or processes occurring in that particular instance'. From this statement and regarding the other scholars such as Sarantakos (2012) and Yin (2013) that case study is very effective and useful method when a certain example needs to be examined and then it might be repeated to a similar case or can be as a reference to another case. The case study method is often considered as a qualitative research design, but it is also used in quantitative studies. The research case varies according to its involvement, so the case could be a city/town, groups/individuals or a group of people from the total

population. In any of the former situations, in order to be considered as a case study, the total study population should be treated as one entity (Kumar, 2014).

3.3 Selected Research Method –'case study research'

Before deciding which method will be the most appropriate to any type of research, there is a need to identify the purpose of the research, the nature of the research and the kind of results that expected to be explored (Cousin, 2005, Merriam, 1988). As it has been explained above that case study research method is to measure/investigate a particular or a few examples in a specific case, so there is a crucial need to determine the boundaries of these case studies very carefully in a first place. In most of the literature of this method the authors such as Denscombe (2014) and Hancock and Algozzine (2016) that identifying the area/boundaries of the research is essential in order to conduct a realistic and valid project, the example can be applied to make comparison or even as a database referencing to the similar case studies (Hancock and Algozzine, 2016). This research focuses on two types of neighbourhoods to be included in the research, thus, case studies can be the match method for an effective use and outcome.

This research deals with assessment, measurement and investigation issues which relate to social dimensions and people's perceptions in their neighbourhood public spaces. It evaluates the existing quality of the neighbourhood public spaces in a social context with regard to the social aspects. In this essence, scholars such as Oppenheim (2000), Merriam and Tisdell (2015) and professionals such as Kumar (2005) have suggested that the appropriate research approach in such study is the mixed approach which combines quantitative and qualitative methods (Yin, 2013, Creswell, 2013). Consequently, identifying the demographic factors in the case of the research will help clarify the points of weaknesses and the strengths of the relationships between the residents in that community (Beins, 2012). This approach gives more in-depth interpretations that contributes more to make sensible and valid results and findings.

3.3.1 What is a Case Study Research?

Scholars, authors and researchers in various fields define a case study research from different perspectives. In some fields, a case study is defined as the method of illuminating the decisions (Schramm, 1971, cited in Yin (2013). Many of the social science textbooks in earlier years failed to regard the case study as one of the formal research methods (Yin, 2013, Beins, 2012). Furthermore, in many

earlier education books, the focus of case studies was on the descriptions of respondents' notes or site-work as data-gathering procedures, without taking into consideration the case study definition (e.g., Kidder and Judd, 1986; Nachmias 1992, cited in (Yin, 2013). Sometime later, during the development of the data collection technique, the case study became central to the analysis and the discussion in the quality of the research data. 'Logic of design . . . a strategy to be preferred when circumstances and research problems are appropriate rather than an ideological commitment to be followed whatever the circumstances' (Platt, 1992, p. 46 cited in (Yin, 2013). Accordingly, Yin (2013, p. 16) clearly highlights the two major definitions as follows: 'A case study is an empirical inquiry that: (a) explores a recent and specific incident in depth and in a 'real-world'. (b) The frontiers between incident and context might not clearly obvious'. Hence, digging in-depth into the real data through the case study methods and from the communicating directly with the instance of the research tools such as interviews and questionnaires. This gives comprehensive rich data and makes new information that can present valuable indications and therefore pure findings.

3.3.2 'Why' and 'How' Questions in the Case Study Research

It is widely known that the case study research method is common among various disciplines. Although it is considered as the most challenging method (Stake, 2013), it contributes very effectively to investigations and measures a real-world as opposed to a hypothetical one to provide realistic and accurate perspectives (Kumar, 2005). One of the indicators of choosing the case study as a research method is that the research question for a case study is often used to investigate the 'why' and 'how' questions (Yin, 2013, Denscombe, 2014) as per Table 3-1. This is because the answer to these types of questions needs to deal with operational connects not just a mere mention of events and times of occurrence. It can be seen clearly in Table 3-1 that in the survey method which this research uses, there is a need to identify the following: *who* – the participants; *what* – the data; *where* – the location; *how many* – the sample and *how much* – the domain of the research (Cousin, 2005). Moreover, in the case study method, the author also needs to explain the 'how' – the process of the research conduction, and the 'why' – the purpose for conducting the research (Yin, 2013).

METHOD	(1) Form of Research Question	(2) Requires Control of Behavioral Events?	(3) Focuses on Contemporary Events?
Experiment	how, why?	yes	yes
Survey	who, what, where, how many, how much?	no	yes
Archival Analysis	who, what, where, how many, how much?	no	yes/no
History	how, why?	no	no
Case Study	how, why?	no	yes

Table 3-1: Relevant situation among research methods. Source: (Yin, 2013, p. 9)

The mixed method approach creates a complete understanding of the research problem through the quantitative 'questionnaires' and qualitative 'case study' and 'in-depth interview'. The use of the case study approach usually produces more compelling and reliable findings which promote the validity of the research (Denzin and Lincoln, 2009). Furthermore, as the research aims to measure the role of public space in terms of social dimensions, the most appropriate research method is through a qualitative case study. Additionally, the research intends to formulate a unique framework that should be based on real data according to the case study. There is four main data-collection parts for the case study as follows:

- Survey questionnaires are distributed to three types of respondents to collect data from different perspectives. To create a range of balance between various views that make the study more realistic and valid. The questionnaire forms are distributed relatively, where a percentage of each group will take part in the study according to the total population of each category.
- In-depth interviews, particularly with decision makers and professionals who are involved in the relevant subjects. In addition, samples of the residents are recruited to take part in the interviews to explore their thoughts and ideas about the existing situation and find out their aspirations for future development.
- Observation, including onsite observation and collecting effective data through creative methods such as recording the activities' times, taking photos of the most popular places that residents prefer to be present in, and

watching the movements and the levels of participation of different category of the users.

- Documented data, either in electronic format or hardcopy, from the local authorities, archives and consultant centres. Selecting database information is an effective method to evaluate the recent developments and investigate the weaknesses of the public space efficiency in the neighbourhoods in terms of function, communication, the size of the area, and the type of activities.

According to the literature of the studies in this field, it seems that the case study is the most effective approach to evaluate and assess real examples to conclude more accurate discoveries (Merriam and Tisdell, 2015). For instance, in their article: 'The Evolving Metropolis: Studies of Community, Neighbourhood, and Street Form at the Urban Edge', Southworth and Owens (1993, p. 272) used several case studies to compare the urban development in different scales as they state that 'Through a case study approach this paper formulates typologies for several different dimensions of the urban edge'. Therefore, this approach supported the research to draw out a better understanding and more valuable findings because it involved more cases; hence, more potential for investigation. Another example is the study of Lelévrier (2013) titled: 'Social mix neighbourhood policies and social interaction', Lelévrier (2013, P. 411) states that,

'In order to obtain a certain temporal distance and perspective, this article presents the findings of our qualitative research into the experience of newcomers in new housing developments at three sites in France ... selected according to three criteria ...'

Thus, including a case study of several sites in such research has been experienced and marked as an effective method which supports the approach of this research methodology. On the other hand, scholars such as Cousin (2005, p. 422) importantly states that 'Case study research aims for depth and if a site cannot deliver this owing to limited access to actors, events and settings, it will not yield a sufficiently 'thick description' of a case' therefore, it is very important to ensure the access to the case study and have enough evidence to support your ability of handling and controlling the case studies to produce the data needed for the research.

3.4 Data Collection Strategy

Data can be collected by many tools in various ways; however, it is mainly categorised by two types of sources: (a) primary data, and (b) secondary data (Kumar, 2014). The first approach is often used in types of research such as evaluating health situations in the community, examining a social programme, determining the satisfaction of people towards job opportunities, while the second approach is generally used in research which obtains information from documents like hospital records, using organisations' databases, and collecting data from sources such as journals, books and articles see Figure 3-2, (Kumar, 2014).

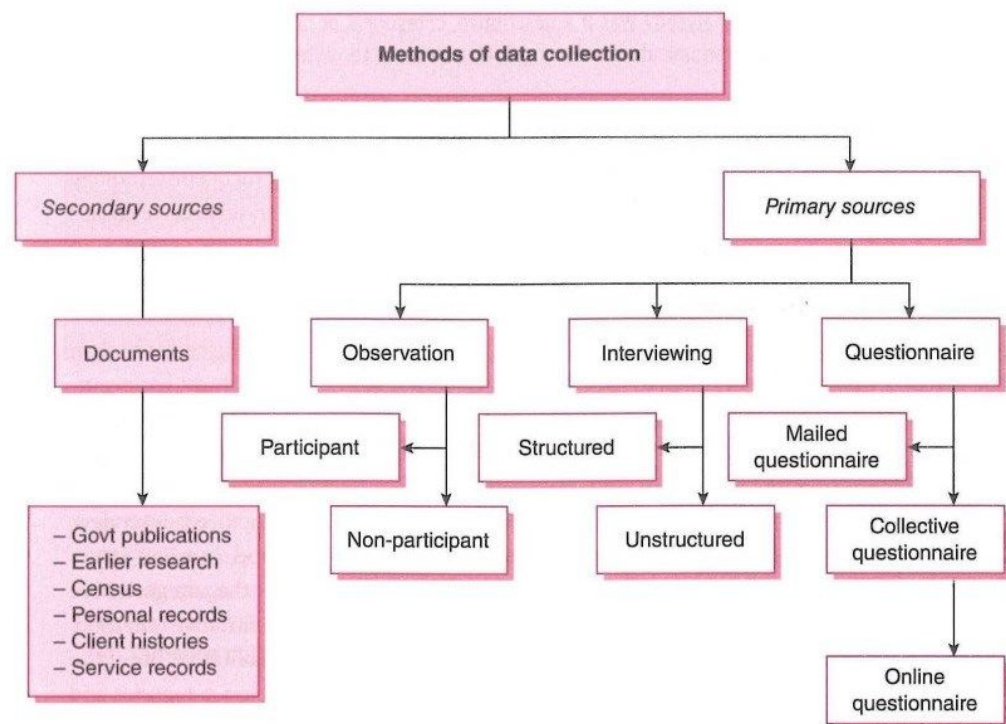


Figure 3-2: Methods of data collection. Source: (Kumar, 2014, p. 172)

In this mixed method research, the data collection approach includes four types of categories using more than one tool. Each one of these types is designed particularly to gather a certain amount and type of data. The collected data is then analysed in a combined manner to build up a complete understanding of the research enquiry. For instance, the survey questionnaires focus on simple questions put to the general public of the residents to gather quantitative data, while the in-depth interviews contain more specific enquiries and ask for deeper information. This method allows the gathering of qualitative data which provides more details and rich statements for the research questions than quantitative data alone would. Furthermore, associated tools are used in the research methodology which includes

the site visits/observations and the documentation support. This part of the research had the author visiting the site several times in order to document and capture as much evidence as time would allow, to enrich the data collected from other sources and methods. In addition, several visits were made to collect statistical and regulatory data from the local authorities including both the private and the public/governmental sectors to collect data such as maps, site plans, figures/standards and official specifications related to the urban design and public planning.

Sampling Technique

According to previous studies and similar research, the number of samples is not always more important than the sample quality (Abrahamson, 2016). Oppenheim (2000, p. 43) stated that 'A sample's accuracy is more important than its size'; for example, a 2000 unit sample can give us more reliable results from a population of millions. In order to define the appropriate size of the survey sample, tables were used with a precision (e) of +/- 10%, and from the population of 2000-3000, 80 was determined as an adequate sample size, with a confidence level of 95% (Israel, 1992, p. 6), (Kotrlik and Higgins, 2001). Sample selection was done using a combination of the random and snowball techniques. The random technique is based on taking samples without picking up some and leaving some others, thus there is no selected, just take everyone in an encounter order till the number of the samples being achieved (Beins, 2012). On the similar way, the snowball technique, Kitchenham and Pfleeger (2002, p. 19) highlight that 'This involves asking people who have participated in a survey to nominate other people they believe would be willing to take part sampling continues until the required number of responses are obtained'. Additional participants joined the research through an invitation from other residents as they completed their surveys, thereby generating extra participants in a more spontaneous and neutral manner.

The next stage of the research is the in-depth interviews conduction, as the researcher starts to find out some more interesting answers from the participants during the questionnaire application. Another important issue was to avoid bias in this study and to gain information from different perspectives. Interviews were categorised into three groups – professionals (independent), decision-makers (governors) and residents (from both sites, TN and GN), the selection of these three categories based on the following reasons:

- ❖ Professionals from independent institutions (private sectors) to find out different perspectives and very relevant information as well as avoiding the single opinion from the public sectors.
- ❖ Decision-makers from the government sectors who are related to the public space of the housing projects and other involved authorities, this mainly to explore data regarding the policies and strategy of the government towards these projects.
- ❖ Residents of both types of neighbourhoods, these are the main component of the research elements because residents who have the practical activities, daily experiences and the real-life engagement in the public spaces of the neighbourhoods.

Regarding a similar research in the field such as 'community-level engagement in public housing redevelopment' by (Walker, 2015), this research includes two neighbourhoods and the participants were only from the residents. Therefore, the research has a limitation of lack of views and perspectives on the measurements tools. Walker (2015, p. 29) states that: 'the sample may include a self-selection bias that excluded a group that may have had different views from the study participants' therefore, including more participants from the local community with different categories, in fact, is enriching the research findings and avoiding subjectivity. This result can be also noticed in the following articles where they use case studies methods and have a limitation of using a single or few participants' categories (Peters and de Haan, 2011, French et al., 2014, Costa and Lopes, 2015).

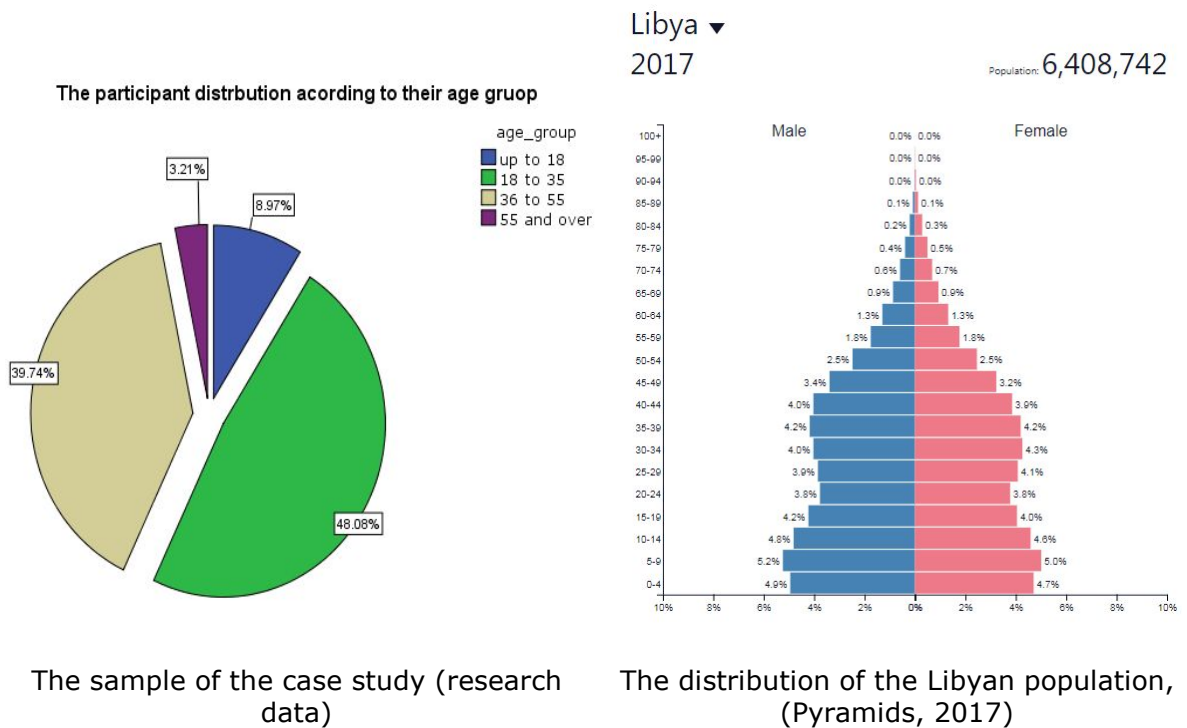
In another example, Ghoomi et al. (2015, p. 285) in the article 'Comparing the Components of Sense of Place in the Traditional and Modern Residential Neighbourhoods' indicate that the research has a limitation of 'The possibilities and limitations found in the studied areas (Kan and Baharan) relying on the views of the inhabitants'. On the other hand, the multi-category sample of participants can give the strength to the research reliability and validity as the research of Costa and Lopes (2015, p. 30) titled 'Urban Design, Public Space and the Dynamics of Creative Milieux: A Photographic Approach to Bairro Alto (Lisbon), Gràcia (Barcelona) and Vila Madalena (São Paulo)'. They use,

'... 22 set of ... interviews in the three cities, with (1) government authorities from urban, cultural and economic policy areas, (2) experts

in consultancy and the academic world, and (3) some prominent creative and cultural institutions'.

This strategy of using the multi-category sample for the research questionnaires and interview allow richer data and more accurate information because they contain more perspectives.

Another important factor is the representativity of the research sample, in order to ensure that the selected sample is representing the local population with regard to age and gender and other factors, there must be involvement of all the residents' categories from all the backgrounds, age group and size of the family. Figure 3-3 shows the structure of the city population and the sample of the participants. It can be clearly seen that the selected sample of participants includes all different ages with a relatively adequate percentage according to the distribution of the local population in Libya.



Figures 3-3: The representativeness of the research sample towards the distribution of the population in the country, (Pyramids, 2017) accessed 12/01/2018 14:27 pm

3.5 Research Tools

3.5.1 Questionnaires

The questionnaire is one of the research tools that generate quantitative data by asking numerous questions within a category, group or sample of the population. It is distributed to a selected sample of people inviting them to respond to a structured list of questions to find out their opinions, attitudes and thoughts towards a certain issue (Creswell, 2013, Dörnyei and Taguchi, 2009). Kumar (2014) points out that the only difference between the interview and questionnaire methods is the data recordings; in the interview, the data are recorded by the investigator while in the questionnaire, the data are written by the respondents. Therefore, it is important to be aware of this distinction due to the weaknesses and strengths of data gathering.

Questionnaires were mainly recorded and completed by participants individually; because of that, there are some significant characteristics that should be considered during the preparation of the questionnaires. Some of these features are that the questionnaire should be easy to read and to follow; structured comfortably to the eye when reading; clear and straight meaning; avoid complex questions, and be appropriate to the nature of the respondents (Sarantakos, 2012). In order to achieve these features, several techniques can be used such as change of the writing font size, inclusion of short notes and or explanations, and well-ordered questions (Bernard and Bernard, 2012).

Consequently, there are some advantages and disadvantages of questionnaires that can be included; Kumar (2014, p. 181) explains clearly that a questionnaire is a less expensive tool due to its time-saving nature, particularly when it is administered collectively to a study population. Another advantage is that the questionnaire allows for a high level of anonymity which is considered very important particularly if some questions are sensitive in nature. Thus it is more likely to obtain much more reliable and accurate data.

On the other hand, there are numerous disadvantages; however not all research necessarily faces these problems because it varies from one research to another. Therefore, investigators should be aware of these flaws as they may experience examples of such limitations. Kumar (2014, p183) indicates a wide range of possible disadvantages of the questionnaire that can be summarised in the following points:

- ❖ A limited application which means that it is unlikely to use the same application to different categories of the population, which shows a lack of contribution to other research.
- ❖ As the data collected are usually recorded by the respondents, they may contain some unclear answers which might affect the quality of the information.
- ❖ Those who receive a questionnaire might have a self-motivation to be biased due to a limited sample of the whole population; thus, there should be an appropriate amount of the respondents to emphasise that the data collected are representative of all the population.
- ❖ There might be a low rate of respondents, so it is a good idea to distribute more forms of a questionnaire to ensure obtain the expected number of answers are acquired.
- ❖ There is the possibility of a lack of clarification from the investigator as the opportunity of meeting the respondents is limited; hence the answers collected might not be very accurate.

	ID	gender	age_group	status	work_type	other_work	living_period	previous_lv...	ES1	ES2	ES3	ES4	ES5	ES6	ES7	ES8
1	01	1.00	3.00	2.00	1.00		3.00	2.00	4.00	4.00	3.00	4.00	5.00	4.00	4.00	4.00
2	02	1.00	2.00	2.00	4.00	private	3.00	2.00	5.00	4.00	5.00	5.00	3.00	4.00	5.00	5.00
3	03	1.00	4.00	2.00	1.00		3.00	2.00	5.00	4.00	3.00	5.00	5.00	1.00	3.00	3.00
4	04	1.00	3.00	2.00	1.00		3.00	2.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	1.00
5	05	1.00	2.00	1.00	4.00	private	3.00	2.00	4.00	4.00	4.00	4.00	4.00	2.00	4.00	2.00
6	06	1.00	999.00	2.00	1.00		3.00	2.00	4.00	4.00	4.00	1.00	4.00	4.00	4.00	1.00
7	07	1.00	1.00	3.00	4.00	student	3.00	2.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	3.00
8	08	1.00	3.00	1.00	2.00		3.00	2.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
9	09	1.00	3.00	1.00	1.00		3.00	2.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00
10	010	1.00	2.00	3.00	4.00	private	3.00	2.00	4.00	4.00	3.00	4.00	5.00	4.00	5.00	2.00
11	011	1.00	2.00	1.00	1.00		2.00	3.00	4.00	4.00	5.00	5.00	5.00	4.00	4.00	3.00
12	012	1.00	2.00	1.00	2.00		3.00	2.00	4.00	4.00	4.00	4.00	5.00	3.00	5.00	3.00
13	013	1.00	2.00	2.00	1.00		3.00	2.00	4.00	4.00	4.00	5.00	5.00	5.00	4.00	4.00
14	014	1.00	2.00	1.00	2.00		3.00	2.00	5.00	4.00	4.00	4.00	3.00	5.00	4.00	4.00
15	015	1.00	2.00	3.00	1.00		3.00	2.00	4.00	5.00	4.00	3.00	5.00	5.00	5.00	3.00
16	016	1.00	3.00	1.00	1.00		3.00	2.00	4.00	4.00	4.00	4.00	5.00	2.00	4.00	2.00
17	017	1.00	2.00	1.00	1.00		3.00	2.00	5.00	5.00	4.00	4.00	5.00	3.00	5.00	2.00
18	018	1.00	3.00	1.00	2.00		3.00	2.00	5.00	4.00	4.00	4.00	4.00	1.00	4.00	1.00
19	019	1.00	2.00	3.00	4.00	student	3.00	2.00	4.00	4.00	4.00	5.00	5.00	2.00	5.00	1.00
20	020	1.00	2.00	1.00	4.00	student	3.00	999.00	4.00	3.00	4.00	5.00	5.00	2.00	4.00	2.00
21	021	1.00	999.00	3.00	999.00		2.00	2.00	4.00	4.00	3.00	5.00	3.00	1.00	2.00	2.00
22	022	1.00	1.00	3.00	1.00		2.00	1.00	4.00	4.00	4.00	3.00	3.00	5.00	4.00	3.00
23	023	2.00	2.00	2.00	4.00	student	3.00	2.00	3.00	3.00	5.00	4.00	3.00	2.00	3.00	4.00
24	024	2.00	2.00	2.00	4.00	student	3.00	2.00	4.00	2.00	5.00	4.00	4.00	1.00	4.00	1.00
25	025	1.00	2.00	3.00	1.00		3.00	2.00	3.00	2.00	4.00	3.00	4.00	5.00	4.00	2.00
26	026	1.00	2.00	2.00	4.00	private busi...	3.00	2.00	3.00	3.00	4.00	5.00	4.00	4.00	3.00	3.00
27	027	2.00	3.00	1.00	2.00		1.00	2.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	2.00
28	028	2.00	2.00	3.00	2.00		2.00	3.00	4.00	5.00	4.00	5.00	3.00	5.00	4.00	3.00
29	029	2.00	2.00	1.00	4.00	a housewife	1.00	2.00	4.00	5.00	2.00	5.00	4.00	4.00	5.00	1.00

Figure 3-4: The data analysis through the SPSS Statistic 22 software, research data by author

In this research, three different groups of participants have been involved in the questionnaire process. Two hundred questionnaires were sent out to the residents of the selected research sites, and a total of 158 questionnaires were returned as follows: Almegawba neighbourhood, 81 participants and 9th July neighbourhood, 77 participants. The questionnaires included a number of open-ended, closed and multi-choice questions (see the questionnaire forms in appendix 3). The data were analysed through the SPSS Statistic software, version 22 (Figure 3-4). The questionnaires were designed to collect a particular type of data; the significant respondents were invited to take part in in-depth interviews in order to gather more focused responses and further details.

3.5.2 The questionnaire technique

The questionnaire forms of this research include two parts of structured questions, the first one is to collect quantitative data through (agree ... disagree) questions. The other part includes qualitative questions to provide more specific information that support the data from the first part. The Table 3-2 explains some examples from the questionnaire forms and the reason of using this terminology.

Questionnaire Statement	To find out ...
For example: - Residents should spend time to participate in POS...? (Qualitative Question)	To find out: - The attitude/perception of the respondents towards using and participating in the POS.
- What kind of activity do you often do in the PS...? (Quantitative Question)	To find out: - Whether they use it or not. - The type of activity they do.
- How much time do you usually spend in the PS...? (Quantitative Question)	To find out: - Length of stay in the PS which can tell the extent of their satisfaction towards the PS.

Table 3-2: Explains the reason of using this terminology in the questionnaire forms, to collect various types of data

3.5.3 In-Depth Interviews

An in-depth interview is one of the main methods in a qualitative research; however, it can be used in many other research approaches. It is defined as a method to collect data from people, essentially a one-to-one interaction. In some cases, small groups may be interviewed due to specific requirements and/or certain purposes. Kumar (2014) clearly highlights the technique of using the interview to collect qualitative data including the conditions of the interview in terms of the connection tool such as face-to-face, online record and telephone call in which the participants respond to the ideas and opinions of the interviewer. Consequently, interviews are identified as 'structured' and 'unstructured' (refer to Figure 3-5) (Kumar, 2014). The main distinction between them is that in the unstructured interview, the participant responds to the questions with almost complete freedom and can provide extra information which is not included in the form of the interview questions while in the other type there is guidance of questions to be followed by the interviewer and the interviewee in the same order and wording which is considered a more limited and focused collection technique.

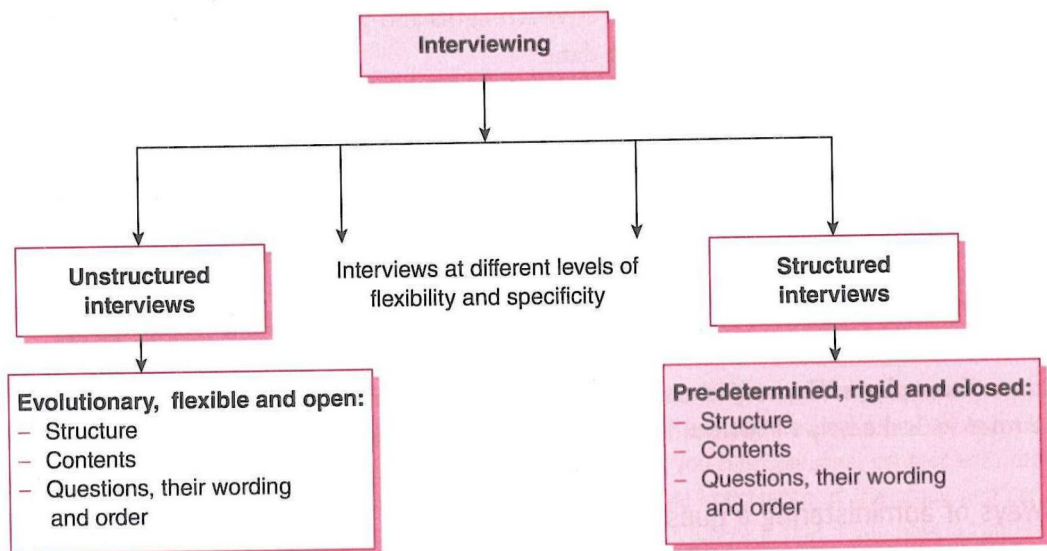


Figure 3-5: Types of the interview, source: (Kumar, 2014, p. 177)

According to the interview method, in this research, there should be from three to six samples for each category which has been described previously in the questionnaire forms which represents the required percentage of the total amount of the participants. In-depth interviews aim to provide a deeper understanding of the existing situation as well as to gain a clearer feature of the quality of the public space in the place of study. Moreover, interviews help the researcher to collect

appropriate evidence that supports the research to solving the main research question and create a coherent framework to be used in future policies.

The interview is one of the most important sources of evidence in the case study method. It is an essential source for the case study due to its guided conversations rather than structured queries (Oppenheim, 2000). In addition, interviewing people enable the researcher to find out specific information that cannot be noticed and observed (Merriam and Tisdell, 2015). In this research, interviews were divided into four categories to obtain information from all perspectives. The questions were modified to each individual category to focus their interest and to conclude significant data which are important for the research.

In-depth interviews were conducted to provide a further understanding of the existing situation as well as to gain clearer features about the quality of the public space of the case study. Also, the interviews were used to collect appropriate evidence that clarifies the research issue and contributes to solving the research matter and creating a coherent framework for use in future policies. A total of 16 in-depth interviews were conducted during the field work as follow:

1) Decision Makers: represented by four participants, this number is set regarding the number of respondents in this category compared to the others. However, there is a focus on the information from this category through the interview which can provide qualitative data that are relevant to the research.

2) Residents: represented by four participants from each site. There is no single standard to determine the number of samples; it usually depends on several variables such as the type of research method, the field of the study and the features of the data needed. Therefore, with regard to many previous studies and some sources, (Bernard and Bernard, 2012) suggest that is from 5% - 15% of the community population, but each case can be slightly different. In this case, the numbers of participants are between 80 and 100 in **GN 9th July**, and between 100 and 120 in **TN Almegawba** neighbourhood.

3) Professionals: represented by four respondents, from this group were interviewed, including Architects, Urban Planners, Landscaping architects and urban designers. Nevertheless, there is a focus on this category by involving them to take part in the interview. In this case, qualitative data are more useful to find out the relevant information to the main core of the study.

Part 1 - Chapter 3

Research Methodology

In terms of the gender, status, age and educational level, there is a mixture of all categories indicated, taking into account this variety among the participants in all the research methods. All the interviewed participants are selected from the questionnaire list due to their significant answers, to seek more in-depth details. The list of the in-depth participants shown in Table 3-2 and a brief summary of the participants' interviews transcript are attached in **Appendix 10** and the interview questions are attached in **Appendixes 7, 8 and 9**. The interviews are transcribed and translated from Arabic to English. All data are stored in a safe and confidential store. All the interview data are uploaded to the QSR NVivo version 10 for analysis, in order to be coded and classified accordingly, as shown in Figure 3-6.

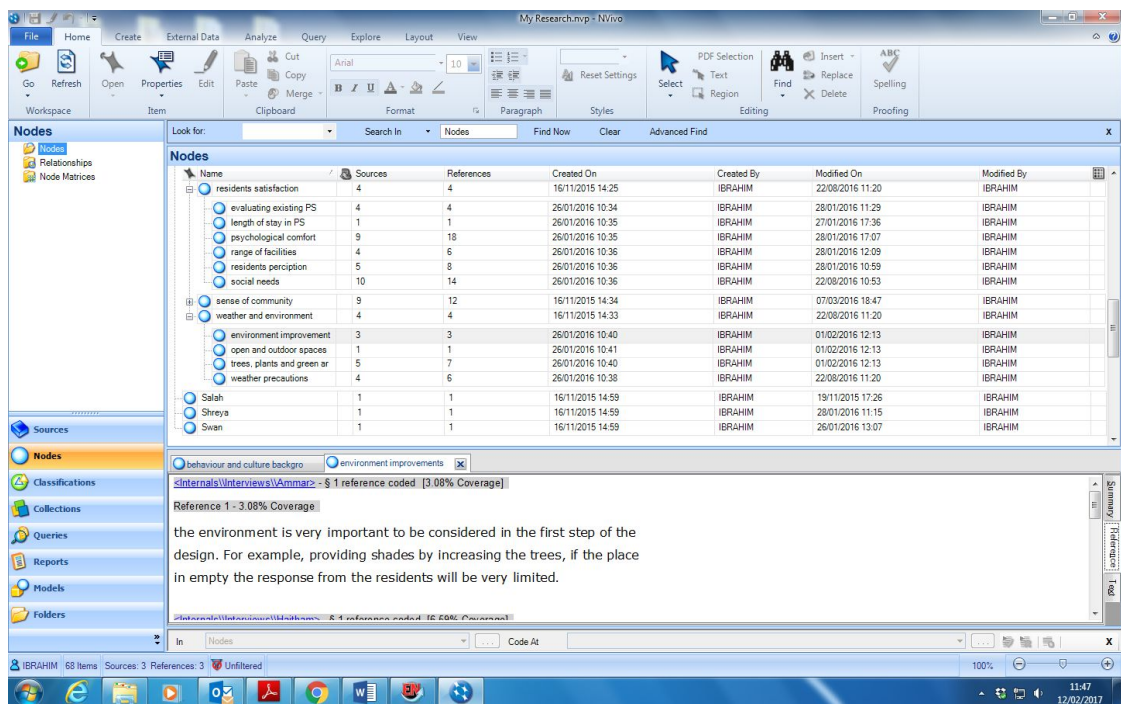


Figure 3-6: The QSR NVivo 10 which is used in the qualitative analysis of the research

The list of the participants and their details who respond to the in-depth interviews divided into three categories as shown in Table 3-3.

Name	Institution	Degree/Position	Date
Professionals			
1.Ali Swan (T 04) A S	Private institution	Master in Architecture and Urban planning, part-time lecturer at Misurata University, Architecture Dept.	10/08/2015
2.Dr. Aymen Mogalfta (T 06) A M	Misurata University	Head of Architecture Dept.	11/08/2015
3.Ammar Gargoum (T 07) A G	Private institution	Urban planning, 30 years' experience	12/08/2015
4.Mohamed Lashheb (T 15 &16) M L	Misurata University	Master in Architecture, lecturer assistant	03/09/2015
Decision Maker			
5.Ali Zidani (T 08) A Z	Urban Planning Ministry (MUP)	Head of UPM, the middle region of Libya, Misurata	13/08/2015
6.Hadi Sharif (T 01) H S	Housing and Infrastructure Board (HIB)	Head of the Middle region of Libya, Misurata.	03/08/2015
7.Saleh Zarmoh (T 03) S Z	Misurata city Council (H&U)	Head of the Housing and Facilities Department	09/08/2015
8.Haitham Bayou (T 10) H B	Misurata City Council (GSC)	Head of the General Services Department	24/08/2015
Residents (GN)			
9.Fayez Ismail (T 02) F I	Resident	Male/51 years	06/08/2015
10.Khaled Shuaib (T 09) K S	Resident	Male/44 years	19/08/2015
11.Mohamed Gresa (T 14) M G	Resident	Male/46 years	30/08/2015
12.Ibtisam Shreya (T 12) I S	Resident	Female/31 years	25/08/2015
Residents (TN)			
13.Layla Shergawi (T 11) L S	Resident	Female/33 years	25/08/2015
14.Ibtisam Ismail (T 13) I I	Resident	Female/25 years	27/08/2015
15.Salah Mabrok (T 05) S M	Resident	Male/37 years	10/08/2015
16. Saleh Elsiwi (T 17) S E	Resident	Male/63 years	23/10/2016
Total of 16 interviews			
Table 3-3: The list of the participants who took part in this research includes the details and the initials of their names which used later through the text, numbers from T 01- T 016 are the voice record list			

3.5.4 Site Observation

Observation is one of the most effective tools to collect primary data. There are many situations in which the observation is the most appropriate method for data collection; for instance, when the data needed are about the interaction of groups and/or individuals, users' behaviours and ensuring the qualification and task performance of a group of employees. In such cases, it is likely that the investigator cannot obtain accurate information through questioning due to lack of cooperation and/or misunderstand the questions. Therefore, in this case, the observation is the most suitable choice to gather data (Kumar, 2014). Mainly, there are two types of observation: 'participant observation and non-participant observation' (Kumar, 2014, p. 173). Simply, in the first type, the investigator is usually engaged with the participant with knowledge, while in the second type the observer is not involved in the activity and remains a passive observer.

In terms of conditions of the observation, it can either be done in a controlled way when actions have been made to observe the respondents' reaction, while in a natural way of observation, the observer watches the interactions under the normal conditions of the respondents' activities (Kumar, 2014, Bryman, 2015). Finally, recording the information through observation depends on the pattern of the research – either quantitative or qualitative. The descriptive recording is commonly used in qualitative research while a numeral or categorised form is used in a quantitative research. In fact, there are advantages and disadvantages in each approach depending on the purpose of the study. In addition, many other tools can be used in observation such as taking photos, recording a video and sketching what is observed (Kumar, 2005). An example of observation and recording group interaction is shown in Figure 3-7.

Therefore, in this research, as a mixed method approach. Observation can contribute to providing useful material such as caption certain activities in a specific space. Using the different time to observe the extent of the space use and activity types. Also, taking a photo can help to visualise some material which will provide clarity. The method of the observation as following: a) writing down how long people usually stay in POS. b) who use the POS and with whom (sharing, contacting ...etc.). c) Where people prefer to spend their time, and how far from their houses. d) Observing any new information that does not gain by the other tools of data collection, or any unusual movement. These are the key benefit of the observation as well as identifying the proper use of the spaces in daily life for the local residents.

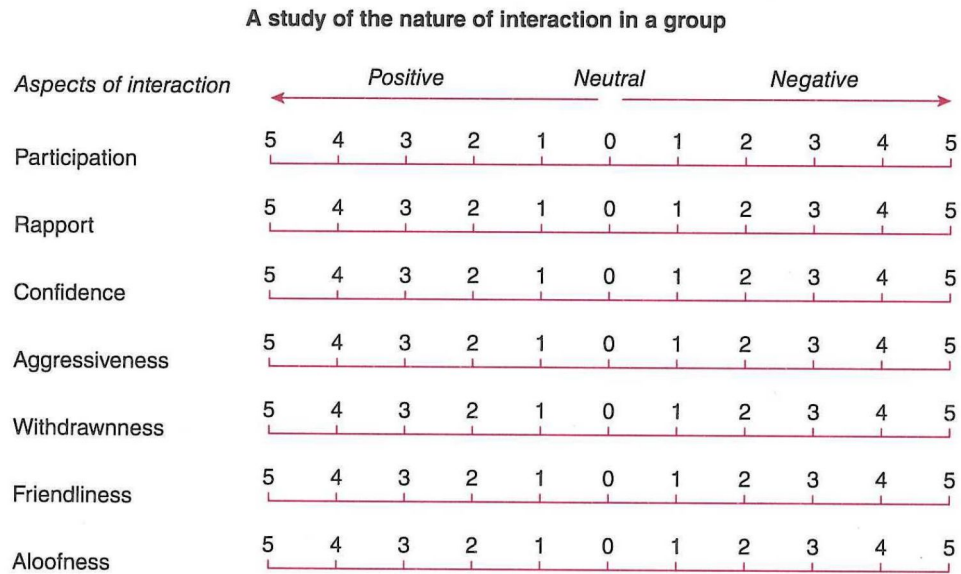


Figure 3-7: Observing/recording group interaction on three directional rating scale. Source: (Kumar, 2014, p. 176)

Observation is a rich source of qualitative data and is undertaken by gathering information from a site visit and observing the residents of the community individually and in groups. Further relevant information is collected through documented and recorded experience from the formal archives of the Projects Management Department of Misurata city council. There is a focus on the supporting documents and site photos, maps of the public open space of the site zones. Visits to the local authorities involved in the public space design, management and the constructing firms were planned to undertake more in-depth discussions as possible. In addition, focus groups observation might be involved in this research, such as observing their moves and length of time they remain in the public space, when and where they have their main activities, and focusing on their behaviour among the community spaces.

Site observation is an effective tool that adds more valuable information to support the rest of the data gathered by other tools. Scholars have determined many tools that have been used in observation such as tracking, tracing or looking for traces, counting, photographing, keeping a diary and mapping (Gehl and Svarre, 2013). The purpose of using this approach is because there are actions that might not be covered by the questionnaires and the interviews; for instance, observing the children who are not included in the questionnaires and interviews, and also some other actions that participants might not want to mention. It was for these reasons that the observation method formed a major component of this research. The

strategy was driven by a desire to get a little closer to '*what really happens*' in public spaces to expand on more commonly researched aspects of what people 'think' happens, or what people 'say' happens within them (Clark et al., 2009). In the spirit of the early Chicago school of urban sociology, the author believes that direct observation is fundamental to the advancement of knowledge (Sampson and Raudenbush, 1999b).

List of site visits/observations and the most dominant activities that happen in the public spaces of the neighbourhood by all different categories of resident:

9th July Neighbourhood					
N.	Gender	User's category	Activities observed	Time length	Date of visit
1	26/07/2015 (Photos 5&9)	Sun 4:00-6:00 pm	Walking Football Chatting Cycling	Adult Children Adult and elderly children	M & F Male Male Male
2	The 9:00-11:00 pm	04/08/2015 (Photos 1&2)	Male Male	Adult and elderly Children	Chatting Football
3	Thu 10:00-11:30 am	06/08/2015 (Photos 4&10)	Male Male M & F Male M & F	Children Children Adult and elderly Adult and elderly Children	Football Cycling Walking Sitting and Chatting children games
4	Sat 17:30 - 20:00	15/08/2015 (Photo 3)	Male Male M & F Male	Children Children Adult and elderly Adult and elderly	Football Cycling Walking Sitting and Chatting
5	M & F M & F M & F Male M & F Male Male	Children & youth Children & youth Children All age categories All age categories Adults & elderly Adults	Football Biking Playing in playground Sitting & chatting Walking Drinking tea, coffee and smoking Shisha	Thu 16:00 - 18:00	20/10/2016
Table 3-4a: Observation schedule, photographs and observations by the author					

Almegawba Neighbourhood (GN)					
N.	Date of visit	Time length	Activities observed	User's category	Gender
1	13/08/2015 (Photo 6&7)	Thu 12:00-1:00 pm	Walking	All age categories	M & F
2	13/08/2015 (Photo 8)	Thu 5:30-6:45 pm	Play in ground play Walking Cycling Gathering in groups, sitting and chatting	Children All age categories Children All age categories	M & F M & F Male Male
3	17/08/2015	Mon 10:15-11:45 am	Football Cycling Walking Sitting and Chatting children games	Children Children Adult and elderly Adult and elderly Children	Male Male M & F Male M & F
4	25/08/2015	Tue 3.00-400 pm	Walking	All age categories	M & F
5	03/09/2015	Thu 8:30-10:15 pm	Sitting in groups, chatting and drinking tea. Gathering on street, chatting.	Adult and elderly Children	Male Male
6	20/10/2016	Thu 18:00 – 19:00	Football Cycling Walking Sitting and Chatting Other children games	Children Children Adult and elderly Adult and elderly Children	Male Male M & F Male M & F
7	22/10/2016	Sat 17:30 – 19:00	Play in playground Walking Cycling Gathering in groups, sitting and chatting	Children All age categories Children All age categories	M & F M & F Male Male
Table 3-4b: Observation schedule, photographs and observations by the author					

This research adopted two of the former tools – photographs and counting – according to the specific data needed for the research. From this perspective, photographs are fundamentally rich in meaning; one single photo may be worth 1000 words (Gehl, 2011). Photographs also convey more than one meaning to different viewers based on the life experiences, knowledge and perspectives of that viewer. Photographs, similar to words, though, convey both clear and unclear

messages to the observer, with variations in meaning (Cruickshank and Mason, 2003). The following list illustrates the visits to both sites and the activities that occurred in each location, as well as the age category and genders of the users; see Tables 3-4 a and b. Based on these visits, the researcher collected more relevant data to support the other tools of the research and to increase the credibility of the findings as data were taken directly from the real life as it happened on the ground.

3.6 The criteria of the case studies selection

Firstly, the city of Misurata is a third biggest city in Libya in terms of population and there are numerous of other cities in Libya which has a similar population number such as Zawyha, Zliten, Sabha and Tubroq (Atlas, 2009). These similarities in population and land size to other cities made the choice of Misurata can be a good selection as this size of cities are the most typical in the country of Libya. Thus, this case of Misurata may be able to be applied in different cities with taking on account some other differences in the cultural background, environment and other local features. The question now is that 'why these specific neighbourhoods'? Almegawba and 9th July. Before answering this question see the Map 3-1 (appendix 14) which shows examples of the GNs around the city. By looking at the figure, it can be seen that there are 8 examples of GN. Sites number 1, 2, 3, 4 and 5 are far away from the planed area of the city and also, sites number 3 and 4 are not completed. Sites 1 and 2 were built in the 1980s which is before the new scheme of the Libyan government as it is explained in the introduction section. Therefore, these examples are not valid to be included in this research.

Sites 6 and 7 are in the official area within a good distance from the city centre, however, site 7 is very small compared to the typical neighbourhood sizes in the general fabric of the city. The site 6 is an old residential area, it was built around the 1990s which may not the best choice for a new research that needs to investigate recent issues that probably new residents are dealing with in terms of social aspects. Hence, the site 8 is the most suitable site for this research because of the following reasons:

- 1- It has a good size of housing number of around 750 units.
- 2- It is within the official master plan of the city.
- 3- It was built in 2007 as the first completed GN in the new scheme of the housing policy of the government.

- 4- The typology of the houses is the most comparable to the traditional houses which can ensure valid and objective findings.
- 5- It has a complete infrastructure works same as the TNs.
- 6- There is some data can be accessed in order to collect information from the first party (HIB) such as the map, a number of house units ...etc.

N.	Element	9 th July (GN)	Almegawba (TN)	Similar/ different
1	Distance from city centre	≈ 4 km	≈ 2 km	Similar
2	Site area	53 Hectare	58 Hectare	Similar
3	Population	Around 3000 people	Around 3500 people	Similar
4	Number of housing units	784 units	650-700 units	Similar
5	Level of infrastructure	All services are included in the site	All main services included in the site	Similar
6	Date of moving in with residents	2005	Through generations / long time ago	Different
7	Residents' social background	From different parts of the city and from other cities of the country	Almost all from the same area since born	Different
8	Average of family members	4-6 person	4-6 person	Similar
9	Average of the house area	150-200 m2 Including the garden	800-1200 m2 Including the garden	Different
10	Public space (open space) area	20-30% of the site area	20-30% of the site area	Similar
11	Public car park	More public car parks	More private car parks (within the space around the house)	Different

Table 3-5: The characteristics of the case study sites, the general project's office of the Housing Ministry, Misurata, MUP and HIB archive

On the other hand, the selection of the TN was made according to the size and the distance from the city centre in the first place, also, because this TN neighbourhood (Almegawba) is good example to represent TNs of the Misurata city as it has the most typical features that similar to the most of the TNs of the city such as:

- 1- It has a Central Public Space 'park'.

- 2- It includes a POS for sports activates.
- 3- It has a suitable size of housing number which is around 700 houses.
- 4- Its density is in the average of the urban areas of the city.

In addition, Table 3-5 provide more details of the features of both sites and the key similarities and differences between them. Finally, regarding the time and framework of this research, it considered that two sites are enough to find out the main and essential findings that research is addressing. In addition, this research should suggest at the end recommendations for further investigations that may be required in the future research. Moreover, it can be also future tasks to establish a wider framework that can include more neighbourhoods in a bigger size research.

3.7 Conceptual Framework of the Research

All the techniques of data collection in this research are to explore answers to the research questions. To be more specific, the appropriate type of data needed in this research is to identify and clarify the situation of the public space of the neighbourhoods in the city of Misurata, Libya. In particular, the focus was to find out answers to the research question/s that are adopted in this study such as:

1. How does PS of the neighbourhoods provide the sense of community and social cohesion for the residents?
2. Why is it important to provide good-quality public spaces to increase the quality of the neighbourhoods?
3. How can people feel socially satisfied with their neighbourhoods in terms of physical and intangible elements of the PS and in which ways should public space meet the social needs of the residents:

Therefore, data collection tools were structured to provide information about the key points as follows:

- What is the basis of the public space design in Misurata neighbourhoods?
- How do people feel about the space that should be shared by all the residents' categories for public activities? And do they obtain the benefits of their functional purpose or not?

- Why do people use this space and when? Are they socially satisfied with the quality of the existing public space?
- What is the preferred time that residents contribute to the public space and why?
- Is this public space suitable for all genders, ages and status of the residents in the neighbourhood?
- In which way does the design of the public space promote the value of the social network of the neighbourhoods?
- To what extent does the public space impact on the sense of community and social cohesion of the residents? What type of impact and in what way?
- Do residents prefer communities that contain a large area of public space or are they more attracted to the private space which is attached to their properties?
- What kind of social needs encourage the residents to be more satisfied with their neighbourhoods from a social perspective?
- Which type of space is more desired by the majority of the residents – the public used space in the middle of the community or the private space which belongs to each individual resident?
- Comparing both types of neighbourhood, the TN and GN, which one of them is more preferred based on the residents' views and why?
- What are the advantages and disadvantages of TNs and GNs, and how are they different from each other in each individual type of neighbourhood?

These points are the key enquiries of the research. The researcher's task is to find out the answers to these inquiries in a way that supports the concept of constructing a new framework for future redevelopment in the urban design of the public space of the neighbourhoods. Nevertheless, more detailed data are gathered via the qualitative part of the research which was covered by the in-depth interviews and site observation. Finally, it is the aim of this research to investigate, then evaluate and finally to suggest/recommend the most needed development in a clear scope that highlights and establishes alternatives and improvements to the current situation of the urban quality and residents' satisfaction in Misurata city.

3.8 The Link between the Objectives and Data Collection Methods

The following Table 3-6 illustrates the linkage between the research objectives and the data collection methods. This approach facilitates reaching the aims of this research within a clear framework and a tight future plan.

N.	Objectives	Data Collection Method
1	To find out whether the PS of these new theme neighbourhoods 'GNs' have succeeded to provide a greater level of sense of community, compared with the previous residential areas TNs.	Literature and Documentation Review: - Visiting the city council archive and investigating the residents' opinions. - Interviews with the residents who are living in the neighbourhood to explore their experience about the differences between the existing and former communities. - Questionnaires ; asking the participants about the quality of the present situation and how public space contributes to their life.
2	To understand the impact of PS of neighbourhoods on the social integration, and how its design can enhance the sense of community, which should lead to a better life quality and higher social satisfaction.	Literature, Reviewing the relevant documents: - Checking the designs of these communities and ensuring that the design was based on considering the public space. Interview with experts/decision makers. - Government policies and future schemes. - Residents from all categories. The Survey (questionnaires).
3	To draw a clearer conceptual picture of the social dimensions and its role towards the variety and the interaction of the community.	Literature, Public space analysis: - Privatisation, variety, accessibility, social activities, community cohesion. Direct Observation of the community public space, recording the significant movements and interactional activities. Interviews with residents, scholars, specialists and developers.
4	To find out whether or not the POS is enabling the residents to contribute fairly/equally in the public realm, and to evaluate the existing social cohesion.	Literature, observation: - Previous experiences - Other research conclusions - Onsite visits Questionnaires: - Residents (age, gender, status and groups). - Local community contribution. - Detailed information. Interviews: - Planners and architects - Decision makers.
5	To gauge the social satisfaction of the residents within the community regarding the quality of PSs and the range of varying the activities, particularly those	Literature review, similar study analyses: - Investigating the measurement tools and link to the points of the study. - Exploring the social needs of the community through direct questions. The questionnaire:

	belonging to the social integration.	<ul style="list-style-type: none"> - How people perceive the idea of sharing the public space. - Observing the time and place of all types of social activity.
6	To establish a developed framework that could contribute to creating integrated communities with an appropriate level of social interaction and local cohesion.	<p>Literature and all data collected are then analysed and discussed in a qualitative approach.</p> <p>Interviews;</p> <ul style="list-style-type: none"> - Residents. - The community leaders. - The specialists, architects, environmentalist, urban planners and the government managers. - Decision makers. <p>Findings and results</p>
Table 3-6: Describes the linkage between the research objectives and the data collection methods		

3.9 Pilot Study

Conducting a pilot study is an effective approach that can save the researcher time and avoid any major failure in the data collection strategy. Creating survey questions is a long process that includes several adaptations and much development work. In order to gain the data intended, there should be tests that are usually done by the distribution of questionnaires to a sample of participants at least once (Oppenheim, 2000). The pilot study is conducted during the preparation of the survey's questions. The purpose of the pilot study is to ensure that questions are suitable and appropriate to collect the right data. A small sample of 20 questionnaires was sent out to the two sites 'Almegawba and 9th July'; random sampling was applied. Fourteen out of 20 questionnaires were filled out and returned, and the need for few changes was identified to improve the questions. Most of these changes are essential regarding how participants interpreted the questions. The main changes are:

- Dividing the age groups into four categories due to the local specific features that give meaningful indications to the data. As the married and not married participants give different views about the use of public space, thus, the age groups are adapted to correspond with the average age of married participants.
- Refining the questions to avoid confusion and to make it as simple as possible for the participants. Also, adding questions related to defining the types of activities in the public space and measuring the length of stay.

- Editing some multi-choice questions which were mostly answered with "nature" to be tighter and clearer; therefore, the answers became more specific and more accurate.
- Re-ordering some of the questions consecutively so that the participants can understand more easily the following question, once they have answered the former one.

Overall, the pilot study shows positive indications, it was noticed that the attitude of the participants was very positive and they were happy to take part in the research and provide answers to the questions with enough data. Moreover, many of the male respondents welcomed the participation of the other female members of their family which raises a positive sign that supports the representativeness of the research sample. Finally, the information obtained from the pilot study sample increased the awareness of the researcher regarding the process of categorising the participants in a way that allows maximum benefit from their participation to provide key valuable information. On the other hand, this sample has revealed a few limitations in the points mentioned above which were subsequently amended to avoid any lack in the data quality and to overcome any ambiguous question that might prove difficult for the respondents to answer.

3.10 Research Reliability and Validity

Qualitative reliability illustrates that the researcher's approach is consistent among other projects and investigators, while the qualitative validity refers to the accuracy of results and findings, which should be examined by the researcher by following a specific set of procedures (Gibbs, 2008). Validity is considered as one of the strengths of the research; the investigators, respondents and the readers should be convinced by the researcher, not only through the information provided but also by the accuracy of the data which can be seen from a different standpoint to that of the researcher (Creswell, 2013).

In order to examine and gauge the reliability of the research approach, Yin (2013) recommends that researchers should document the process of their case study from the first step to the end. He also encourages them to establish a clear programme for all the research stages so that other researchers could follow the same procedures. For this reason, a storage box was used to save all the research material and data collected in case they needed to be referred to at any time afterwards. Along the same line, Gibbs (2008) suggests some points to achieve a

reliable research study with a tight procedure. First, the researcher should ensure that there are no obvious mistakes in the raw data, and be aware that transferring data from questionnaires, records and other tools might have a negative effect on the accuracy compared with using original data. Therefore, data should be transferred immediately after recording. The researcher should make sure that all language is clear, otherwise, they need to seek clarification from the participant before ending the interview or during the questionnaire collection.

3.11 Summary

To conclude, this chapter has discussed how this type and nature of research will be more effective and logical through a qualitative case study. Nevertheless, the chapter has enumerated the most used methods in the field of urban design particularly when it is linked to social dimensions and the life quality. The research hypotheses focus on social and physical issues which therefore need real data which practically to be gathered through a representative and an appropriate number of participants who are relevant to the matter of the study.

The case study approach which is recommended and suggested by many scholars who conducted similar types of studies as mentioned early in the chapter has been selected as a research method. However, the size and the context of each different case may vary according to the purpose and the nature of each individual research. In this research, the mixed quantitative and qualitative case study is adapted to highlight more consistent and focused findings from two different sites which are the most dominant types of urban pattern in the residential complexes of the city of Misurata, Libya. The categories of the participants include a wide range of facts/evidence which enhances and enrich the collected data from different perspectives.

Furthermore, the chapter has illustrated the process of the data analysis which employs two effective software packages, SPSS and NVivo as supportive tools to encourage better understanding and more visual interpretation of the data and research results.

In addition, it has stated the list of the participants who took part in the in-depth interviews and pointed out the significant keys of the data collection strategy and the sampling technique. These factors are essential in terms of accuracy and the sample's representativeness. In this way, the research findings should be more

accurate as a result of processing the information through effective assessment tool to the research enquiries. Hence, it can suggest the right outcomes for future solutions and practical alternatives. The chapter also provided a list of the site visit criteria including times, locations, dates and the activities of the residents to support the other data collection tools in order to draw a clear and explicit framework for the future urban development of the case study and the entire country; and also to contribute by sharing the research findings with similar research cases in other countries that might face the same challenges.

Finally, this chapter has presented the main linking issues between the research objectives and the data collection methods to confirm the coherence and the explicitness of the research outcomes. It has also emphasised the appropriateness of the research findings to contribute to the establishment of the most revised and practical framework as a final scope that may become the basis of future development and provide a comprehensive guide for urban redevelopment.

CHAPTER FOUR: THE CASE STUDY

4.1 Exploring the Case Study City, Misurata, Libya

4.1.1 The Location of Libya

Libya is located in the middle of North Africa (Figure 4-1 and Figure 4-2), and has a population of around six million people, who live on approximately 10% of its landmass while 90% of the land is desert and/or semi-desert (Figure 4-3 and Figure 4-4), (Salhin, 2011). Its total surface area is about 1,760,000 km square with a coastline on the southern side of the Mediterranean Sea of 1,980 km (Kezeiri, 1983) and a density of 3.6 sq. km in 2016 (Economics, 2018). Almost 90% of the Libyan population lives on the coastline dispersed among many coastal cities such as Tripoli, the capital of Libya and second is Benghazi and Misurata which is the third biggest city in Libya.



Figures 4-1: Location of Libya in Africa, (Atlas, 2009) accessed 17/03/2016 12:37 pm



Figures 4-2: Location of Libya and the main cities, (Atlas, 2009) accessed 17/03/2016 12:37 pm

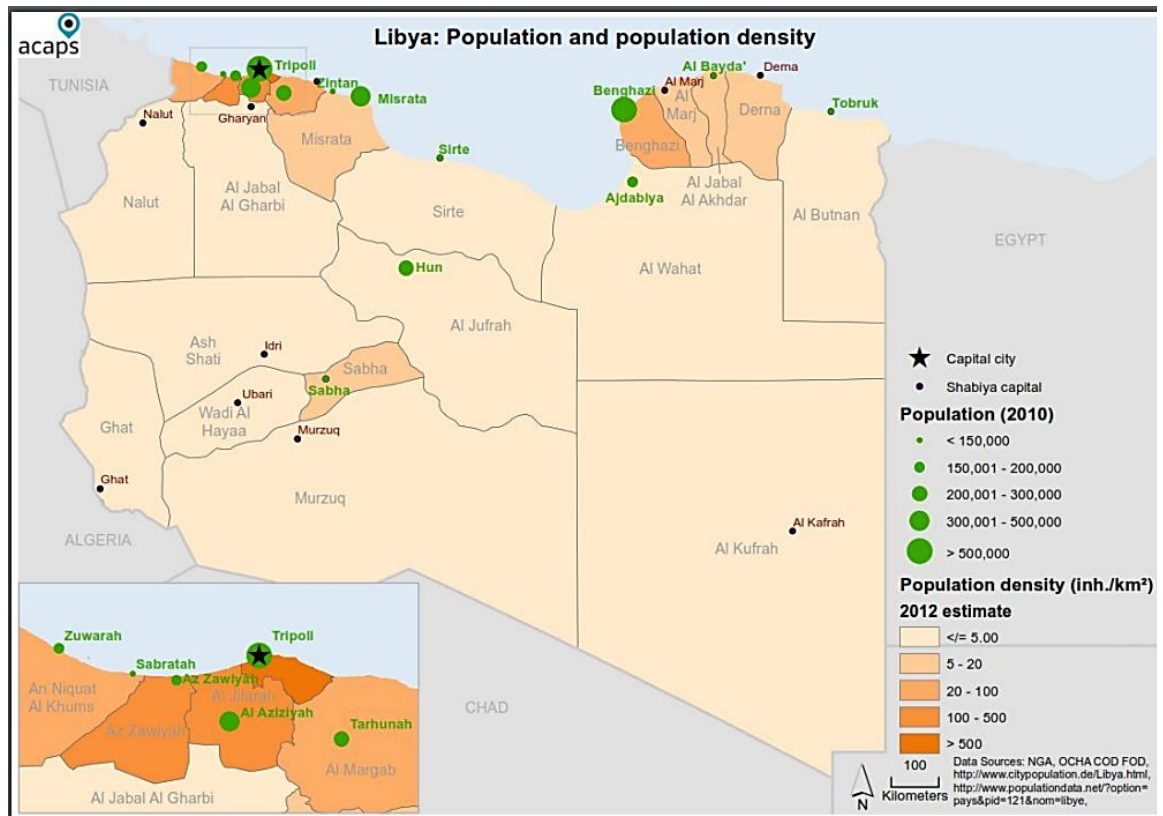


Figure 4-3: The distribution of Libyan population on the cities of the country and density, (Maps, 2015), accessed 25th/04/2017 at 10:36 am

4.1.2 The Location of Misurata

Misurata is the third largest city in Libya located about 200 km east of the capital city Tripoli see Figure 4-4. The region of Misurata has a population of around 530.000 people; the centre of this region is Misurata town which is home to approximately 314,305 people. The area of this town is about 2770 km square (Salhin, 2011) as per Figure 4-5 and Figure 4-6. This map was compiled in 2000 by the Polservice Consultant Company which shows the distribution of the population in Misurata city. This study included the latest official master plan which was prepared for the period of 20 years from 1980 to 2000. Since then, the master plan has not been updated, and this issue has lemmatised the improvement of the city urban plan. The delay of updating the master plan of the city has caused many problems such as the random extinction of residential areas, lack of public spaces within these areas, lack of central parks and open spaces, and insufficient transportation network around the city. Although the responsible authority has started a new plan for the housing projects and some other infrastructure development, there is no comprehensive strategy that can keep up with the needs

of the city's population growth (source: the interview AG an independent urban planner from the professional group and A Z, the head of MUP).



Figure 4-4: The location of Misurata city in Libya, (AAAS, 2017), accessed on 25/12/2017, 13:05 pm

The distribution of the population in Misurata town is indicated in the Polservice Consultant Company Report (2000) see Figure 4-5 and Figure 4-6. The Masterplan of Misurata town was designed on the basis of a ring roads system planned in 1980. The first three rings were already completed by 1980, with the design set to be followed until the year of 2000. Unfortunately, it seems that there is no comprehensive study about the urban planning of the city; however, there are several updates to the existing master plan. Instead, the attention was paid to short-term plans such as developing a small area for housing projects and some other similar individual projects.

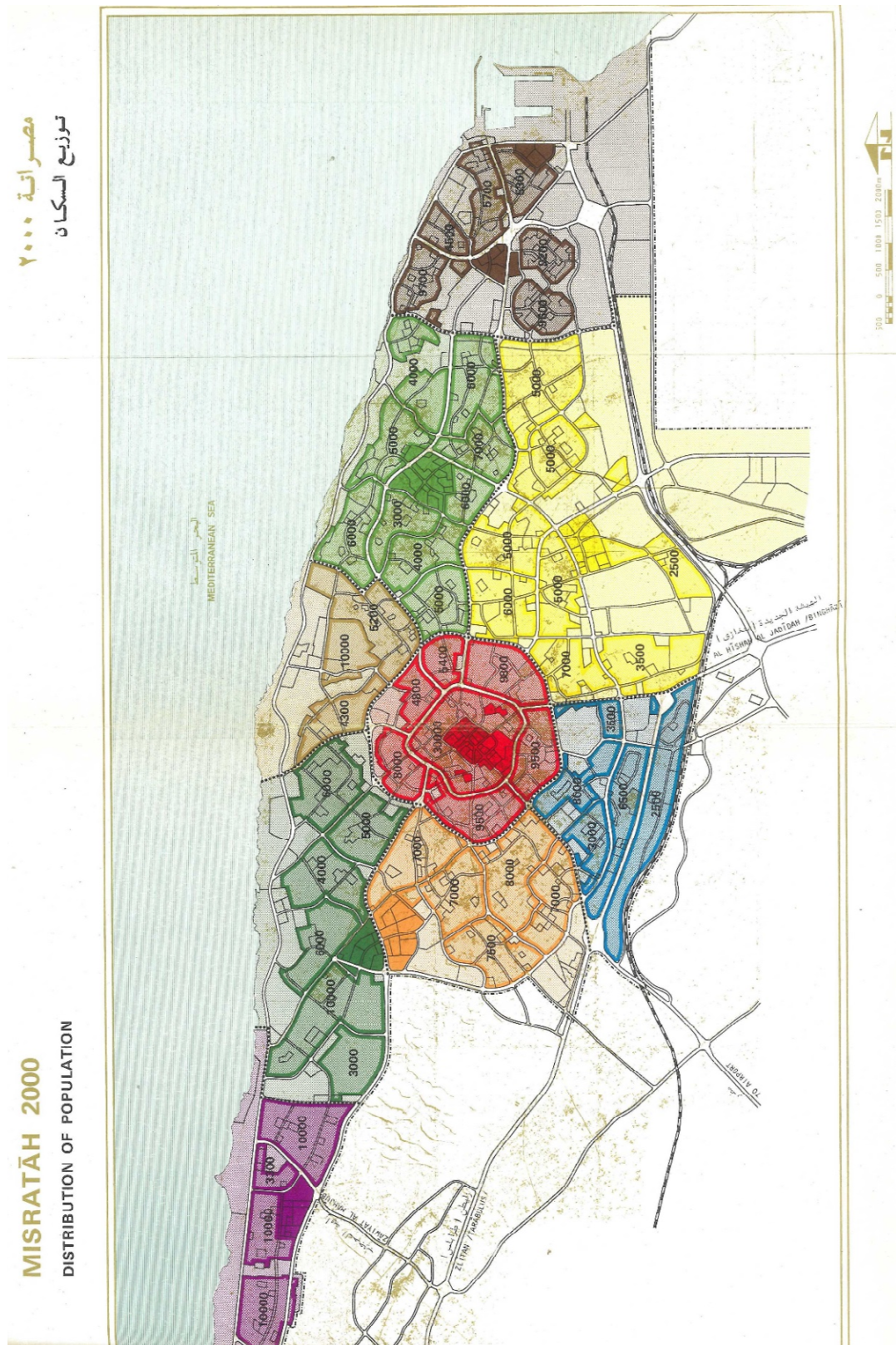


Figure 4-5: The distribution of the population around the town of Misurata.
Source: The Electronic Archive of Misurata City Council (2000)

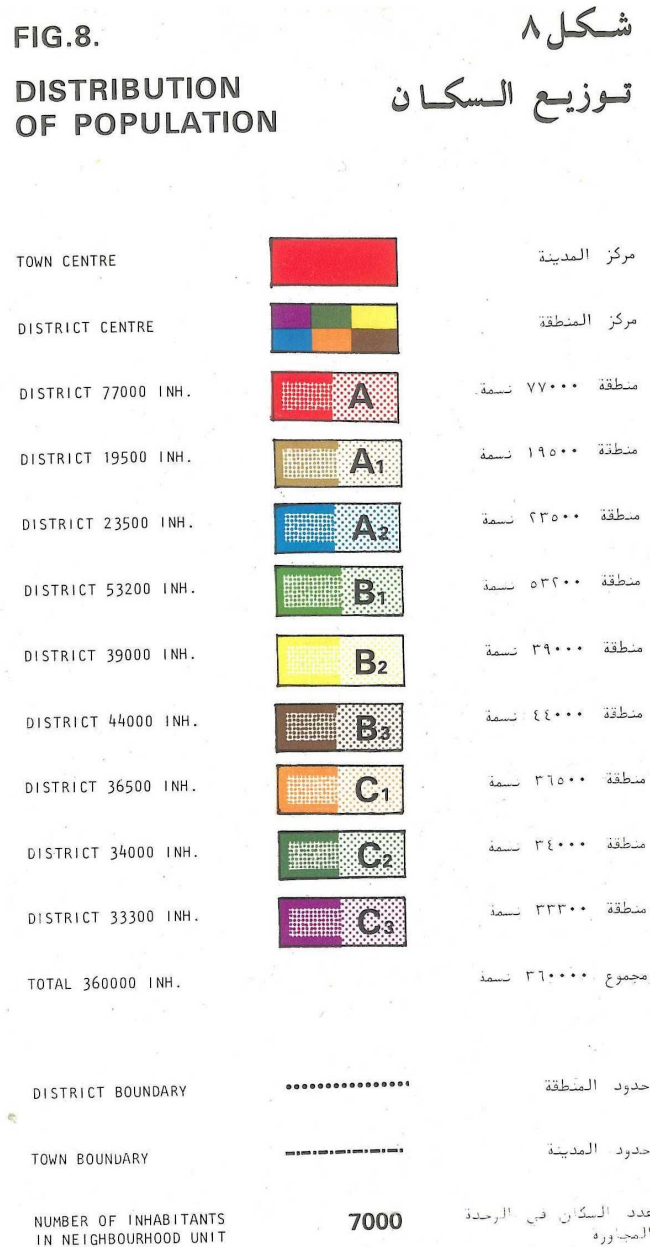


Figure 4- 6: The distribution of the population around the town of Misurata (map key). Source: The Electronic Archive of Misurata City Council (2000)

4.2 The Historical Development of Misurata Urban Form

4.2.1 Historical Background and Urban Development

In total, there are six distinct historical periods of Libya: Ancient Libya, the Roman era, the Islamic era, Turks 'Ottoman' rule, Italian rule, and the Modern era. It is believed that the historical roots of the city date back to the year 3000 AD, when the foundations of the Phoenicians "Tobakedz" were laid, where the current city of Misurata stands and was used a commercial station. Misurata is also known as 'That

Arremal' which means it contains many sand hills; and a belt of high sand dunes exists in the north (Blake, 1968).

The first Arab Republic, 'Tripolitania Republic,' was established in Misurata, after the battle of 'Alqurdabya' (Between the Libyans and the Italian occupation forces) in the early 1970s. Interest in exploring the archaeological monuments in Misurata area grew, particularly in the area of the 'Aljazira' where, at the beginning of the construction work, heavy bulldozers unearthed some valuable archaeological evidence, including the foundations of the site buildings and walls. Archaeologists revealed a number of Phoenician and Roman currencies and the foundations of brick confirmed the presence of wall fortification which is believed to belong to the ancient walls of Soubakedz.

In addition, in the grounds of the Palace Ahmed (an old palace in the eastern part of Misurata, near the main seaport of the city), several archaeological sites were also discovered, revealing currencies, pottery and tombs. The excavations also revealed the existence of Roman baths beneath the lighthouse. It is believed that this lighthouse date back to the old harbour station 'Kayvalaa Bromentorium'. Activity in the 'Dafniya' area and 'Zawyet Elmahjob' revealed a number of graves underground in an area which contained its own funeral furniture based on the Punic and Roman styles (Despois, 1945).

Misurata was founded by the Romans in the seventh century. It was well-known for its important strategically located near the seaport. From an urban view, the first establishment of the town settlements was in the Turks colonial period in 1860 when a few administration buildings were constructed in its centre (Figure 4-7). It can be seen clearly that there are two main areas which are the most popular for living in: a) the city centre where most of the facilities, markets and public central services are located, and b) the area of Palace Ahmed which is near the seaport of Misurata see Figure 4-12.

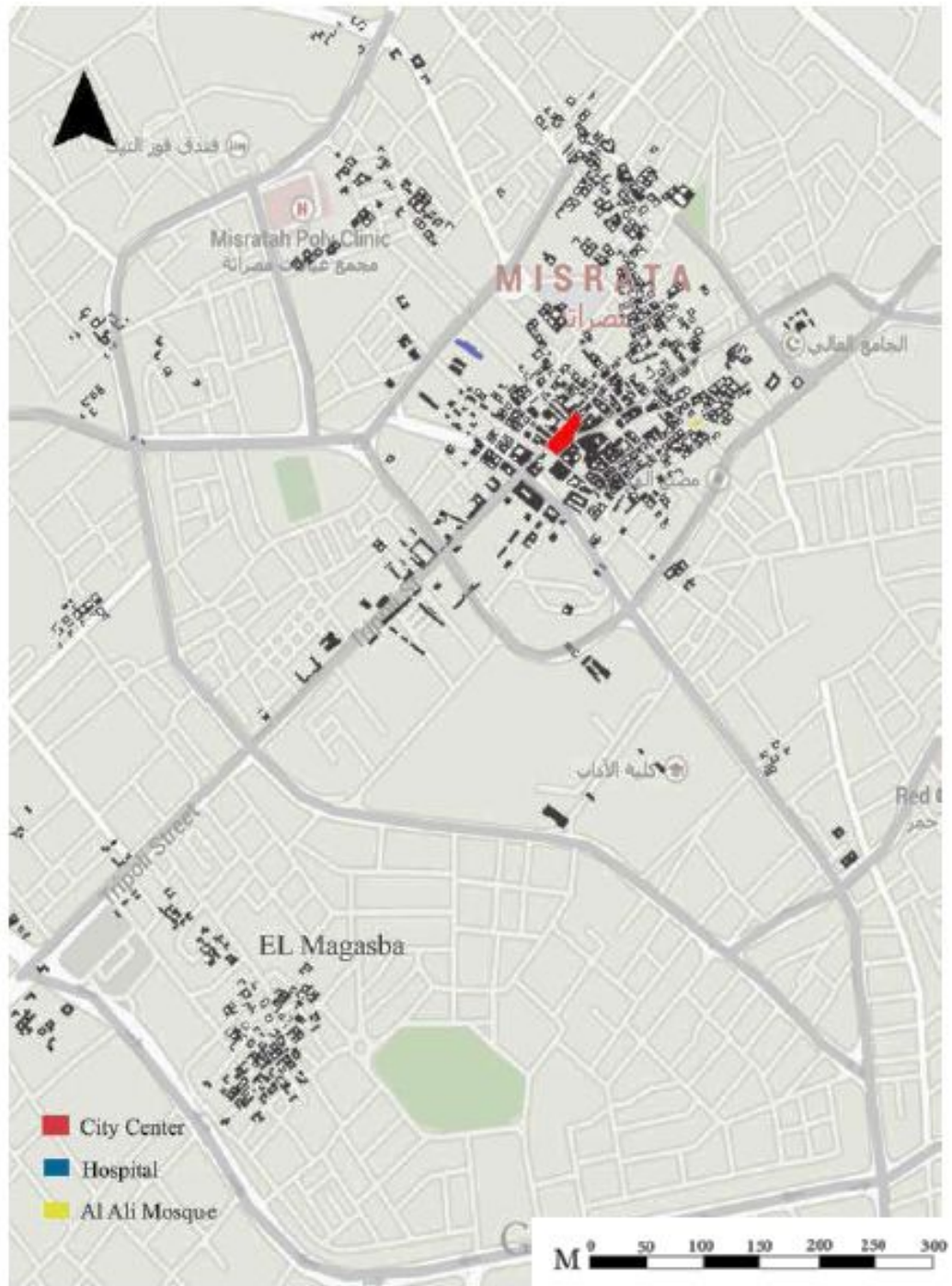


Figure 4-7: The form of the city in 1860 during the Turks colonial, (Mattingly, 1994) cited in (Elmagalfta, 2014, p. 58)

The next period of the city's development was from 1922 to 1943, during the Italian occupation. During this period, the Italians developed the city plan as they built several residential settlements and military encampments in several parts of the city (Figure 4-8). At the same time, the local inhabitants were building small groups of houses in a unique compact form which was influenced by the local environment (Figure 4-9).

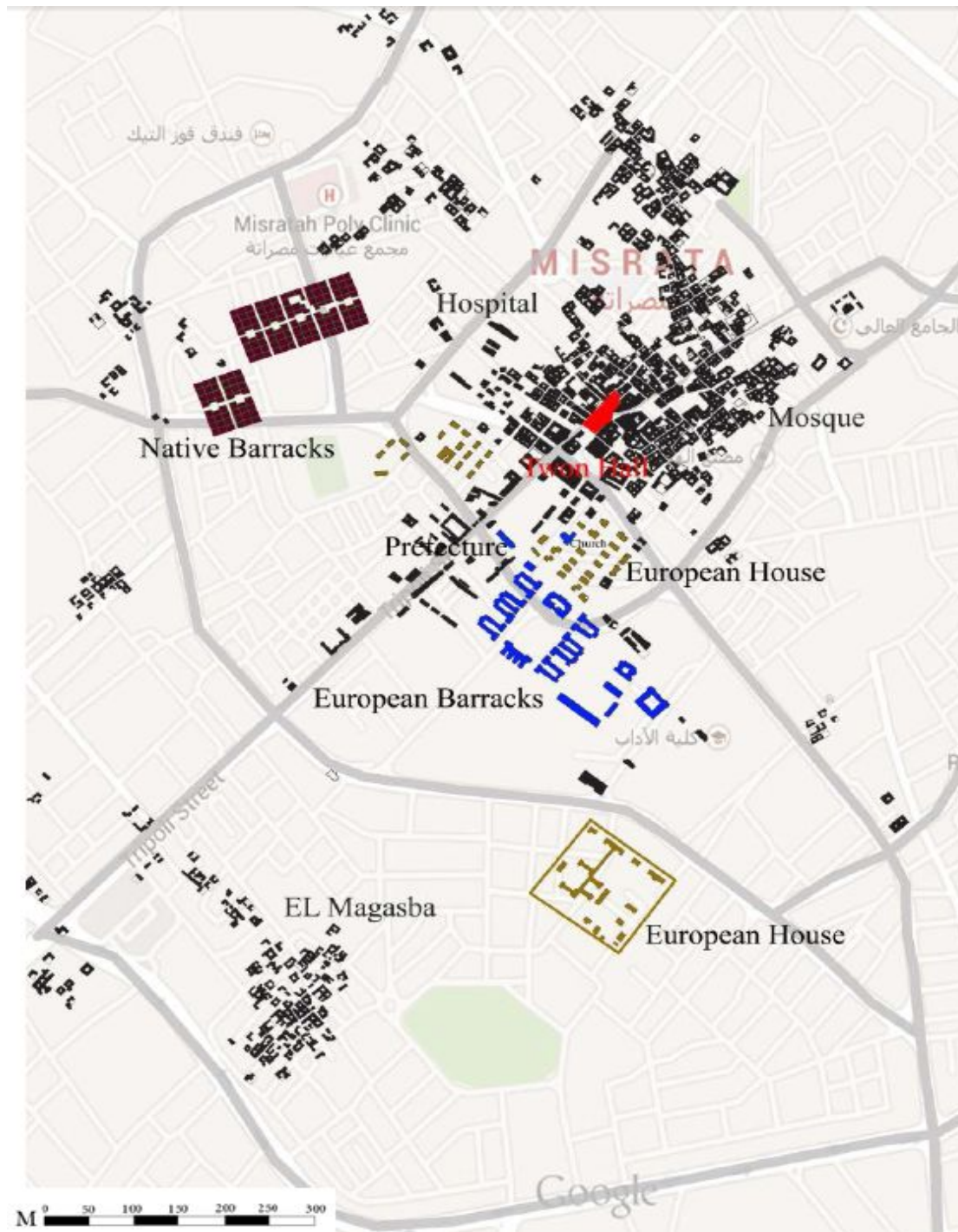


Figure 4-8: The development of the city plan during the Italian colonial in 1943, (Mattingly, 1994) cited in (Elmagalfta, 2014, p. 59)

The next period has two major changes which both had a significant impact on the Libyan urban development. The first one was a political change which followed independence in 1951 and the second was an economic revelation regarding the discovery of oil in 1960-1970 (Kezeiri, 1983). These two changes are considered as a turning point in the urban development in the whole country; as a result, great

urban expansion started to take place in most of the main cities such as Tripoli, Benghazi and Misurata.

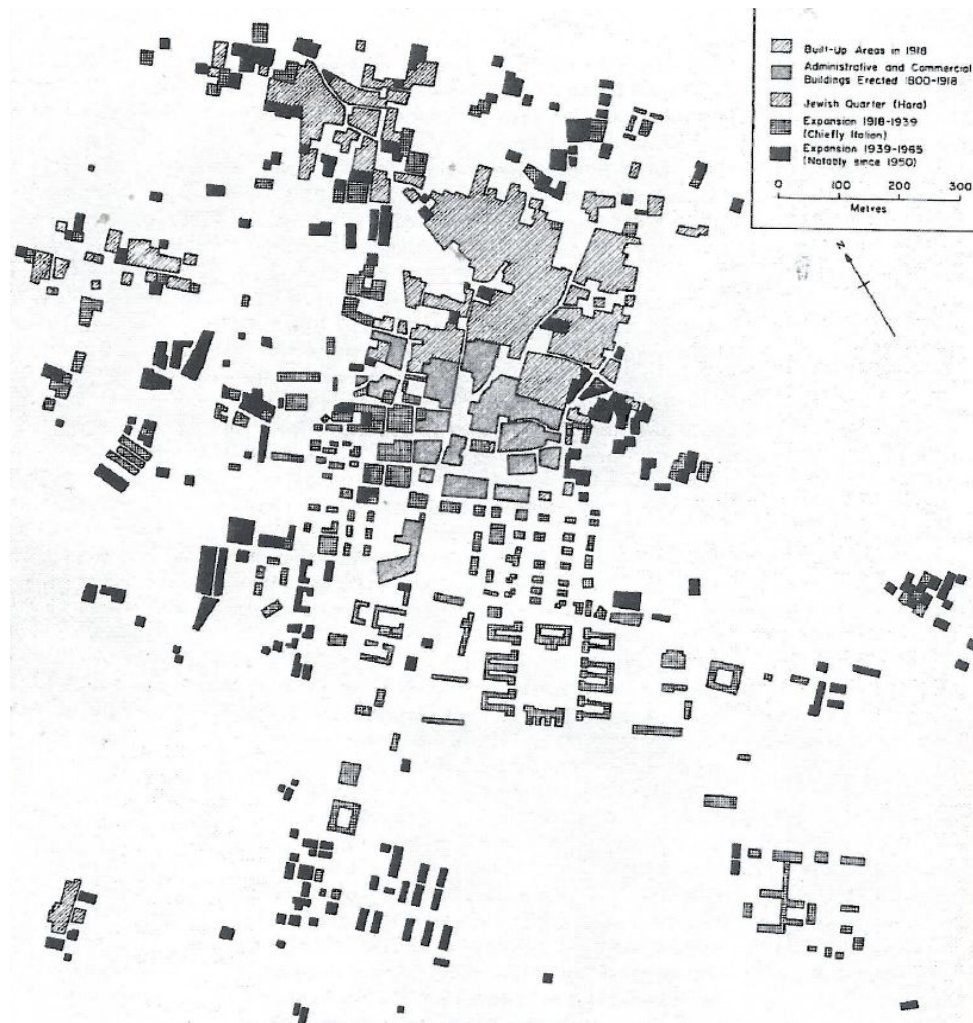


Figure 4-9: The expansion of Misurata plan in 1918 – 1966, (Blake, 1968, p. 12)

Since 1970, important attempts at development began to appear in the main region by the government to establish a comprehensive master plan for the city of Misurata. These attempts become a mature programme by 1980. In 1980 the first master plan was produced by a specialist institution for the three main regions: the Northwest, the Northeast, and the South. This was conducted by the Polish institution of Polservice Consultant Company in collaboration with the local regional council of each region. Figure 4-10 shows the first version of the city evaluation master plan. The street pattern in Misurata city was proposed by this institution according to the current situation at that time which appears in Figure 4-11. It takes the round 'rings' shape which contains four main ring roads around the city centre. Now, these four ring roads are complete and the updating of the master

plan has stopped since 2000 which was the due date for the third generation of the city's urban plan.

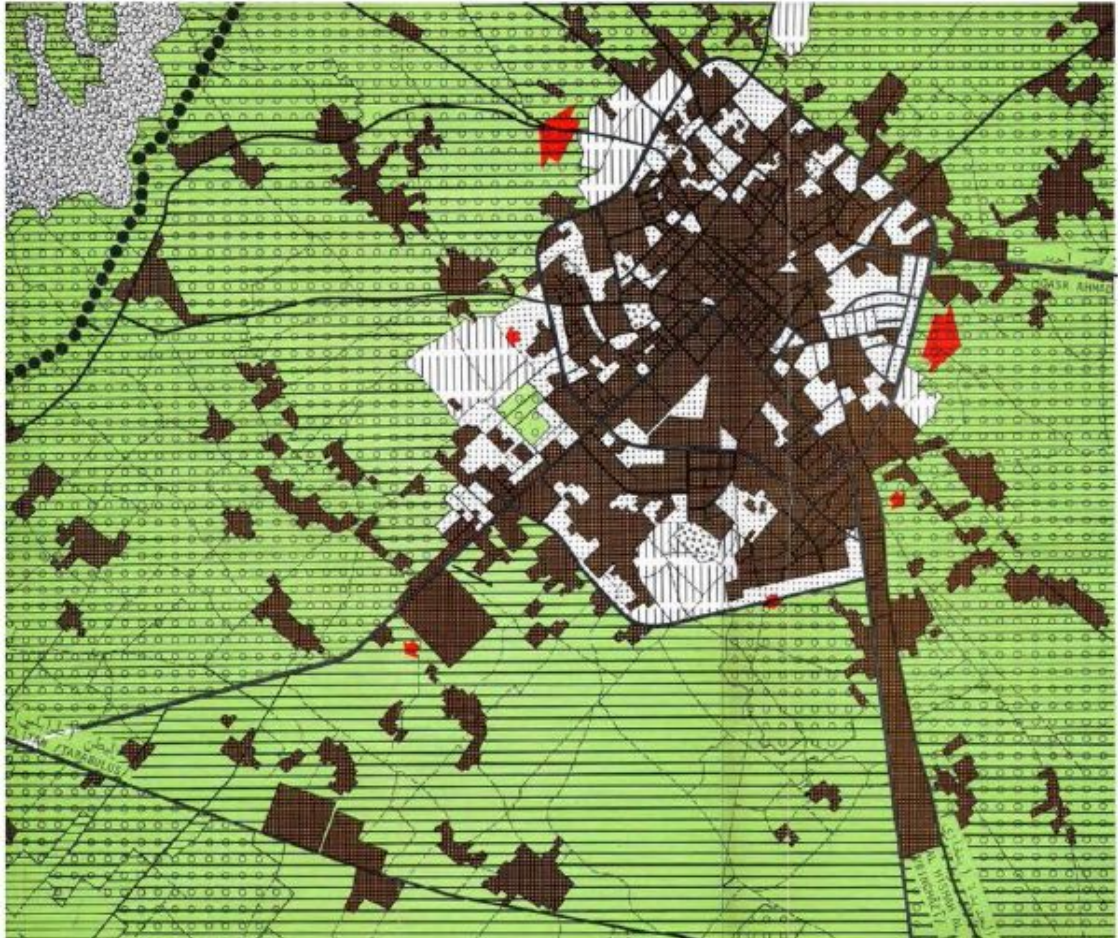


Figure 4-10: The initial form of evaluation of Misurata city plan in 1980, source the Electronic Archive of Misurata City Council (2000, p. 9 and 10)

MISRATĀH

مصراته

FIG. 2

شكل ٢

EVALUATION OF NATURAL ENVIRONMENT

تقييم البيئة الطبيعية

URBANIZED AREA		مناطق حضرية
INTENSIVE CULTIVATION		زراعة مكثفة
CULTIVATION		مناطق زراعية
ORCHARD		بساتين
SCATTERED TREES		مناطق اشجار متناثرة
FORESTS AND DENSE AFFORESTATION AREAS		غابات ومناطق تشجير كثيفة
CEMETERY		مقبرة
VACANT LAND		مناطق خالية
ROAD		طريق
UNPAVED ROAD		طريق غير معبد
RECOMMENDED BOUNDARY OF URBAN DEVELOPMENT		حدود اتجاهات التطوير الحضرى
PREFERRED RECREATION AND REST AREAS		مناطق مفضلة للراحة والترفيه
INFILL DEVELOPMENT		ملء الفراغات
GENERAL DIRECTION OF DEVELOPMENT		الاتجاهات العامة للتنمية

Figure 4-11: The initial form of evaluation of Misurata city plan in 1980, the Electronic Archive of Misurata City Council (2000, p. 9 and 10)



Figure 4-12: The street pattern of Misurata city, (Elmagalfta, 2014, p. 67), and the location of the sea-port in Misurata

4.2.2 Misurata Land Use

In an urban context, Misurata city is one of the scalable growths of urban cities due to its large tracts of land. In addition to that, its flat land and the lack of barriers are limiting its growth. However, it is considered the most beautiful of Libyan cities in how it is organised and planned (Elmagalfta, 2014). In all of the past and current periods, Misurata has been identified as the commercial capital of Libya to distinguish its commercial nature that has existed since ancient times.

The city has fertile lands and inherent economic importance. It has the only iron and steel plant in Libya, a huge compound works employing more than 6000 people. Moreover, the city has seen a huge upswing since the 1970s because of its transformation into a magnet for residents of the area. Figures 4-13 and Figure 4-14 show the last updated masterplan of the city in the 1980s when first mapping work was started by a foreign company explained in the figures. Since that proposal work, there was no valuable comprehensive update for the city plan which has made the development struggling and helps the disorder that recent plan is facing such as random expanding and lack of infrastructure.

Figure 4-15 and Figure 4-16 show the last official update by local institutions (Elmagalfta, 2014) of the land use plan of Misurata in 2013; It can be seen that the

residential area occupies around 60% of the land use. The industrial activities are localised in the eastern part of the city. The green colour represents the open and green spaces, which is clearly below the required percentage of 25%-30% in the residential areas.

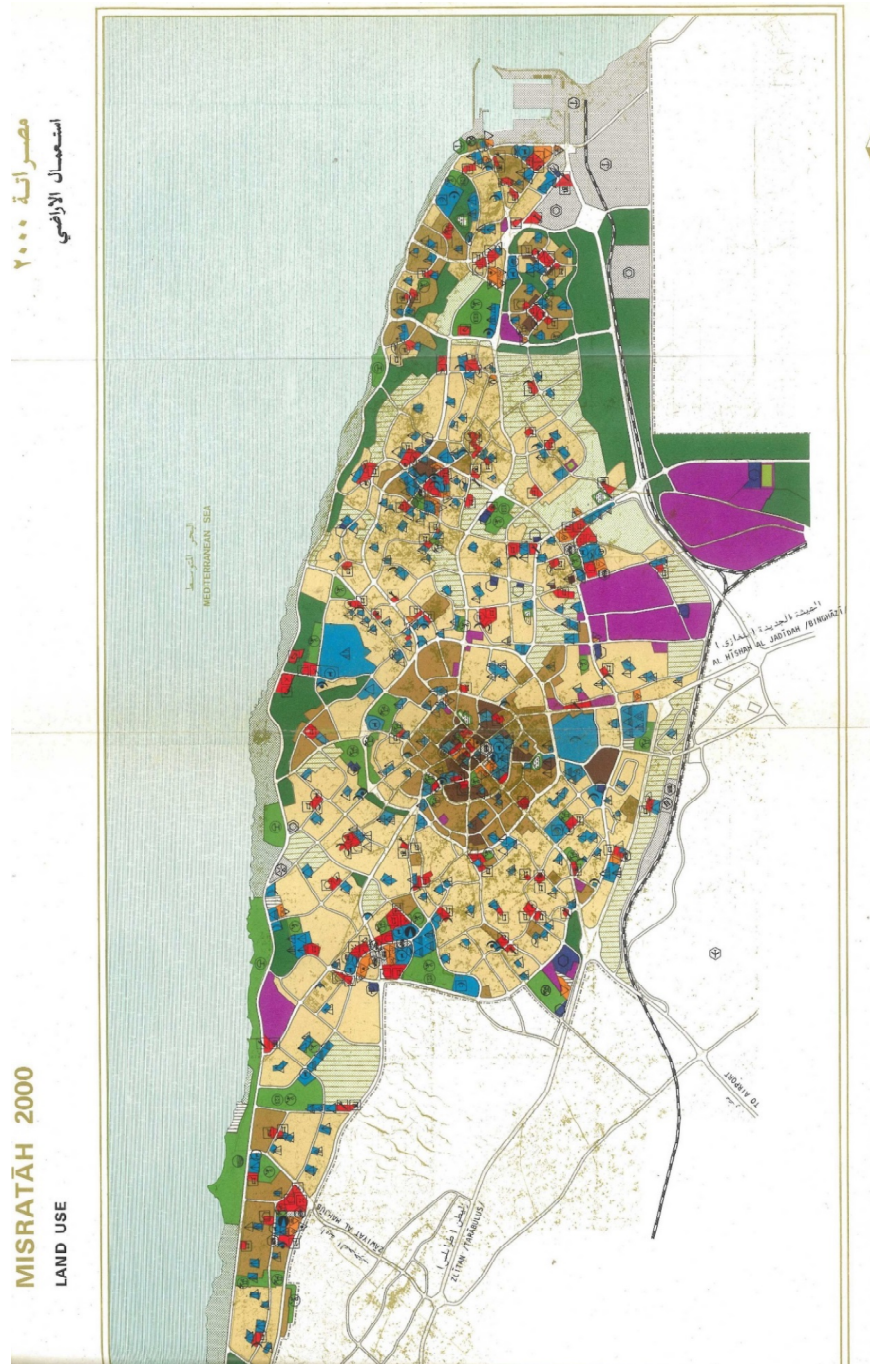


Figure 4-13: The official proposal master plan of Misurata city in 2000, the MUP archive

RESIDENTIAL		مناطق سكنية	GREEN AREA, RECREATION, SPORT	
LOW DENSITY		كثافة منخفضة	PARK, GARDEN	
MEDIUM DENSITY		كثافة متوسطة	RECREATION CENTRE	
HIGH DENSITY		كثافة عالية	PLAYING FIELD	
			STADIUM	
			BEACH	
COMMERCE BUSINESS		للتجارة والاعمال	WATER FRONT	
MARKET		سوق	FOREST AND ISOLATION BELT	
ANIMAL MARKET		سوق حيوانات	INDUSTRY	
SHOPS, STORES		حوانيت ومخازن	UTILITIES	
PERSONAL SERVICES		خدمات شخصية	WATER SUPPLY FACILITY	
HOTEL		فندق	SEWERAGE FACILITY	
RESTAURANT		مطعم	ELECTRIC POWER FACILITY	
BANK		مصرف	GAS SUPPLY FACILITY	
FILLING STATION		مخطة وقود	TRANSPORT, COMMUNICATION	
CAR SERVICE		خدمات للسيارات	EXPRESSWAY	TE
OTHER		اخرى	MAIN COLLECTOR ROAD	TC 1
			COLLECTOR ROAD	TC 2
PUBLIC BUILDINGS		مباني عامة	FEEDER ROAD	TF
MUNICIPALITY		بلدية	RAILWAY	++++
COURT		محكمة	BUS STATION	
POLICE STATION		مركز شرطة	PORT	
PRISON		سجن	RAILWAY STATION	
POST OFFICE		مكتب بريد	PARKING LOT	
FIRE BRIGADE		مطافيء	OTHER	
SLAUGHTER HOUSE		سلاخنة	TRANSMITTING TOWER	
OTHER		اخرى	AGRICULTURE	
EDUCATION		مباني تعليمية	SERVICE FOR AGRICULTURE	
PRIMARY SCHOOL		مدرسة ابتدائية	AGRICULTURE RESIDENTIAL	
PREPARATORY SCHOOL		مدرسة اعدادية	SPECIAL AREA	
SECONDARY SCHOOL		مدرسة ثانوية	BOUNDARY OF MASTER PLAN	
TECHNICAL OR VOCATIONAL SCHOOL		مدرسة فنية او مهنية		
BOARDING SCHOOL		مدرسة داخلية		
BELOW UNIVERSITY LEVEL INSTITUTE		معهد اقل من جامعي		
OTHER		اخرى		
HEALTH		مباني صحية		
PRIMARY HEALTH CARE UNIT		وحدة صحية اولية		
PRIMARY HEALTH CARE CENTRE		مركز صحي اولي		
POLICLINIC		عيادة مجمعة		
GENERAL HOSPITAL		مستشفى عام		
FIRST AID STATION		محطة اسعاف		
OTHER		اخرى		
RELIGION, CULTURE		مباني دينية وثقافية		
MOSQUE		مسجد		
MUSEUM		متحف		
CULTURE AND YOUTH CENTRE		مركز ثقافي وشباب		
CINEMA		دار عرض		
ANTIQUITY		آثار		
ASSEMBLY SQUARE		ساحة تجمعات		
CEMETERY		مقبرة		

Figure 4-14: The map key of the official proposal for the master plan of Misurata city in 2000, the MUP archive

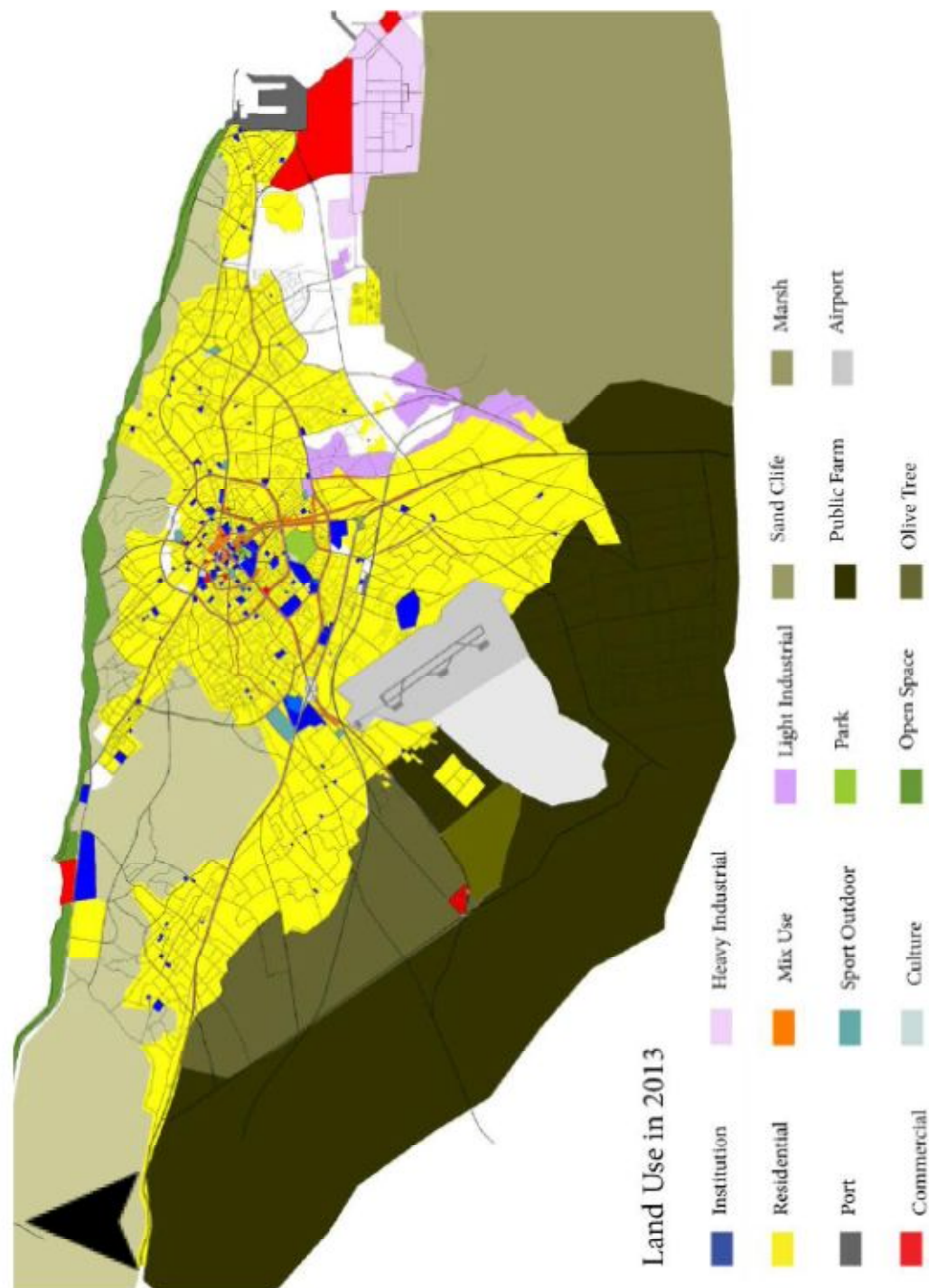


Figure 4-15: Misurata land-use map last updated in 2013, source, (Elmagalfta, 2014, p. 69)

In terms of the types, importance, usage and the other main elements of public spaces, Misurata is similar to any city elsewhere in the world. In other words, in each region, there are certain activities and particular uses of public space, but in

each part of the world, there are specific characteristics which indicate the local value and the uniqueness of the place. In Misurata context, it is crucial to point out that public space has several functions in many dimensions such as social, environmental and aesthetic.

As indicated above, Misurata is a coastal city and the common weather conditions during the year are more supportable to outdoor rather than indoor activities due to the climate region of the city which is 'moderate climate' (Chapter 5). Therefore, the research mainly focuses on the outdoor spaces in which people desire to spend most of their time with regard to leisure and social activities.

By the end of the nineteenth century, the government of Libya recognised the unbalanced distribution of the city population; thus it started to create plans to control the unregulated spread of houses and small communities. Later on, the government followed the policy that was based on building whole communities to attract the citizens to certain areas in the rural parts of the city and away from the city centre. The following Figure 4-15 illustrates the land use of the central urban area of Misurata. It can be seen that the residential area is mostly located in the city centre from the seaside in the North and also from the East and West sides. Therefore, the new housing projects are located out of Ring road number 3 which as shown in the Figure 4-16.

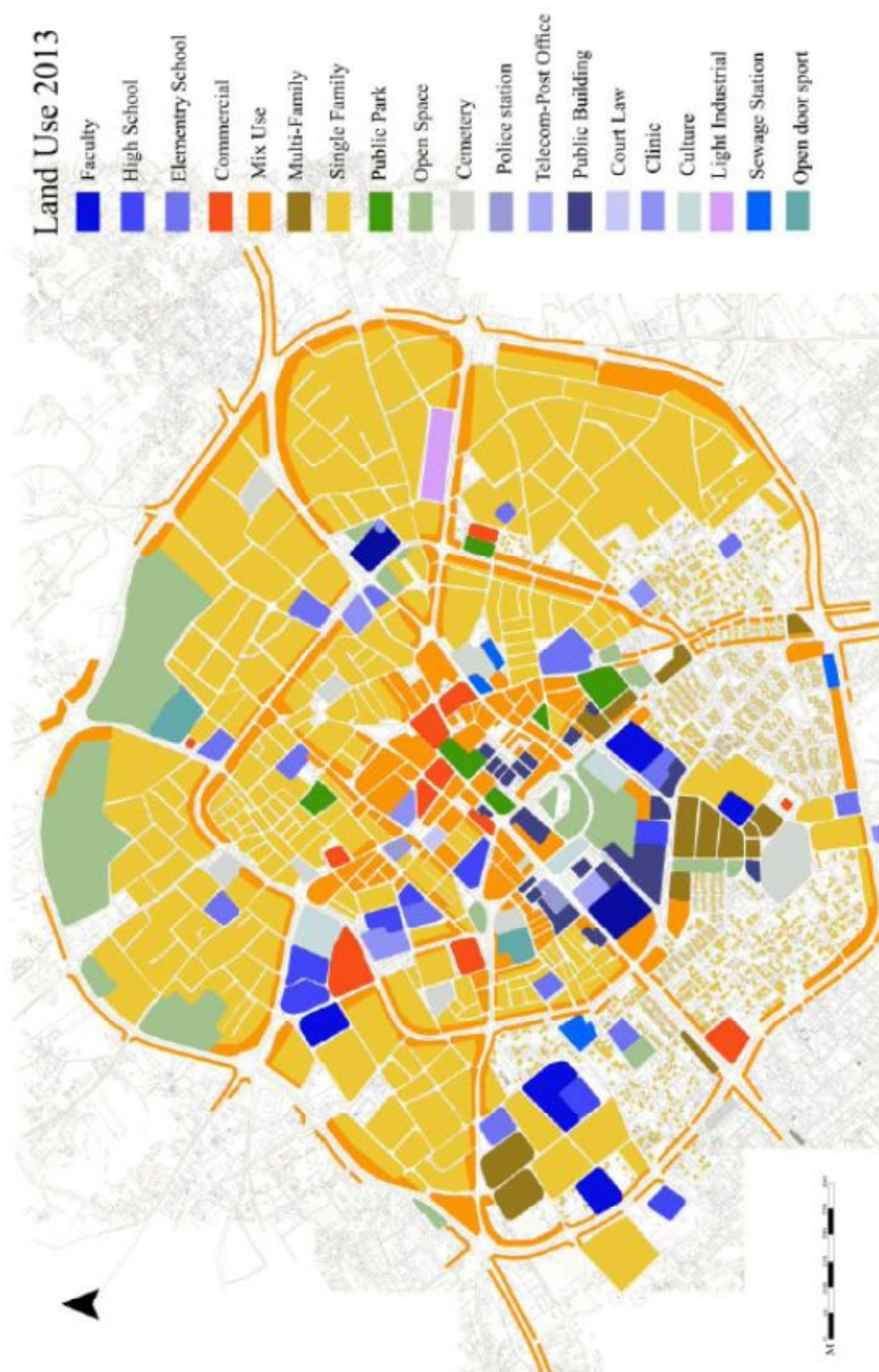


Figure 4-16: Last update of the city land use in 2013, (Elmagalfta, 2014, p. 70)

4.3 Urban Characteristics of the Residential Area

This section focuses on the development stages of the city urban plan from the 1950s to the present form. Due to the lack of availability of documents and sources, in this case, some examples from similar cities are presented for reference. Figure 4-17 show the typical types of urban form in Libya through the urban history of the city.

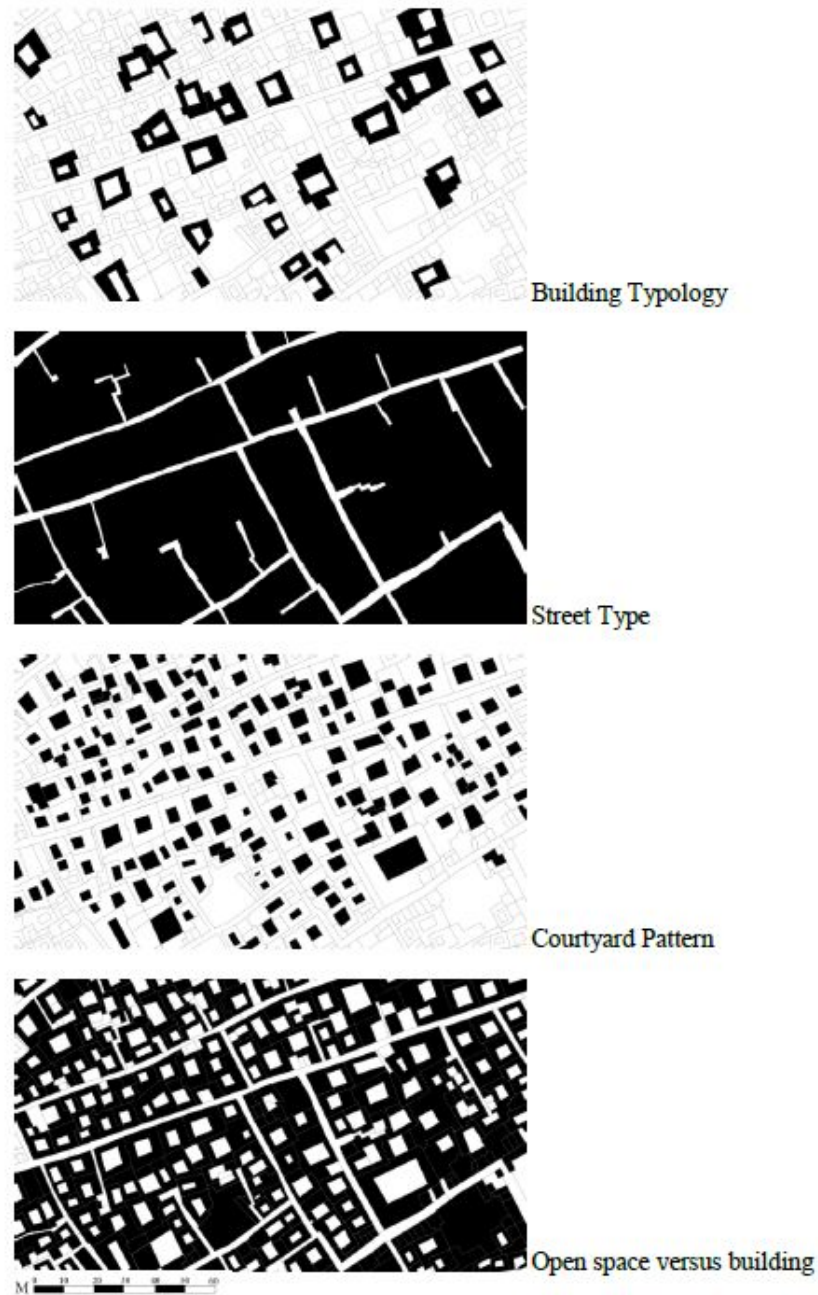


Figure 4-17: The analytics of an old traditional neighbourhood in the coastal cities, Tripoli, Libya, (Elmagalfta, 2014, p. 23)

In Misurata particularly, old residential settlements often developed as very compact forms to respond to two main requirements; environmental and cultural – *Environmentally*, to allow more shade, and to protect against the strong wind flow through the streets and *Culturally*, to provide more privacy, safety and security and for easy accessibility (Figure 4-18).

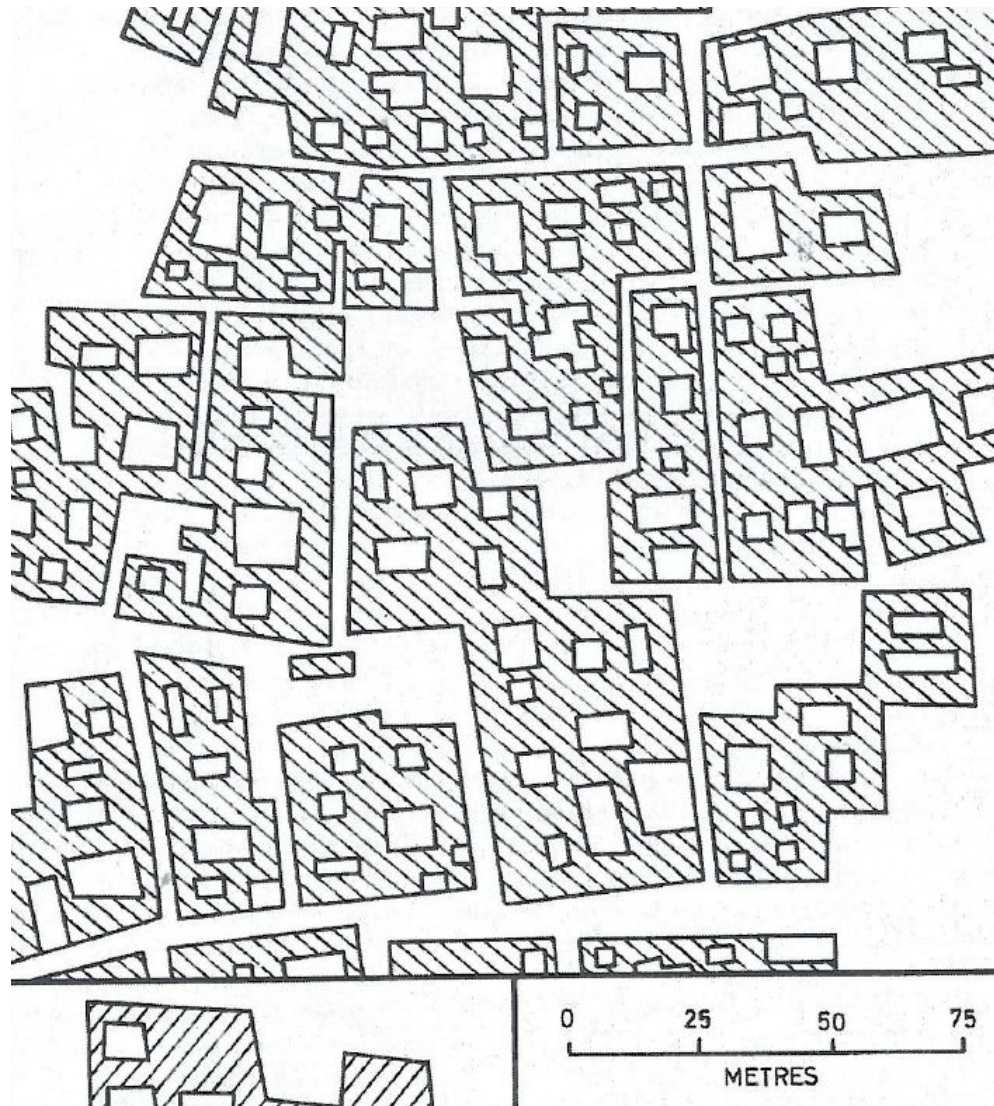


Figure 4-18: Misurata morphology, the old residential area pattern (part of Ra's Ali Village), (Blake, 1968, p. 14)

As the economics of the country has increased and the new master plan was put into place, the government started to develop new areas and build new houses, which has resulted in a new urban form of the city (Figure 4-19). This is the present form of the urban form of Misurata city which is a mix of GN and TN. Open spaces, public parks, public schools and new road networks have been created since 1990 up to now.



Figure 4-19: The recent form of the urban morphology of Misurata city, (Elmagalfta, 2014, p. 77)

4.4 Cultural Characteristics of Misurata

This section illustrates the most significant differences between the local culture of Libyan cities in terms of social-cultural background and the features of social communication. It is important to understand the perceptions of the local residents towards the people's actions in daily practice among the residents. This, in fact, interprets the reasons for a specific action and other people's reactions against each other and all of that, and therefore, reflects on the relationship between the residents of the community and the entire city. From the initial knowledge of architecture and urban design, it is essential to know who you are designing for. This makes the investigation into the people's lives and local behaviours very important if the appropriate design that can fulfil the residents' needs and match their social desire is to be created and the level of design quality is to satisfy them.

The local community as elsewhere has its own uniqueness in terms of social value. For instance, communication between the residents in Libya is a 'must', culturally. If someone does not contact neighbours on a daily basis, this can be considered as bad behaviour and, therefore, will negatively affect the relationship with the other residents of the neighbourhood. In more detail, if it happens that to see an unusual number of cars in front of your neighbour's home, you should knock on their door and find out what is going on. This manner/action might be perceived in a different

way in other cultures; it might be considered as a disturbance or inquisitive action. In another example, participant K S said, 'in our community if you don't get involved socially with your neighbour that is a negative behaviour which means you are arrogant and seeing yourself above others'. From this statement, it can be understood that the local community appreciates the social communication and this is considered one of the essential elements of the local practices.

4.5 Site Descriptions

4.5.1 Location of the Case Study

In the city of Misurata likewise the most of Libyan cities, the city neighbourhoods are either TN or GN. This research focuses on both types of the neighbourhood through an in-depth analysis via several methods including comparison approaches. However, Type 2 is expected to become more popular due to the policy of the government. In order to gain an accurate and reliable qualitative data that can support the study to obtain the aim of the research, two neighbourhoods will be involved in the case study. The selection of these samples is based on similarity of both Types 1 and 2. Therefore, these differences between the two types of neighbourhood enable more details that support the outcome of the research.

4.5.2 Selected Case Study

Figure 4-20 shows the whole city of Misurata and the two case study sites are highlighted on this map in yellow. The red spot is the location of the main city centre of Misurata.

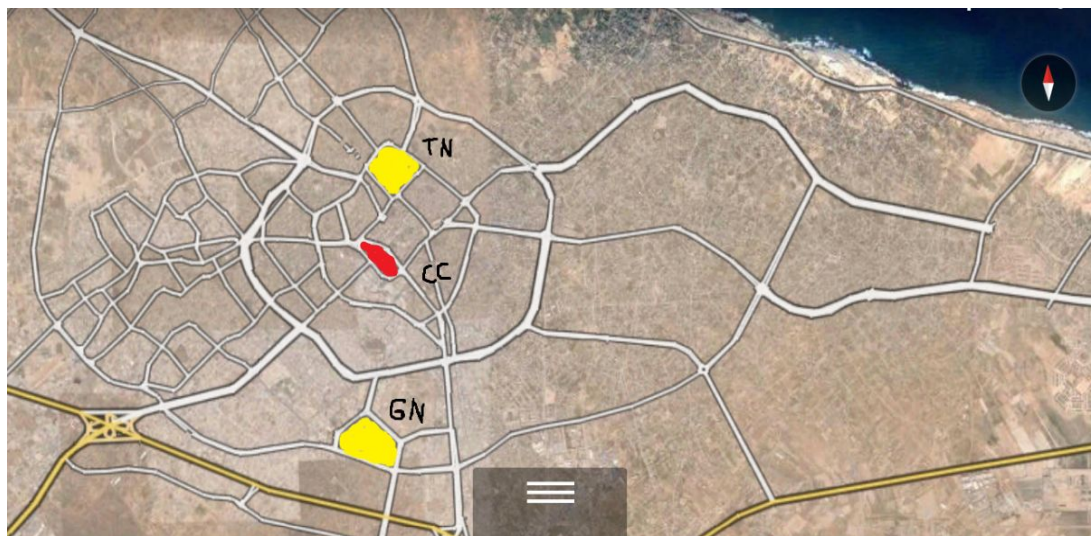


Figure 4-20: Location of the case study sites: a): Almegawba TN, b): 9th July GN, c): city centre CC. Source: Google Earth map

The case study of this research focuses on two different sites: a) Site 1 named '9th July' as one of the important dates in local history – this is a Governmental Neighbourhood (GN). b) Site 2 named 'Almegawba', which is a Traditional Neighbourhood TN in Misurata, Libya as per Figures (4-20, 4-21, 4-22 and 4-23).



Figures 4-21: The layout of the GN 9th July. Source: Google Earth map

The main purpose of selecting two different types of the neighbourhood is to identify the research enquiry in each individual case, and also to investigate the differences, the advantages and positive social features that are present in both forms which may be transferred to future projects. The evaluation and investigation will eventually provide clear evidence of the extent of successfulness of these neighbourhoods in terms of the public space usage and the local social interaction. As can be seen in Figure 4-21, the site includes a number of different house forms (multi-storey buildings which contain a number of flats and two-storey houses in detached and semi-detached forms). The number of house units in this site is about 784, occupied by families from different background, cities and from other parts of the city. The main area in the centre of the neighbourhood includes a plan for a primary school and some services offices such as a post office and a Masjid. The Masjid is the main large hall for worshipping which used by Muslims.

Figure 4-22 is the plan of the site before the construction: it indicates that the central area should have a sports facility, car park and other similar facilities. In the existing plan in Figure 4-21, it can be seen that there is a lack of these facilities; this is one of the aspects of the poor quality that the public space of the neighbourhood is facing, and the follow up from the responsible authorities is very poor.



Figures 4-22: The official design of the 9th July GN, HIB archive

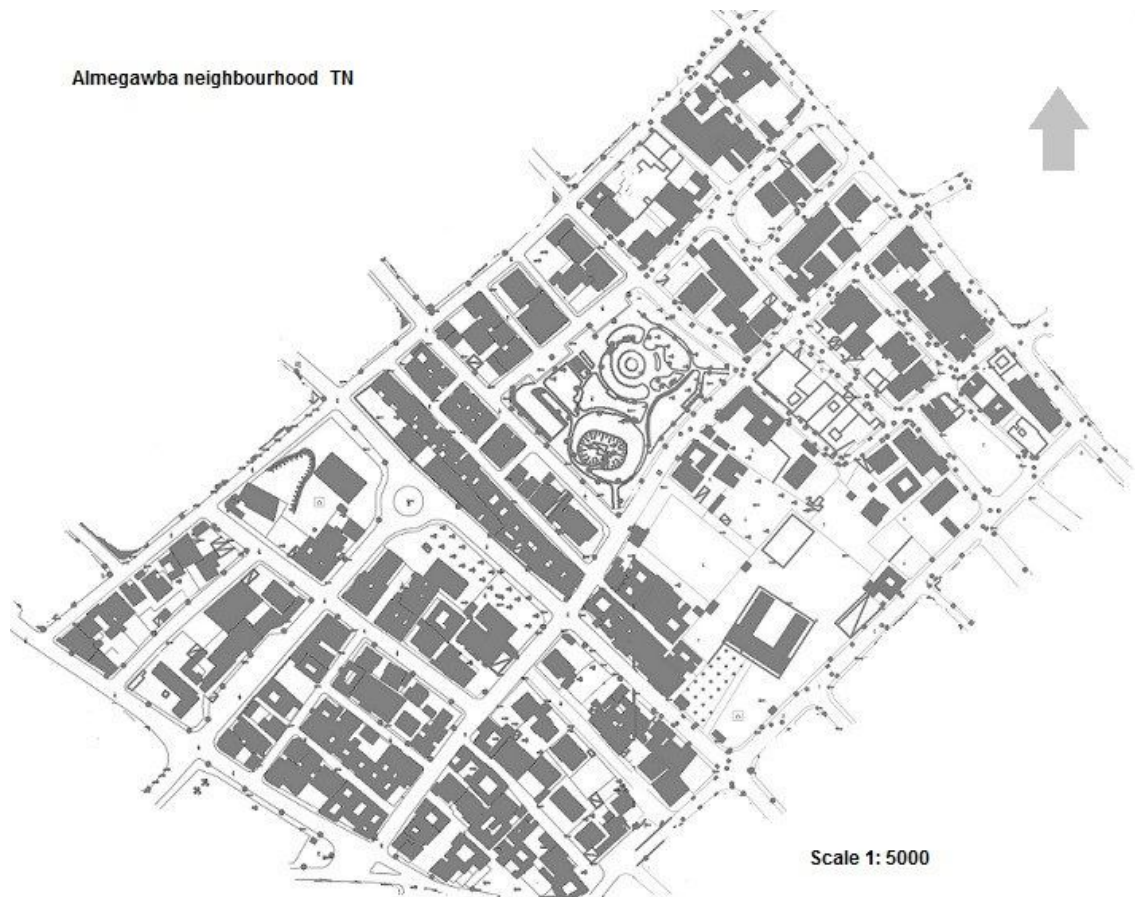
Regarding this issue, participant H S from HIB highlighted that: 'it is our responsibility to hand out the housing and the infrastructure works but the open spaces and landscaping works; that is another organisation's tasks'. Hence, the management system and the connection between the firms and the local authorities should have been more organised and linked otherwise this disorder is going to continue. This type of management disorder can be often observed in the governmental neighbourhood more than in the private sector projects. In the private sector the site is usually smaller and contains fewer houses; most importantly, the site is often located inside the planning area which has the comprehensive plan that shows the land use of the surrounding area. In the case of public housing, the land is usually outside the planned area of the city so the zoning of the land use is still not determined, which can cause conflict in categorising the land in and around the site.

Figure 4-23 show the existing situation of the Almegawba Neighbourhood which is a TN. It is clear that the housing distributed spontaneously over time and space between the houses is wider and larger in most of the neighbourhood parts. The roads and open spaces are planned by the government, and the residents use their land to build private residential houses based on availability. It can be seen that there is a central park in the middle of the neighbourhood; this space is designated to include facilities such as sports pitches, seats, water fountain, children's playground and other similar facilities. The space measures around 10,000 m² which meet the standards of the MUP. The critical issue in this site as explained by many of the interviewees is the maintenance and the operation of this park. The participants stated that the government has not provided any maintenance or facilities for more than ten years, which means that the quality of this space is very low at this time.



Figures 4-23: The Google Earth layout of the TN Almegawba, source, Misurata, Libya, Google Earth accessed on 26/06/2017 15:32 pm

Figure 4-24 shows the same site of Almegawba in 1990 (source: The city council report) when one of the companies made a complete drawing of the existing plan of the Misurata planned area. It can be that there is not much difference compared with the Google plan shown in Figure 4-23 as the neighbourhood is already occupied and the spaces are determined by the city council authorities.



Figures 4-24: The site of TN Almegawba layout in scale 1:5000, MUP archive

The selection of these sites is based on the need to find similarities and differences in some common characteristics which can fairly represent the data collected from both sites as presented in section 3.6 in Chapter 3.

4.6 Understanding the Importance of the Public Space

Public space including open and green areas has been increasingly acknowledged as a fundamental component by all sectors, not only the urban development but also political, economic, education and even psychological sectors (Woolley, 2006). According to hundreds of reports and studies, open spaces enhance people's quality

of life, social benefits, cultural advantages and improve the initiatives of the residents and leisure facilities (Das, 2008, Woolley, 2003, and Chen et al., 2016). Data gathered from the interviews and questionnaires show that most of the respondents agreed that including the public space within the design of the neighbourhood is very important. The main purpose of that is to ensure the provision of the essential facilities and equipment is sufficient and functionally effective.

In terms of importance and necessity, in interviews from the four categories – professionals, decision makers and both sites' residents who took part in the interviews – data show that all participants are considering the role of public space in their neighbourhoods. As a result, they show a very positive interest to ensure that design should provide the appropriate public space which should fulfil their needs in all possible activities. For instance, a participant H B from the decision-maker group stated that: 'The most important part of the neighbourhood is the public space and parks, these are a high-value credit and advantage of the neighbourhood'. To make this statement clearer, related questions were asked to the interviewees about the importance of the public space design and physical settings. Respondents from decision-makers' interviews indicate that the design of neighbourhoods should be based on the local social features in order to create an active and livable community.

In the same vein, residents' interviews depict several points about the importance of the public space provision and connect it directly to the design, facilities and quality issues. Offering further evidence from residents, participant F I stated that,

'Public spaces of the neighbourhoods are very important for the residents' satisfaction and comfort. First, it is a relaxation and breather place, especially for children because they have plenty of energy so they need such a place to discharge their energy by playing and sharing the physical activities such as sports with their friends'.

Therefore, it is very clear that the research participants acknowledge the importance of the public space of the neighbourhoods and they show different attention from each individual view. Moreover, the questionnaire results also emphasise this statement which is clearly can be seen in Figures (4-25, 4-26 and 4-27).

4.6.1 Governmental Neighbourhood GN 9th July:

Figure 4-25 shows the answers of the participants on statement number 16 of the questionnaire, 'The public space is a very effective method to improve the quality of the community environment'. It is clear that more than 85% agree that public space plays an essential role to improve the quality of the community.

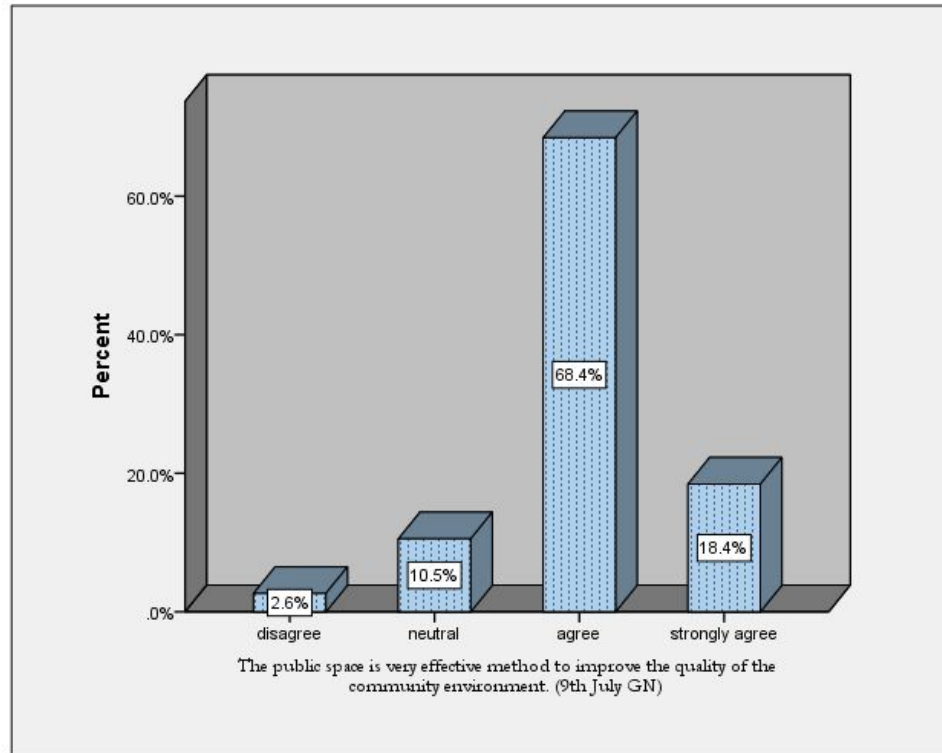


Figure 4-25: Responses to the statement 'PS is a very effective method to improve the quality of the community environment', GN 9th July

4.6.2 Traditional Neighbourhood TN Almegawba:

Figure 4-26 shows the participants' opinions about the above statement in the Traditional Neighbourhood TN Almegawba. The answers clearly show a similar percentage of around 88% who agree that public spaces of the neighbourhood are very important in terms of social communication and enhancing the interactions of the residents.

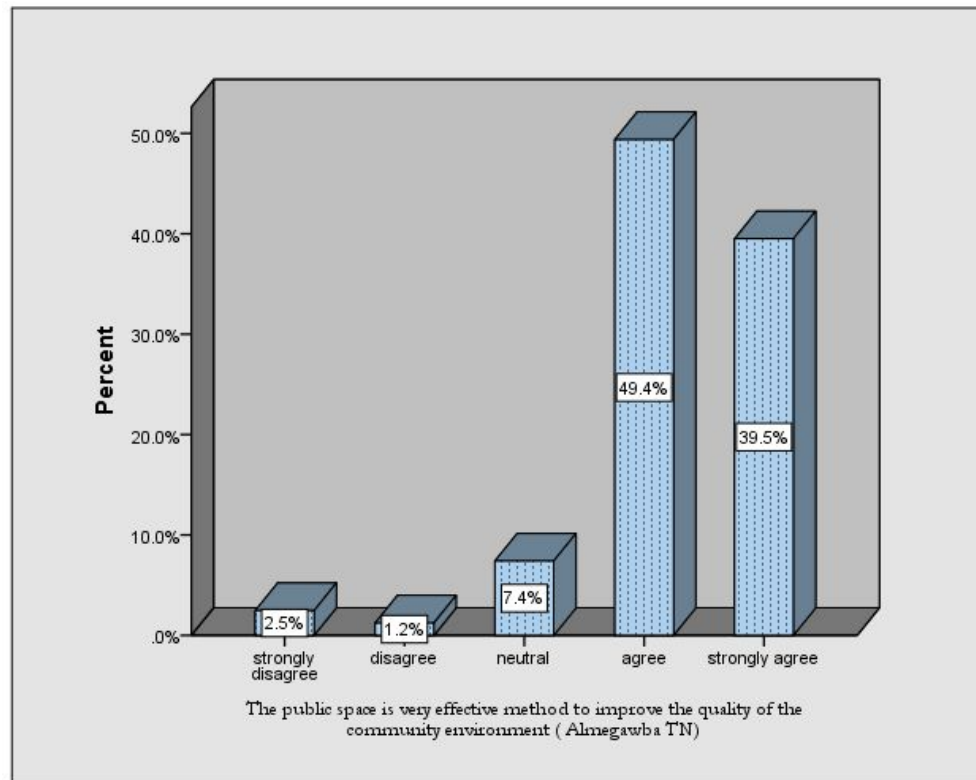


Figure 4-26: Responses to the statement 'PS is a very effective method to improve the quality of the community environment', TN Almegawba

According to Figure 4-27, it appears that in both sites participants believe that public spaces in their neighbourhoods are fundamentally important not only for the quality of their lives but also to enhance the social communication and to improve the interaction between the residents. A professional participant A M stated that,

'Public spaces of the neighbourhoods also impact on the community's social integration and the local economy. It is obvious that PS is the main place which involves the residents to participate and communicate in their neighbourhoods'.

Another statement from a resident S M in TN explained that,

'The public space has always been the favourite place for us especially during childhood and also in youth time, now also as an adult is still the best place to spend relaxing and social time with the neighbours and watching the children playing around the houses'.

In the same way, a participant (II) from GN indicated that 'The neighbourhood should mainly support this aspect (social), and we know that public spaces of the neighbourhoods are the most popular spaces for the residents to share activities, meet, chat and interact'. Under this theme, the result shows similarity in both

opinions from the two sites which express the same desire of most of the residents either in the GN or TN. Therefore, as a conclusion, it is very important that design of the housing as neighbourhoods should be based on a specification that includes all forms of public spaces in order to fulfil the local needs, particularly the social aspects.

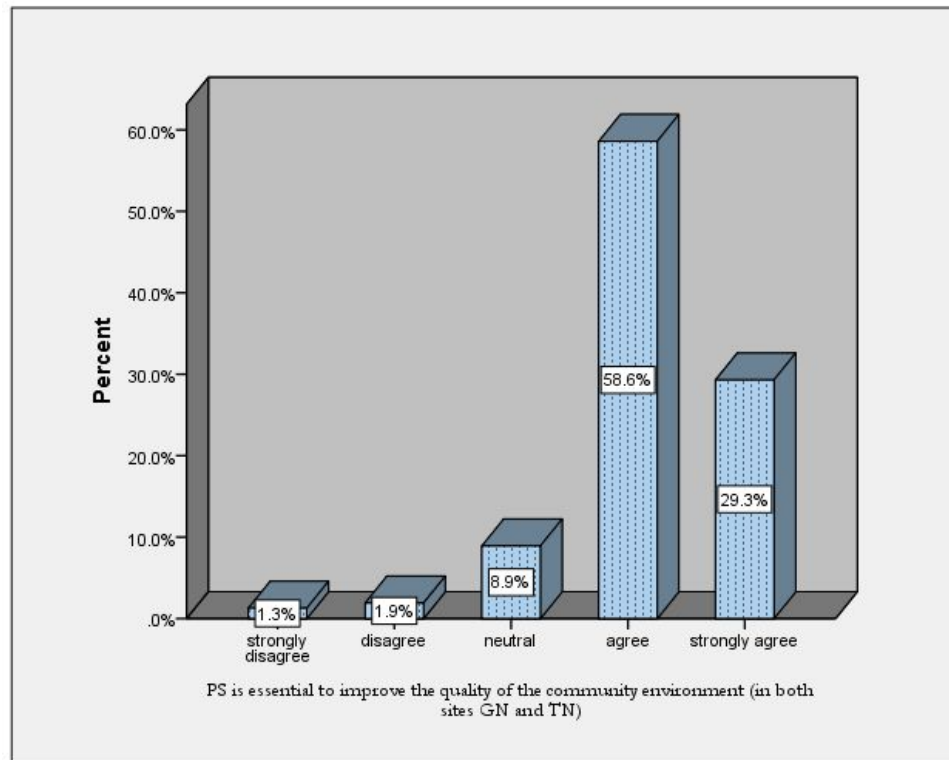


Figure 4-27: Responses to the statement 'PS is a very effective method to improve the quality of the community environment', in TN and GN

4.7 Summary

To sum up, this chapter has presented an overview of the case studies, their location and type of housing, and provided details of the city's location and a brief discussion of its historical and urban background. Moreover, it has identified the main similarities and differences between the two selected case studies and to what extent this selection can support the accuracy of the data and the research validity. Additionally, the chapter has provided a number of maps and plans that offer a clearer picture of the city development and the main historical and development stages over time to the present.

The neighbourhood sites were selected regarding their appropriateness in the main elements of the research such as to be inside the planned area of the city, not so

far from the city centre and have a similar population. Both sites are similar in terms of the research elements as explained in Table 4-1. Each site represents a specific type of neighbourhood in the city. In general, the neighbourhoods are either TN or GN; however, the TNs are located in more areas of the residential total percentage of the city's urban area. The GNs within the Misurata city occupy 15%-20% of the total residential areas (this Figure is approximate as there is no confirmed source to rely on in the city archives).

This chapter also gives some important examples of the lack of management and maintenance system by drawing a comparison between the planned sites before and after construction. This can point out the need for stronger cooperation between the government authorities. This lack of management quality impacts greatly on the GNs as they are planned and constructed by the government; thus, it is very important to focus on this issue here and now in order to find future solutions that can improve the management system/quality. Interestingly, the large volume of housing which is expected to be planned and built in the city as elsewhere in Libya is going to be GN regarding the large scheme of the government and its policy plan for the future projects. Therefore, this research contributes to creating a new strategy that might be included in the future projects.

PART 2: THE RESEARCH RESULTS AND DISCUSSION (Evaluating the Quality of Neighbourhoods' Public Spaces)

Introduction to part 2

This part highlights the two main elements of neighbourhood public spaces which are the physical and intangible elements discussed in Chapters (5 and 6). It presents the research results and discusses the impact of these elements on the quality of public spaces.

Moreover, it summarises the significant results with regard to each point in the two chapters. Chapter five illustrates the physical elements and its sub-themes and Chapter six explains the intangible elements and their sub-themes. At the end of each chapter, there is a summary that concludes the revised outcomes of this research which is to evaluate the current quality of public spaces as well as introduce a developed framework for the future urban development through increasing the well-being and quality of people's life. Carmona et al. (2008, p. 3) state that,

'...the fact that people use the street outside their front door, their local neighbourhood and the environment around their workplace on a daily basis, and as a result, the quality of streets, parks, and other public spaces affects everyone's daily life, and directly contribute to their sense of wellbeing'.

CHAPTER FIVE: PHYSICAL ELEMENTS

This chapter presents the findings in both neighbourhoods, discusses the results individually, and draws a specific comparison between the GNs and the TNs to clarify the key issues of this research. However, initially it seems that most of the participants believe that design has the largest part of the role to create a good public space in these neighbourhoods; there are a few other factors which are related to the physical elements of both sites including facilities provision, management and local climate that may have a significant impact on the public space quality.

5.1 An Overview of the Public Space Quality

The public space of neighbourhoods includes forms such as parks, open space between the residential buildings, the central area of the neighbourhood, roads between the house clusters, green areas, playgrounds and the car park (Carr, 1992, Koohsari et al., 2015, and Oktay and Rustemli, 2011). The function of public spaces depends on many criteria such as the local environment, culture, location and even the weather conditions. Scholars in this field suggest that evaluating the quality of public space can be applied from two perspectives – physical features and functional aspects – which relate to the residents' background and culture (Nasution and Zahrah, 2014, Mehta, 2014, and Beck, 2009). For instance, in the USA, Banerjee (2001) argues that there has been a lack of public open space in American cities in recent decades compared to the previous period and the city does not keep up with the population growth in terms of providing the residents' needs and updating the urban development.

This research discusses the public space quality based on the case of Misurata city in Libya. The public space in this country is considered one of the most important elements of the people's social lives as observed by the author and stated by the majority of the participants who took part of this research. In fact, it is the main place for most of the citizen's activities such as social events, children activities and other community activities. This section discusses and evaluates the quality of the public spaces of the neighbourhood based on the research data from different categories of participants including residents, decision-makers and professionals.

First, there is a need to understand the responsibility of each sector and its scope of work that falls under their control (Table 5-1). The following points illustrate the management frame in the local government structure:

- ❖ All the public spaces of the city centre and the public spaces of the neighbourhoods such as central garden, car parks and other similar spaces in the city of Misurata and all other cities of Libya are officially owned by the government.
- ❖ Public spaces of the neighbourhoods are included in the standards of any project run in the country either by the government or the private sector; both are required to follow the criteria of the MUP as presented later in Tables (5-2 and 5-3).

- ❖ Housing projects in the country are under two different types: private and governmental construction. In both strategies, there is a specific percentage of the overall area of the housing determined to be a public space as per Tables (5-2 and 5-3).
- ❖ The provision of facilities should be built by the government unless the government has a contract with another party to do this work. In this case, the government still has to be responsible for supervising these works in the public spaces and ensure that they are constructed according to the local specifications.

N.	Define	Housing	Infrastructure	Public Spaces	Landscaping
1	Ownership	HIB Housing and infrastructure board	HIB Housing and infrastructure board	GSC General services company	GO Gardens office
2	Design	HIB by Local and foreign companies	HIB by Local and foreign companies	HIB by Local and foreign companies	HIB by Local and foreign companies
3	Standards	All the specifications should meet those of the Ministry of Urban Planning (MUP)	All the specifications should meet those of the MUP	All the specifications should meet those of the MUP	All the specifications should meet those of the MUP
4	Construction	The neighbourhoods mostly public sector except the individual houses usually by the private sector	Mostly by the public sector	Mostly by the local companies	Mostly by the local companies
5	Management	The owner Usually the governmental sector such as HIB	The owner Usually the governmental sector such as HIB	The owner Usually the governmental sector such as GSC	The owner Usually the governmental sector such as GO
6	Maintenance	The owner Usually the governmental sector such as HIB	The owner Usually the governmental sector such as HIB	The owner Usually the governmental sector such as GSC	The owner Usually the governmental sector such as GO
Table 5-1: This table shows the ownership of and responsibility for the relevant projects and the management responsibilities					

5.2 Design

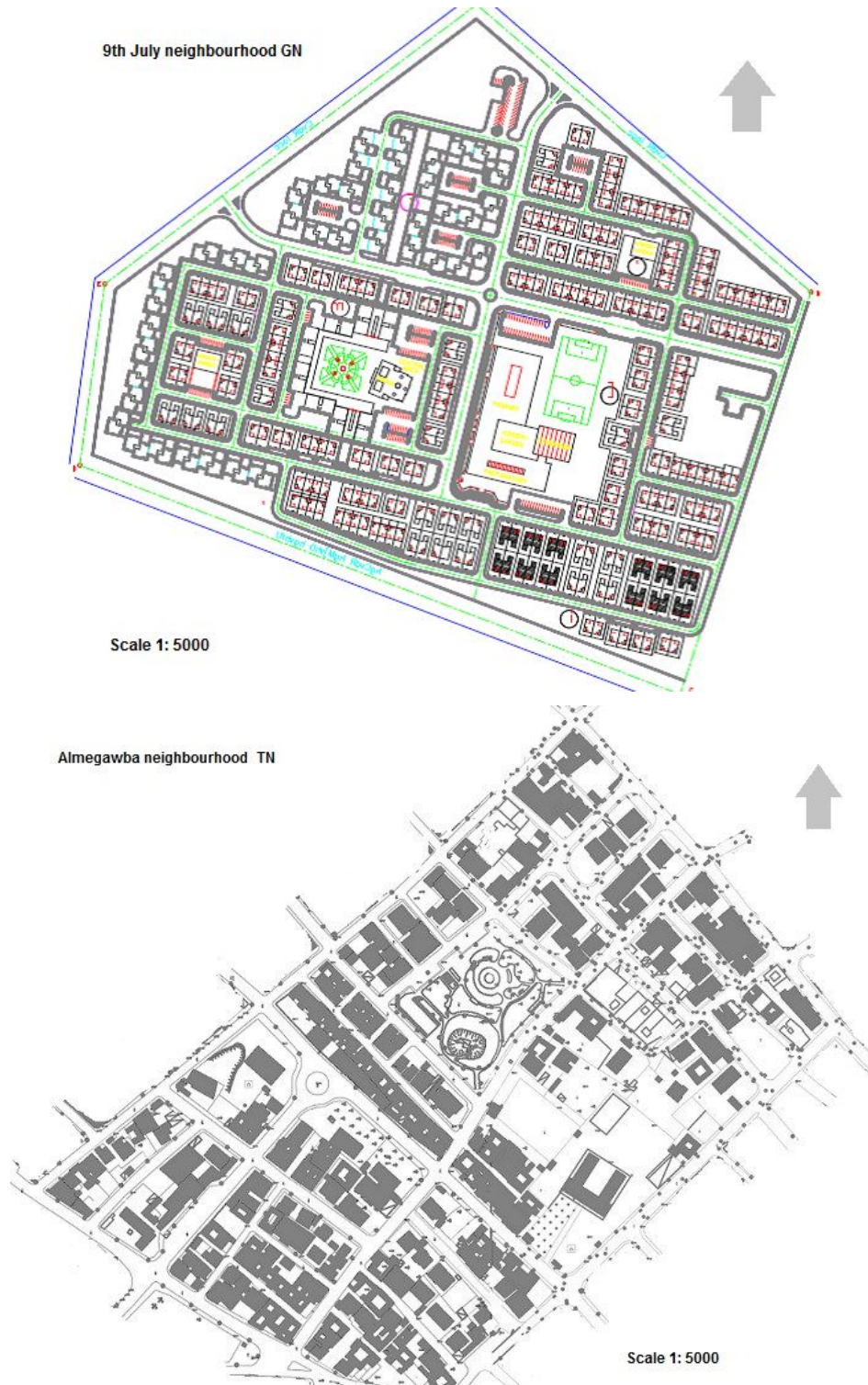
The design of public space is the first element that needs to be assessed to determine the quality of the public space. In many cases, failure at the design stage might lead to poor results because it negatively influences people's movement in their daily activities. This result has been stated in similar research such as (Goličnik and Thompson, 2010, and Rasidi et al., 2012). Carr et al. (1993 cited in Jalaladdini and Oktay (2012, p. 666) stated that,

'In a well-designed and well-managed public space, the armour of daily life can be partially removed, allowing us to see others as whole people. Seeing people different from oneself responding to the same setting in similar ways creates a temporary bond'.

In a similar conclusion Jalaladdini and Oktay (2012, p. 666) pointed out that, 'Eventually, successful urban spaces are the ones that are well-designed and well-managed which bring successful urban life for the people by enhancing their quality of life in the public domain'. Therefore, measuring the quality of the public spaces starts with assessing the design as a physical element and observing how it affects the lives of people in their communication, movements and practical activities; and thus their presence within this space.

The design of the neighbourhood including its open spaces, streets and playground areas often influenced by local environment (Madanipour, 1996). However, each individual region has its own characteristics (Cilliers et al., 2015). The successful design is one that meets these local determinations and functionalities them in an appropriate form to be effective and usable (Pancholi et al., 2015). One of the essential aims of the neighbourhood's public space design is to provide residents' needs; these needs can be produced in many phases such as high-quality settings including good street furniture, and reasonable connection to the city centre and the other parts of the city (Merriam and Tisdell, 2015). Furthermore, there is a need to create a high-quality environment by providing a green area, trees and other environment amenities (Madden, 2010). Along with a similar line, Shaftoe (2008, p. 17) indicates that 'Production of successful public spaces involves an integrated approach with a proper interplay of design and management within the broader context of urban policies'. From another view, Worpole (2005) states that social and economic problems cannot be solved only through the design itself because of the nature of these circumstances is related deeply to the features of the local community. Hence, designing a particular community to provide with a

unique experience should be based on deeply integrated approach with a detailed understanding of the local environment, in order to create a valid and successful public space design (Watson and Bentley, 2007 cited in Pancholi et al. (2015)).



Map 5-1: The sites of Almegawba TN and 9th July GN in scale 1:5000

The findings of this research highlight that the design is one of the fundamental processes to improve the quality of public spaces in neighbourhoods. First, it is crucial to understand the existing situation and the mechanism of the design operation. Regarding the data gathered from the interviews with one of the decision makers, A Z, from the Ministry of Urban Planning (MUP) stated that all the governmental neighbourhoods' proposals need to be approved by the MUP to ensure meeting the local standards. It has been stated that the role of the MUP is to prepare the planning of the city including the residential areas, as well as to allocate the public space in an appropriate place inside the neighbourhoods of the city. They indicated that there are specifications of the public space which include all types of public space within the city. For example, the open and green space of the neighbourhoods is usually around 25% to 40% of the total area of the site. [Source: Misurata Masterplan-2000 final report, Tripoli region-development plans, Polservice, Consulting Office. Warsaw, Poland.]

On the other hand, according to the in-depth interviews, the head of the HIB, participant H S, claims that all the executive companies follow the specification of the MUP in terms of the open and public spaces of the residential complexes. Regarding the research data, one of the participants who represent the General Services Company GSC the participant H B, argues that the main role of their companies is to follow the standards and criteria of the MUP, and that determines the percentage of the public space, roads, public buildings and the open spaces from the total area of the site. Hence, the shortage of quality seems to be in providing the facilities rather than the availability of the public spaces. All new housing projects initially begin by sending the whole package of the design work to the MUP for feedback or approval. The following section discusses the physical elements of the public spaces design in general and then focuses on each of these elements including size, location and central park and the possible influence of these elements on the quality of public spaces of the neighbourhoods.

A) Governmental Neighbourhood GN 9th July:

Figure 5-1 highlights the percentage of the respondents who agreed with the statement number 7 in the questionnaire which is 'The design of the public space is the most important element of the neighbourhood'. Almost 75% of the participants agreed with this statement; however, the rest of the participants who answered differently indicated significant points. For instance, around 16 participants stated that 'facilities provision is more important than design' saying that a space with limited facilities is not beneficial, even if it was perfectly designed. Therefore, the

designers should understand the local environment and the needs of the residents exactly, particularly in public spaces' creation due to the social aspects which play a significant role in local communications.

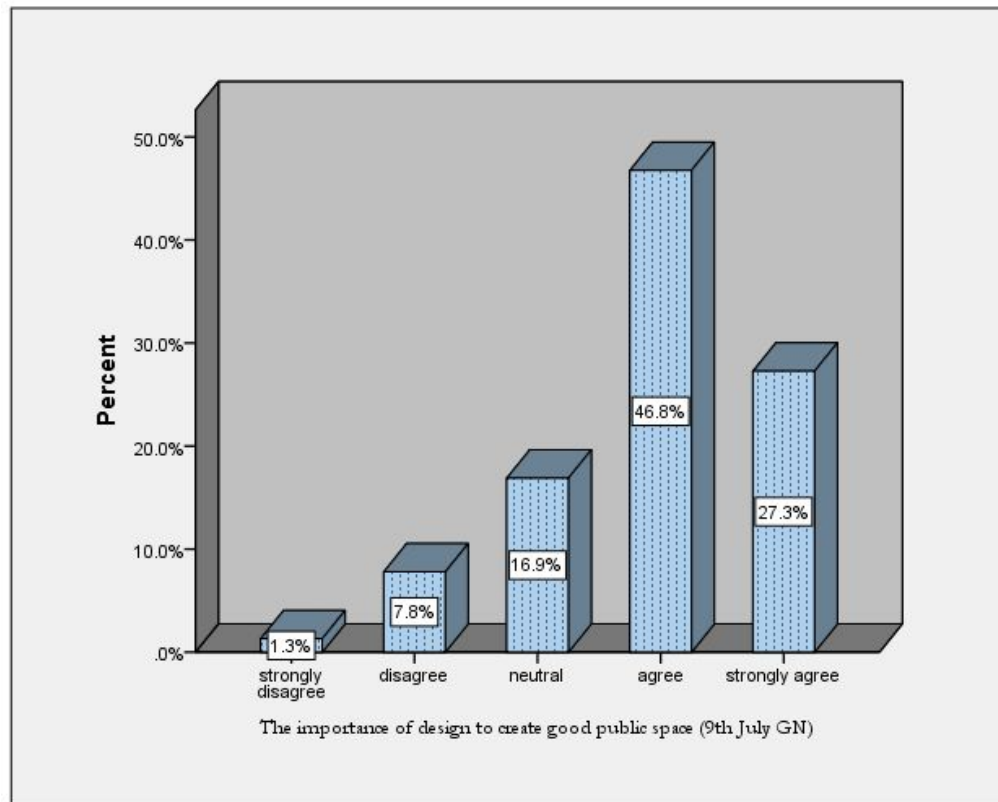


Figure 5-1: Responses to the statement 'design of PS is the most important element to provide better quality neighbourhoods', in GN 9th July

In-depth interview findings show similar results; interviewees from decision makers and professional groups stated that the design stage of the neighbourhood's public space is very important. It is the first action which increases the chance of achieving a successful and high-quality community. A participant A S from the professionals stated that,

'Design of the neighbourhood's public space is very important; neighbourhoods should be designed according to high-quality standards in terms of providing physical elements, green area, open spaces and other related facilities in order to fulfil the social entertainment needs and to allow applying other residents' activities'.

Residents of this neighbourhood GN 9th July stated that they are usually more attached to the physical elements of the public space in their neighbourhood. This enables them to practice their social activities such as meeting, chatting, and having tea or coffee while their children are playing. Therefore, the design should meet these needs of the users to achieve its purpose. On an identical line,

specialists confirm that well-designed space with a good range of facilities provisions such as children's playground and sports facilities are necessary. One of the professionals, M L, pointed out that according to a visit to the 9th July neighbourhood, it is clear that there are some good features of the public space design within this community. However, it would be much better if there was a greater provision of the landscape, green area and playground facilities.

B) Traditional Neighbourhood TN Almegawba:

In Almegawba neighbourhood TN, Figure 5-2 illustrates similar findings with a percentage of more than 80% of the participants who agreed with the same above statement. In addition to this finding, a participant from professionals M L stated that,

'If the design of the public space including its physical elements succeeded to invite and motivate the residents to participate and interact, then the public space will be the most valuable element of the neighbourhood because this is exactly its role in the community'.

Moreover, a decision maker interviewee S Z stated that 'The design of the neighbourhood's public space including streets, parks, playground and even open green areas are as important as the design of the houses because people spend their time in either one of them'. He explains that residents need a comfortable, safe, convenient and practical place to spend their free time in. Living in a high-quality house does not fulfil your desire of enjoying the outdoor public space. There is still a need for a high-quality neighbourhood which enhances social interaction and supports the residents to enjoy their surroundings. In fact, the successful neighbourhood is one that can provide a fulfilment of both components: houses as the main part of the community and the public space including outdoor open spaces.

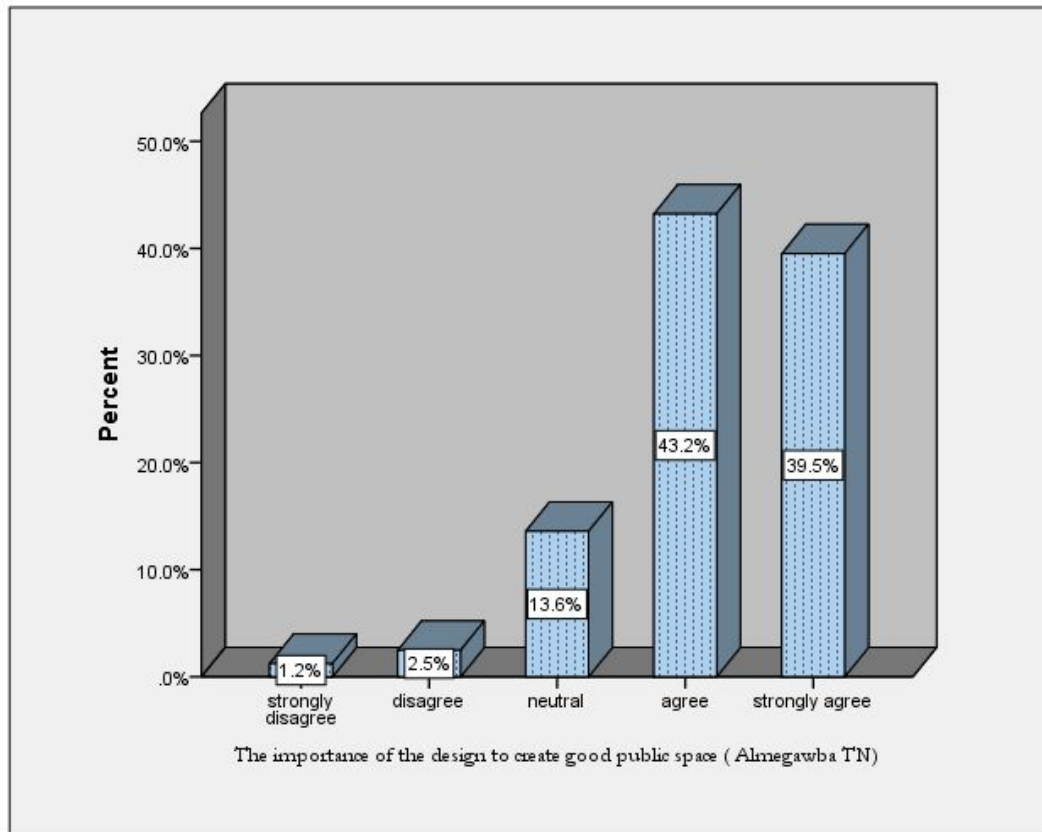


Figure 5-2: Responses to the statement 'design of PS is the most important element to provide better quality neighbourhoods', TN Almegawba

In terms of social dimension, the representative of the Housing and Infrastructure Board (HIB) stated that the priority of their work is usually given to the number of housing units rather than open and public space design and landscaping. The head of the HIB stated that the design of the neighbourhood public spaces cannot be fully based on the social considerations, saying that will slow the process of completing the project. Regarding the governmental perspective, HB claimed that to provide the houses as a quantity with a reasonable quality is much more important than spending a long time to produce high quality but fewer houses, however, this issue considered as a major issue which is taken into account by the designers. In fact, professionals clearly describe the benefits of a friendly sociable public space which is highly important to be considered in the design stage.

Regarding the interview details, the expert of 30 years in urban planning, A G, suggests that it is an essential step to know the social and practical needs of the residents, in order to identify exactly their desires and requirements to improve the quality of their social lives. For example, AG highlights a successful neighbourhood design in another city in Libya called 'Ras-lanoff' (Figure 5-3).



Figure 5-3: The city of Ras-Lanoff, Libya Source: Google Earth, accessed 06/07/2017 16:28 pm

In this case, the design team had moved on to and lived on the site for a period of time that allowed them to discover and observe the local community activities and behaviour before starting the design process. This initiative was to observe the local behaviour and social features of the residents which helped them to base their design on real data. Hence, this town is considered a good example of the GN in the country as it provides plenty of public and open spaces that are supported with a

good range of physical facilities such as playgrounds, parks, central park, shops and cultural centres.

Along the same lines, one of the professionals, participant M L indicated in the interview that the good neighbourhood design attracts all residents contribute, share and participate in its public space. Therefore, physical elements including all the previous elements are very important to create successful neighbourhood's public spaces. It is highly important also to provide the site with suitable settings which create a place for the local residents to interact and get involved in social activities. This strategy might be the best way to promote the successfulness of the public space design, and this certainly is considered as the main aim for the designer to create a good project.

In this part of the discussion, it is very relevant to use this quote from a professional group participant, A M, who stated important highlights regarding the best way and time to use the public space and its role and function from a user's perspective. It is very clear in his statement that right from the design stage there should be attention to the local community features and the cultural background in order to create a successful place for the residents to enjoy:

'Let me state a very important issue here, in new neighbourhoods, the design is not based on the social and cultural data because it is created by foreign institutions. There is not enough consideration of the social aspects which might help the designer to create a successful example of a neighbourhood. I live in a community which has plenty of space which is donated by the residents to be used for our events and social activities. Thus, the idea is not only to provide the public space but rather how to allow and support the residents to communicate and share the spaces to increase the level of interaction and create the sense of the community in their neighbourhoods'.

Finally, according to the literature and theoretical perspective, urban design of the cities has three scales: city-scale, neighbourhood-scale and site-scale as per Figure 5-4. In this research, the focus is on the neighbourhood-scale, where the design of the neighbourhood including its open and public space is linked directly with the quality of the physical provision and the facilities of those spaces. (Cilliers et al., 2015, p. 1372) argues that,

'To ensure that a public space becomes lively and popular, one must make sure that people are given good conditions. This implies that the public space must be highly attractive. This can be achieved through a

number of initiatives such as encouraging more residential development ... providing facilities and open spaces'.

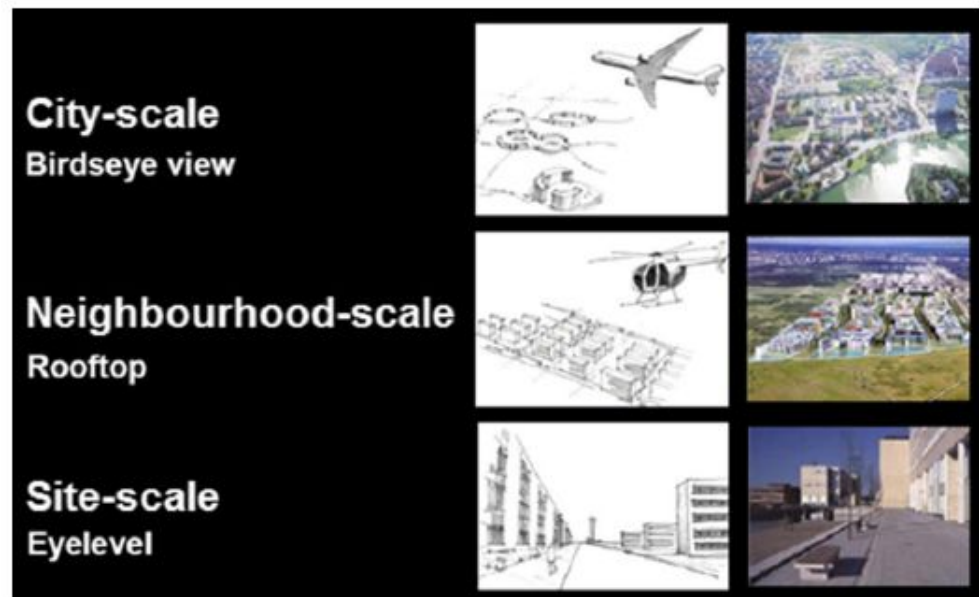


Figure 5-4: The three key-planning scales of the urban development.
Source: (Cilliers et al., 2015, p. 1373)

This context illustrates the importance of the facilities' provision and the design of the public spaces which has been emphasised by many scholars such as Ghavampour et al. (2015, p. 4) who clearly highlighted the role of the design of the small public spaces such as in the neighbourhood that, 'The influence of natural elements occurs in combination with other design elements. However, there is a lack of research on combining natural elements with other design elements'. Moreover, Ghavampour et al. (2015, p. 12) concluded key points in their study titled 'Nature as a Design Element in Small Urban Public Spaces':

- 1) The context of design elements influences how public space is used.
- 2) Natural design elements are associated with the use of public space when combined with other design elements.

The research has found that design of the case study sites is not completely meeting the residents' needs, although they have been designed by an official government organisation, taking into account the local standards the local standards. It is still not well-linked to the social needs and the local practice of the residents.

5.2.1 The Public Space Size

The size of the public space within the neighbourhoods, specifically the area of physical activities, is a fundamental measurement tool to examine the urban design quality (Kaczynski et al., 2008). Few studies have investigated the size of the neighbourhood public space in relation to the physical activities that take place in it (Bertram and Rehdanz, 2015), although several types of research found correlations between the size of public spaces and people's physical activity (Giles-Corti et al., 2005, Holtzclaw et al., 2002). This section explores the existing quality of the public space in terms of its size for the two case study sites. It also investigates the role of the size of these public spaces in terms of meeting the local standards and providing the appropriate space quality to the residents.

The local standards show that 25% of the residential area is to be open public spaces. This percentage includes the central park in each neighbourhood, playgrounds, green area, streets, car parks and margin spaces between buildings (Misurata Master Plan – 2000 final report).

N.	Land use distribution in the year 2000	Symbol	Area/ hectares	100%
1	Residential	R	4,062.0	46.3
2	Education	F1	519.4	5.9
3	Health and social welfare	F2	171.1	2.0
4	Religion and culture	F3	195.9	2.2
5	Commerce and culture	C	174.0	2.0
6	Sports and recreation areas	S1,S2,S3	984.8	11.2
7	Administration and public facilities	P	46.7	0.5
8	Industrial and warehousing	I1,I2,I3	629.0	7.1
9	Transport and communications	T	1,790.0	20.5
10	Public utilities	U	200.0	2.3
	Total urbanised area		8,771.9	100
11	Agricultural land	AC, AR	1,300.0	*
12	Isolation belts, forests, waterfront	S3, S4	1,055.6	*
13	Special areas	X	37.0	*
	Total town area		11,164.5	*
Net residential density: 105 inhabitant/ha Urban density: 43 Inhabitant/ha Table 5-2: Land use distribution of Misurata city in the year 2000, (Utilities, 2000 , p. 89)				

In the following Table, 46.3% of the total urban area is residential and 25% of this amount is intended for open public spaces inside the neighbourhood (Table 5-1). However, there is another 10–15% of the total land is for the central parks and squares in the city centre and around the residential areas which indicated in Table 5-2 in green colour.

Therefore, it is very clear that the local standards of the urban planning fully take into consideration the size that should be provided to the neighbourhoods. The downside is that design institutions are not considering these requirements either due to requests from the owners or some exclusive forces by some of the government departments (participant A G). The issue here is about the quality; for instance, there is a need for children's facilities. The area for this group's activities should be at least 500 m² as per Tables 5-2 and 5-3 (HIB archive, 2008). This size is per group of 20-30 houses in local mentioned standards. According to Figure 5-8, it can be seen that, for example, in 9th July, the available spaces in most of the housing clusters/blocks are far smaller than this area (Tables 5-2 and 5-3) referring to HIB archive 2008.

N.	Utility	In 2000	
		Number	Area/hectares
1	Children's playground *	x	X
2	Playing areas *	x	X
3	Football areas	8	8.0
4	Sports complex	1	36.0
5	Sports centre	2	14.0
6	Horse riding space	1	29.0
7	Entertainment centres	9	367.7
8	Regional park	7	109.9
9	Waterfront	5	158.6
10	Yacht beach	1	1.9
11	Other open and green areas	X	250.7
	Total	X	984.8
<p>Note:* these utilities are included in the residential area</p> <p>Table 5-3: The city utilities: sports, parks and public spaces distribution, (Utilities, 2000, p. 122)</p>			

Table 5-2 shows that the first two rows 'green coloured' children's playground and the playing area with the (x) sign are included in the percentage of the residential part by 25% of the total residential area. However, the following 'blue coloured' rows – which are football area, sports centres, entertainment centres and regional parks – are to serve the whole region of the town. They are allocated on the other edges of the neighbourhoods and residential areas. The assessment of the existing size of these neighbourhoods includes the first two categories of the public places which are within the neighbourhood area. In the following discussion, further illustrations are shown that present the physical features of the public spaces in both sites individually in order to find out whether the size of the public space meets the mandatory standards of the urban design and matches the needs of the local residents.

Another important aspect of why focusing on the size of the public space is that the positive influence of the suitable size that meet the residents' satisfaction. This is should be same the standards determined by the MUP. The efficiency of the size has a high influence on the satisfaction of the residents. Despite this importance, the fact is that many local neighbourhoods are facing a lack of appropriate-sized public areas. This is because either the local standards are not followed by the designer or the public space has been exploited illegally by the residents. Nevertheless, public space of the neighbourhood should be distributed to be within the acceptable distance from at least most of the houses as indicated in next paragraph.

The research found out that the residents who live near to good sized areas of public open space are more satisfied than the residents who live relatively far from any public spaces see Figure 5-5. Many of the respondents in the 9th July GN complained about the small size of the available public space near their houses. They stated that their children have to walk to the central park or to the other side of the neighbourhood to play football. From this discussion, there is no doubt that residents prefer when their children play within the suitable distance which indicated in MUP in a circle of 200 - 500 (Utilities, 2000, p. 17) from their houses regarding safety and security reasons. Therefore, this issue is considered as one of the urban quality measurements within the neighbourhood, as it impacts directly on the satisfaction of the residents.

The following Figure 5-5 and Figure 5-6 show that the majority of the respondents from both sites (GN and TN) believe that size of public space is very important for their comfort and social satisfaction.

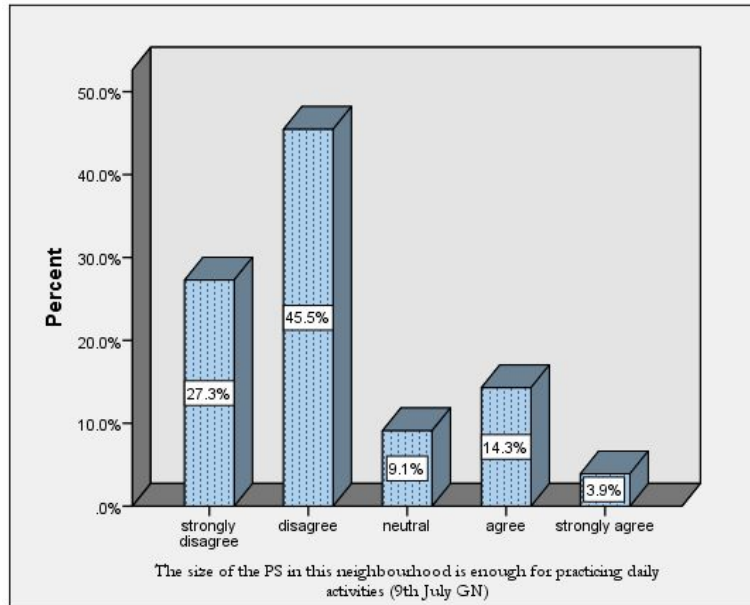


Figure 5-5: Responses to the statement 'The size of the PS in this neighbourhood is enough for practising daily activities', GN 9th July

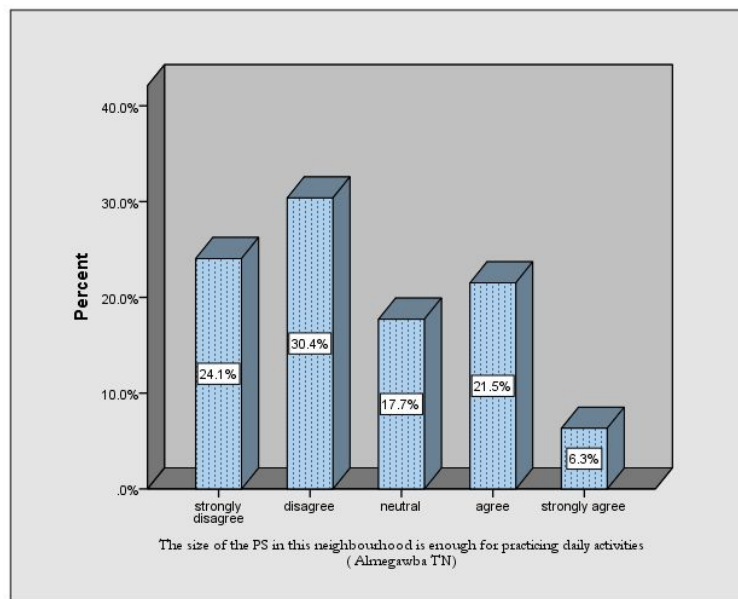
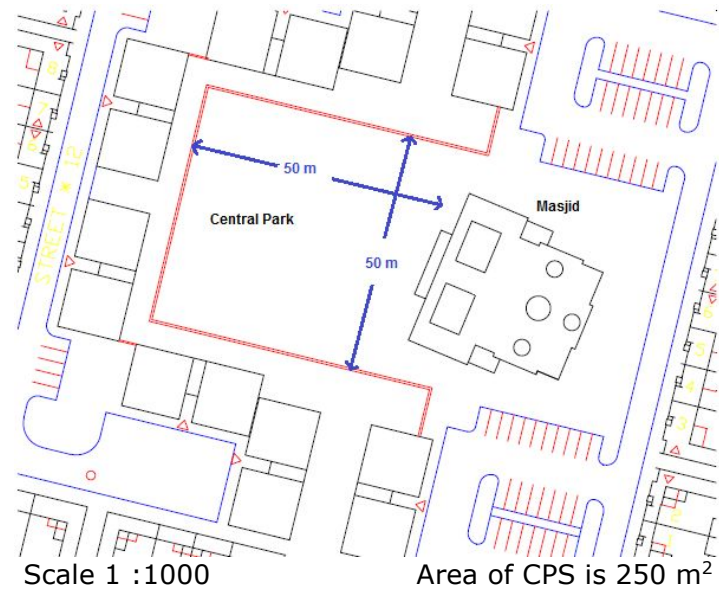


Figure 5-6: Responses to the statement 'The size of the PS in this neighbourhood is enough for practicing daily activities', in TN Almegawba

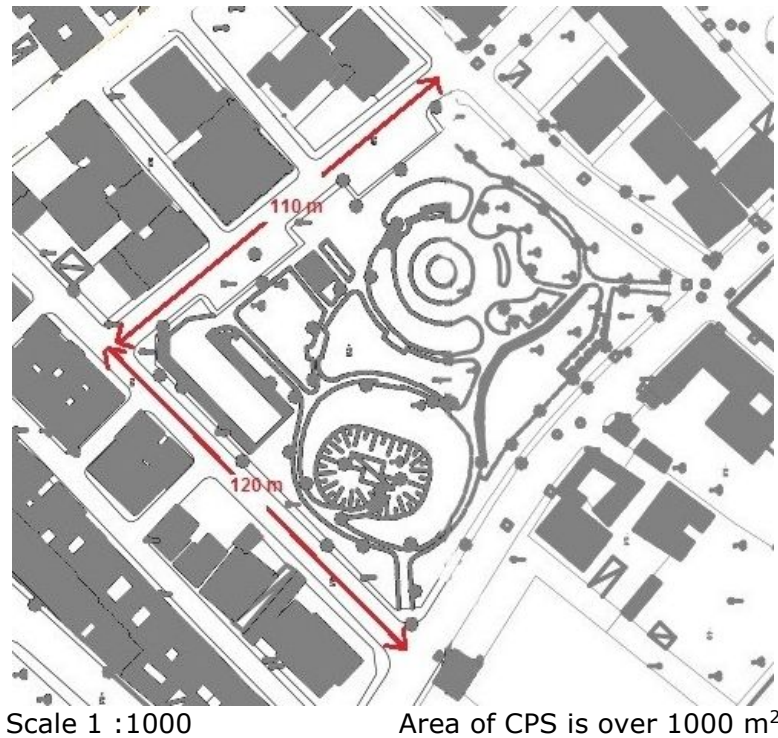
It is clearly indicated on both sites, the traditional and governmental neighbourhoods that most of the residents agreed with the statement in the questionnaire – 'The most effective characteristics of the public space are the size within the neighbourhood'. This factor explains the desire of the resident regarding the needed size of the public space. On the other hand, it might be difficult for the designer to completely meet all the residents' needs; in other words, to provide each group of houses with a large open area to be a playground or a park.

Therefore, in this case, the logical process is to produce make a successful design which follows the specifications of the local responsible authority and at the same time satisfies at least the most of the residents. This combination of the two considerations, in fact, is the main role of the designers. Thus, this is used as the measurement of the quality in these types of physical elements of the public space.

Central park in the main public realm of the 9th July neighbourhood GN



Central park in the main public realm of Almegawba neighbourhood TN



Map 5-2: The size of the key PS in the two case study sites, GN and TN in scale 1:1000 and the total area

As it can be clearly seen in the Map 5-2 that central public spaces of the GN is relatively smaller than in TN. However, the size in TN may meet the local standards, regarding the participants it is considered as a reasonable size to meet their needs. In GN, this size is too small, participants indicated that 'this size can be good for basic activities but in terms of sports, social events and other occasions this space is far less to what they exactly need.

Appropriateness of the size of the public spaces was examined in this research by asking the participants the following question: 'The size of the public space of this neighbourhood is enough for the residents to practice their daily activities'. Figures (5-5 and 5-6) illustrate that most of the participants are not satisfied with the size of the existing public space in both neighbourhoods. Decision makers from the HIB and the MUP argue that, in the GNs, the design is doubtless approved by the Ministry of Urban Planning. This means that the acceptable size of the public space in the neighbourhood is provided. Yet the residents are not satisfied with this size of the public space as they argue that many activities cannot be undertaken such as youth sports, female gatherings, social events, children's playground and local festivals because of the size limitation of the public space of the neighbourhood.

Furthermore, respondents from the residents of both sites, GN and TN, stated that in order to use the public space effectively, public space size should accommodate all the residents' activities. For example, parents need to watch their children and ensure their safety. At the same time, parents and other adults need to have space to sit, chat and communicate in the public realm as adults enjoy spending their time in other activities and social communication while they are accompanying their children. This level of interaction is highly desired by the majority of the respondents both in the questionnaire answers and the interviews.

5.2.2 The Location of Public Space

The location of the public space within the neighbourhood contributes to its quality, such as the distance between the residential units to the public spaces. These places where the residents can spend their time and undertake their activities in their free time are a major factor that should be considered in the design stage.

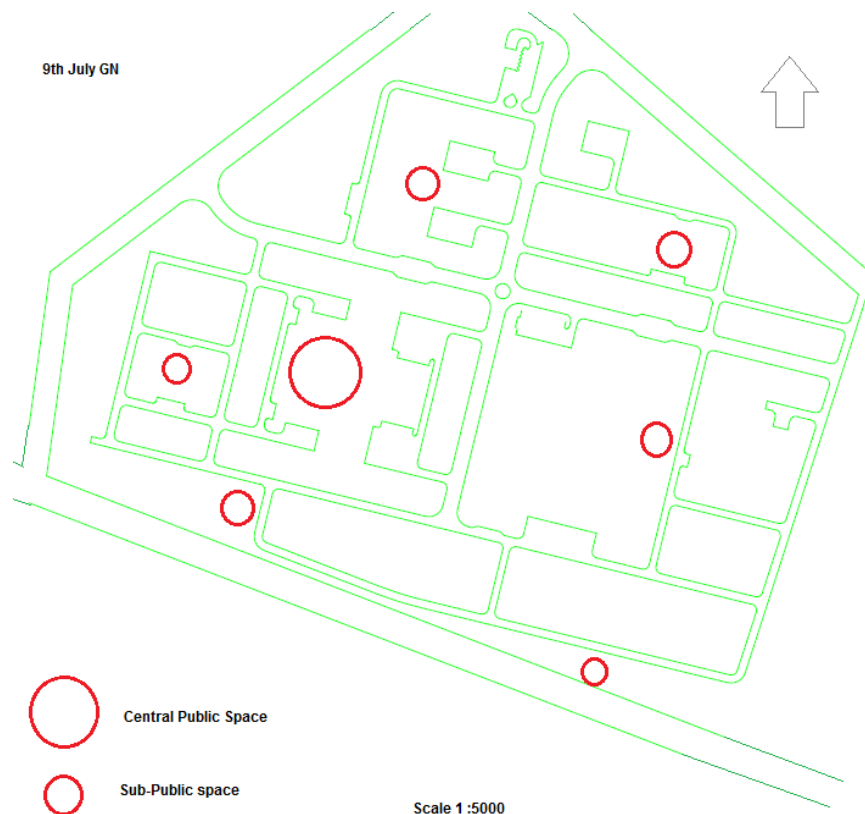
In general, the location of the neighbourhood's public and open space pattern depends on the streets that connect the private and public areas and connect the other parts of the neighbourhoods. Figure 5-7 shows several examples of public space locations which are mainly shaped with regard to the streets patterns. This is

the main distinguishing factor which differentiates one neighbourhood from another.

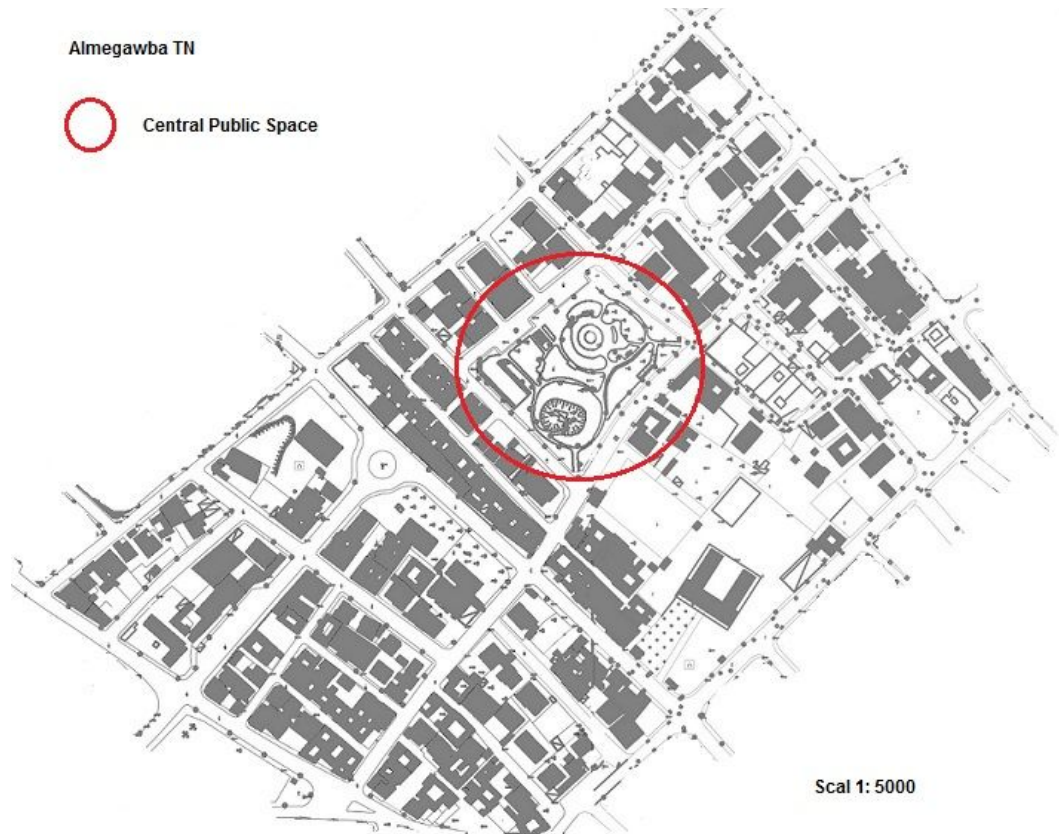


Figure 5-7: Public space location according to the street pattern of the neighbourhoods, adapted from (Grammenos and Tasker-Brown, 2002, p. 11)

The research data show similar results of the public space location relative to the size. These two elements are combined with each other. Therefore, the successful public space should meet the appropriate requirements of the size and location provisions in the neighbourhoods. Map 5-3 show the location of the PS in the GN and also their hierarchy. It appears that there is a better distribution of the sub-public spaces around the site comparing with the TN as per Map 5-4. Although, in terms of quality, size and facility provision still below the required standards.



Map 5-3: The locations of the PS and Sub-PS around the site and their hierarchy in the size, scale 1: 5000, GN 9th July



Map 5-4: The location of the PS in TN Almegawba in scale 1:5000

Finally, the size and location of the public spaces depend on the needs of the local community. Actually, an adequate measurement tool of the public space quality varies from region to region according to the local features of that place. Thus, based on the local features, what it has considered as a high-quality public space in one place may not be considered at the same level of quality in another place. The findings of this research highlight that satisfaction of the residents within the neighbourhoods is not only related to the physical elements such the design but also due to several social aspects.

5.2.3 Central park of the neighbourhood

The central park of neighbourhoods is one of the common features in many cities around the world, particularly in Islamic and Arab countries. This is because the local cultures usually require a place of gathering and socialising. In Islamic countries, space is located around the main Masjid (central mosque/a faith place) in the centre of the neighbourhood. For instance, in Indonesia the traditional main central place which is usually near the main Masjid of the community or the village; this space is called the 'Alun-Alun'. It is a public space and everyone can use and share the activities within this place (Kurniawati, 2012). Although in Misurata some

of these central parks do not include a Masjid, they are preferred by the local residents and it is considered one of the local urban characteristics, particularly in TNs.

This section focuses on the social role of this central space and to what extent it is important in terms of measuring the quality of public spaces. In fact, the MUP suggests that this space is included in all the neighbourhoods of the city master plan, either in the GNs or TNs, to reflect the local urban identity and support the activities of the local community in a practical way that ensures the liveability of the space. Gathered data on this research from both sites illustrate that a central park is very important to the residents. They explained that the central park has a high social value because it is at the heart of many essential social activities. In Almegawba TN, research findings discovered that the residents are very confident and motivated to participate and interact with each other in the central space of their neighbourhood. For instance, in Almegawba TN, the central park includes the following elements: green area, space for sitting, children's playground, youth football pitch and car park, and there are plenty of trees which provide shade in the daytime.



Figure 5-8: Children's playground in the central park in one of TN named 'Taqliya Neighbourhood', picture by author 23 October 2016, 13:47:18



Figure 5-9: Children's playground in the central park in one of TN named 'Taquiya Neighbourhood', picture by author 23 October 2016, 13:47:18

Data from questionnaires and interviews show that residents are very excited about the central-park of their community as per Figure 5-8 and Figure 5-9. It can be seen that residents of different ages, genders and families enjoy their leisure time there, and some parents are watching their children while chatting with other neighbours. This scene presents a successful model of public spaces because it is supported by several pieces of physical equipment and children's facilities. Moreover, the residents can practice more than one activity and many of them prefer to watch the football games along with socialising with their friends individually or as groups. Parents are also interested in being present in this place, as they enjoy their social interaction with neighbours along with watching their children playing. Therefore, it is clear that the central public space has a positive impact by motivating the residents to interact and participate effectively in the public realm. It can be seen in Figure 5-10 and Figure 5-11 that space contains many activity zones including a football pitch, children's playground, fountain, and sitting area. One of the decision maker interviewees, A Z 'head of MUP Misurata city', pointed out that,

'The main central public space of the neighbourhood is very important in all views such as social, health, communication, residents' relations and even from an economic perspective; thus, it cannot be replaced and divided into several small areas around the neighbourhood. The central space (park) is one of the mandatory elements according to the MUP standards'.

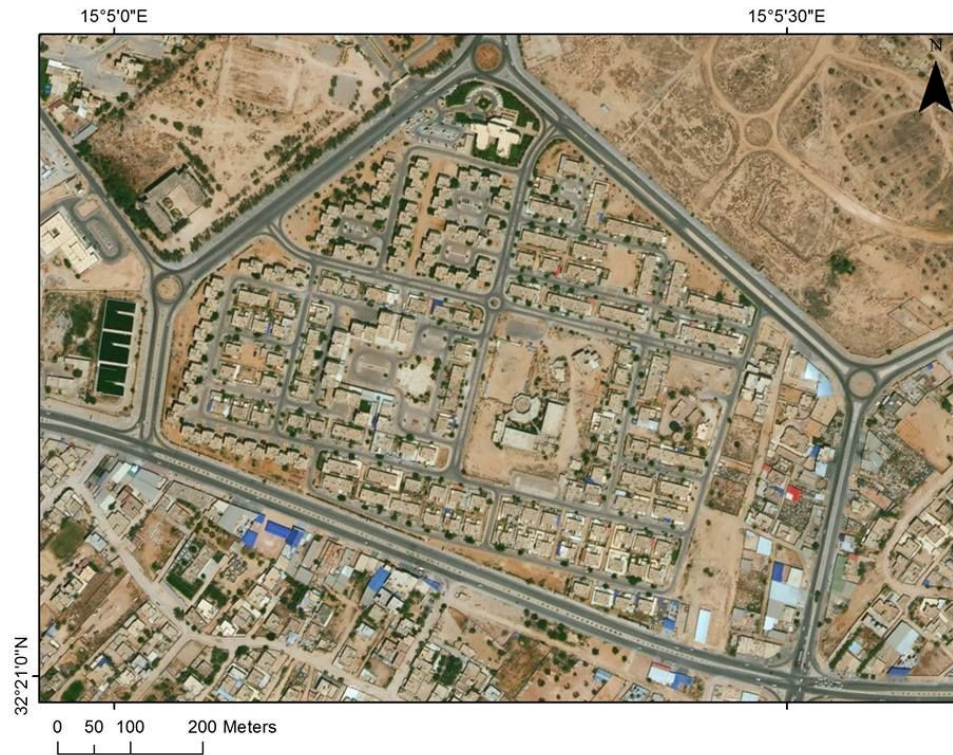


Figure 5-10: The existing situation of the central park, 9th July GN

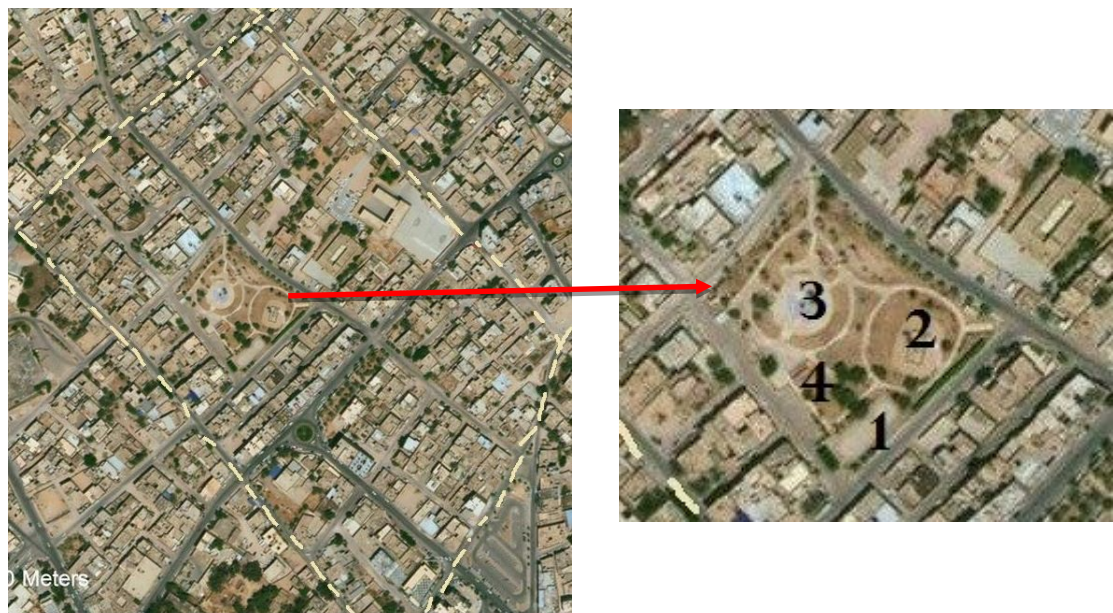


Figure 5-11: The central-park of the Almegawba neighbourhood: 1) football pitch 2) children's playground 3) fountain 4) sitting area. Source: Google Earth

Local residents also show a very high desire to keep the central park space active and vital. They assumed that it is the government's role to redevelop and improve its quality and maintenance to keep up the level of efficiency that residents need.

Also, the government is expected to provide the necessary physical equipment that allows residents to undertake their activities in a more active and lively way.

On the other hand, in the governmental neighbourhood 9th July, the design already included a specific area for a central park space. However, it is not yet completely constructed on the site. Unfortunately, the organisation that is responsible for this project by the government has not finished it yet, although the residents moved to this neighbourhood almost ten years ago. Furthermore, due to the lack of the available land within the neighbourhood, the area which was designed for the public spaces as a central park see Figure 5-11, it has been used for public buildings such as a school and Masjid.

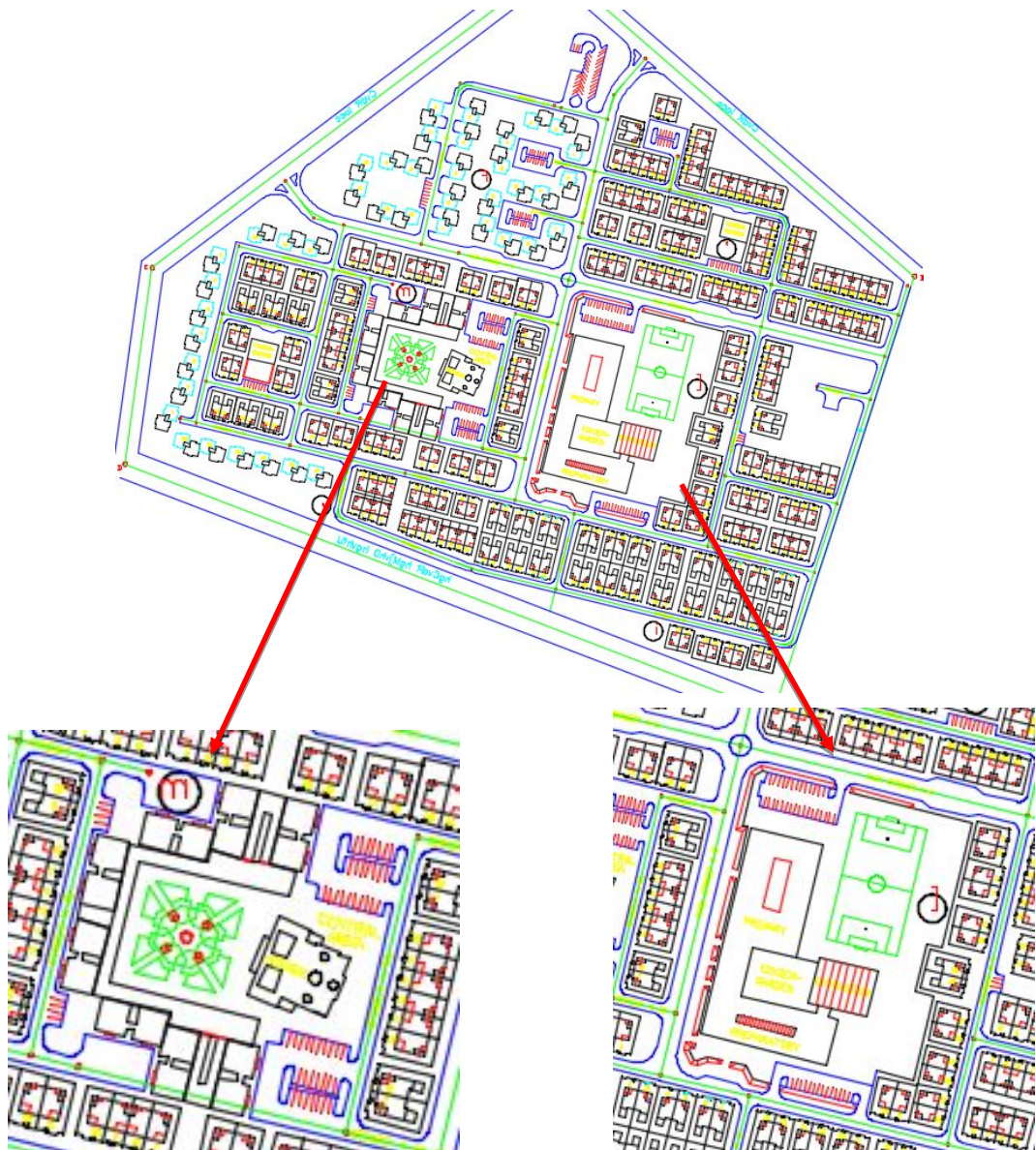


Figure 5-12: The design proposal of the main central area of the neighbourhood 9th July

As seen in the following Figure 5-12, the public buildings have taken a large part of the land which negatively impacts on the overall area. This action of locating such buildings in the public realm which should be used for the social and entertainment activities is one of the most concerning issues that point to the disorder at the decision-making level.

A respondent M G in 9th July neighbourhood explained that the central area is not completed and still without any equipment such as playgrounds, seats, shelter and even walking paths. The participant M G pointed out that the qualified and completed central park would have had a positive impact on the residents' relations and social value:

'If there are good-quality public spaces and a central area which include children's and youth facilities such as playgrounds, sports pitches and green areas for walking and some other activities, I would have known more families and have had a better chance to build stronger relationships with the residents all around the neighbourhood'.

This lack of facilities in the central public space, even if it is a good size, is still an important issue for the residents. Local residents cannot benefit from the space in social and daily activities unless it is facilitated by the main elements as mentioned above. This situation poses the threat of the spaces become filled with rubbish or junk items which will make the quality worse. It is believed that it is the government's responsibility to provide all the services and facilities to these neighbourhoods, so the private initiatives are non-existent.

5.2.4 The accessibility of public space

Accessibility is one of several definitions of the broader term 'spatial equity' which has been the focus of many urban designer and planners in the last few decades. In this context, the accessibility is to provide equal access to the main public facilities (Tsou et al., 2005). In this research, the attention is on the ability of residents in accessing the public realm from their private areas; more specifically, from their houses through the semi-public spaces of the neighbourhood to the public facilities of the central area of the neighbourhood and the city's other public spaces.

The accessibility from house units to the public spaces of the neighbourhood is also one of the essential requirements that should be provided to the local residents. Easy access to the basic places such as streets, parks, sports places and children's playgrounds should be considered for all the residents' categories. In addition,

many local residents suggested that there should be good access not only from the house to the public domain of the neighbourhood but also from one neighbourhood to another.

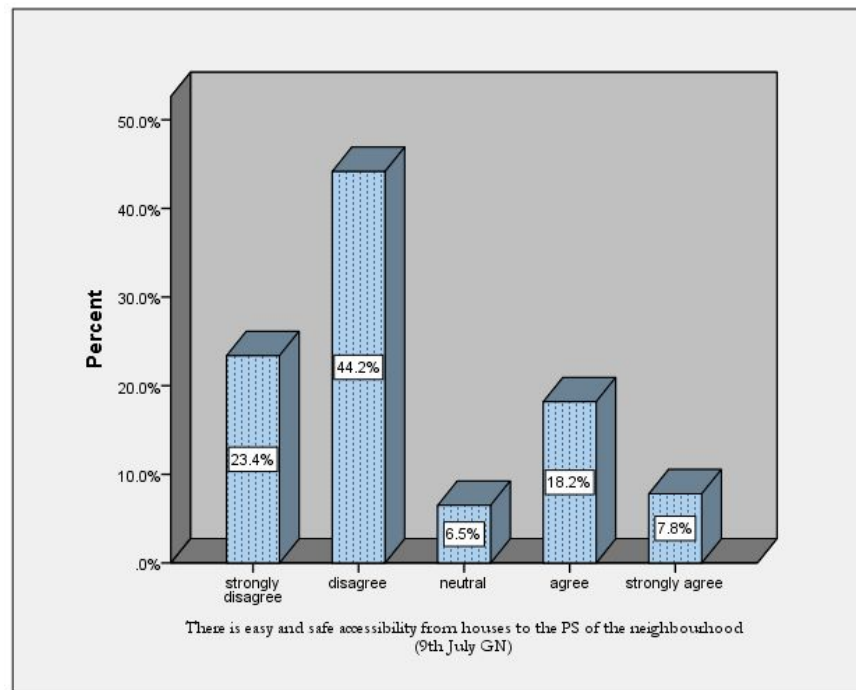


Figure 5-14: Responses to the statement 'There is easy and safe accessibility from houses to the PS of the neighbourhood', in GN 9th July

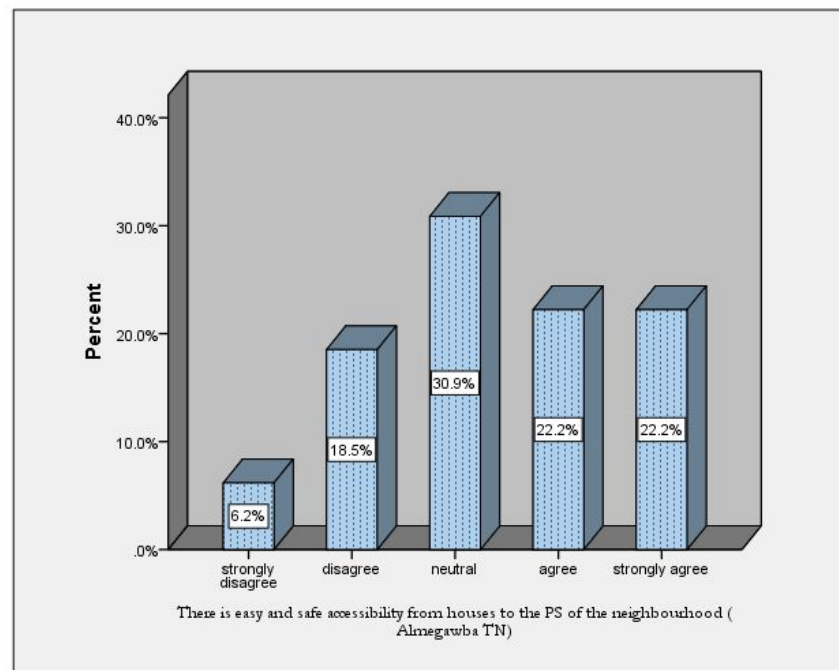


Figure 5-15: Responses to the statement 'There is easy and safe accessibility from houses to the PS of the neighbourhood', in TN Almegawba

Figure 5-14 shows different results from the participants in both sites. In the GN, more than 67% of the respondents stated that they have poor accessibility through the neighbourhood while in the TN only 25% of the respondents who are not satisfied with the level of accessibility in the neighbourhood spaces (Figure 5-15).

In the following Figure 5-16 and Figure 5-17, it is very clear that the accessibility from/to public areas is not very clear which appears from the narrow paths and lots of trees nearly blocking the walkways. The findings show that some of the residents are trying to create a private garden in the public spaces and they privately provide some playground equipment to create a safe nearby area for their children to use.



Figure 5-16: Private surrounded garden in the public area around the building's blocks, 9th July GN, picture by author 20/10/2016



Figure 5-17: A very narrow pathway between the buildings' blocks, 9th July GN, picture by author 20/10/2016

Furthermore, according to the research findings, an interviewee from the professional group, A M, highlighted that linking the communities with good accessibility from one to another by pedestrian paths can also create more social cohesion, which promotes the relationship between the local residents and positively encourages social interaction:

'I believe that the interaction between the residents begins from the house door, then as children growing up, they move to the nearest space around their homes, then to the central area of the neighbourhood. This should not stop here, the high-quality neighbourhoods and coherent urban design is one that provides walkable paths and accessibility between the neighbourhoods to create active and vital channels that connect residents with each other; which finally leads to more interaction and a high sense of community'.

This concept is essentially based on the idea of the hierarchy of the public spaces from the housing clusters to the central space of the neighbourhood, to the similar spaces of the other neighbourhoods around the city. This perspective focuses on ensuring continuity between the neighbourhoods and minimises the chance of producing isolated communities. As a result, the social communication through the neighbourhood becomes more vital and practically effective. Therefore, the level of integration between the residents will be increased which eventually enhances the local community to be more valuable in terms of life quality.

5.3 The Content of Public Spaces

FACILITATED AND NON-FACILITATED PUBLIC SPACES

Facilities which include the physical equipment and the provision of appropriate furniture that makes the space usable are essential in public spaces for them to work successfully as spaces of community interaction and activity. These facilities include the seats, bins, lights, playground equipment, disabled needs, sports equipment and public toilets, among others. This issue has been discussed by scholars in numerous studies, where Kurniawati (2012, p. 479) for example points out that: 'There is not enough public space equipment for everybody, like disabled, elderly, children, and pregnant women and also breastfeeding mothers'. Similarly, it appears that in the case studies examples, most of the interviews and questionnaires data show that facilities in the public space are urgently needed, for the residents of both the GN and TN neighbourhoods in order to apply their activities.

Scholars have pointed out a similar concerns in other regions, examples such as Trancik (1986, p. 3-4) has used the term 'lost space' to focus on this issue and he made similar argument describing the lost space as public spaces that are 'in need of redesign anti-spaces, making no positive contribution to the surrounds or users'. In related research, Carmona and De Magalhaes (2006, p. 77) stated some examples of lost spaces on a more general basis such as,

'The base of high-rise towers or unused sunken plazas . . . parking lots . . . the edges of freeways that nobody cares about maintaining . . . abandoned waterfronts, train yards, vacated military sites, and industrial complexes . . . deteriorated parks and marginal public-housing projects'.

In this context, according to the research findings, residents are strongly not satisfied with non-facilitated public spaces and they consider these as places of concern and negative impacts, for example, to become a dumpsite for rubbish or similar actions. Therefore, to functionalised the public space is as important as the provision of its area – otherwise, it will be an undesired place.

One of the research tasks is to measure the impact of facilities shortage on the people's lives in their neighbourhoods. The results show that the levels of facilities in the existing sites are below the needs of the residents to practice their daily activities. In many parts of the neighbourhood, there are empty neglected areas as shown in Figures 5-18 and 5-19. Even though this area is likely to be used for some social events, it is not satisfying the users in terms of the range of provided facilities. The following interpretations show in detail the positives and negatives of the public space features and how they affect the social life of the residents of the neighbourhood.

Madanipour et al. (2013, p. 50) highlight that in the public sphere there is a fundamental question which always should be asked: '*To whose service should public space be built?*' To answer this question there should be a clear scope, function and role of the neighbourhood public space so it can illustrate the importance of providing the basic facilities in the public spaces.

On the other hand, respondents of the 9th July GN stated that the area of the neighbourhood public space is generally acceptable; however, their main concern lies on the lack of facilities and physical elements which attract and encourage the residents to become involved in the public areas. This public space needs more

attention to improve its quality such as providing physical equipment and some landscape works. Many of the respondents suggested that empty spaces are also important for our neighbourhood because they are used in the social events.



Figure 5-18: Neglected Public Spaces in the central of GN, Aljazeera, Misurata, Libya, photo by author 25/08/2015

Figure 5-18 and Figure 5-19 show the area of the open public space inside one of the similar neighbourhoods 'Aljazira' GN of Misurata city. However, although this neighbourhood has an advantage of large and well-located spaces between the housing buildings, it appears clear that they are non-facilitated places and as a result, they became empty areas that residents hardly use in public activities. This lack of attention to these spaces is considered one of the main negative points in the community quality; at the same time, it is very clear that the urban design of this neighbourhood allows a large area of open space which should have been used and facilitated to provide a better places for the local users to fulfil their social and outdoor activities' needs such as sports facilities and children playgrounds. Therefore, it is not always the design is the problem, it is also the other authorities how to provide and prepare these space for the practical use are responsible.



Figure 5-19: Large empty public space in the GN, Aljazeera, Misurata, Libya, photo by the author on 25/08/2015

This lack of well-facilitated public spaces of the neighbourhoods impacts negatively on the social aspects of the neighbourhood such as residents' relationships and life quality. In terms of the public space quality, with regard to research findings, it appears that one of the reasons that the relationships between the residents are weakened is the lack of facilitated public spaces, which offer less chance for the residents to meet, gather, share activities and to have positive practical communication, leading to a disintegrated communities.

On the other hand, the challenge of creating good public space is to encourage people to spend their time in and to create such activities that residents wish to have. Otherwise, providing space without facilities can become a neglected place which has a negative impact on the neighbourhood quality because what the evidence shows is that residents are not ready to provide such facilities by their own efforts. The residents, in fact, rely on what the government provide either in the TNs or the GNs as both the public and open spaces are owned by the government.

For example, in GN named 'Aljazeera' where the author carried out some observation as per Figure 5-19, two residents who were included in a field discussion, HD and SM, stated that the neighbourhood contains a wide open area, in the centre and also in each group of housing blocks. This design allows plenty of

spaces which are meant to have several facilities such as children's playground, sports courts, landscaping area for sitting, and paths to walk along, but unfortunately, these areas have remained empty since the end of the neighbourhood construction which was over 30 years ago.

Along the same lines, participants of both sites '9th July and Almegawba' stated that there are some other public spaces that have become dumping grounds for rubbish. For instance, some open spaces remain empty or are used by locals illegally to throw the waste in them. It is probably due to their location as they are either on the edges of the neighbourhoods as per figure 5-16 or because they are not provided with facilities and physical equipment. In this case residents pointed out that these spaces are not appropriate to be used in the social and entertainment activities; for example, when space is parallel with a busy main road or if it is far away from the housing clusters see Figure 5-20 and Figure 5-21.



Figure 5-20: Non-facilitated open public space in the GN 9th July Misurata, Libya, picture by author 15/08/2015



Figure 5-21: Good size open public space in the central part of the 'Aljazira' neighbourhood GN is not been used for its purpose, picture by author 19/08/2015

Figure 5-22 and Figure 5-23 show children while they are playing football on the roads due to a lack of facilitated playground, pitches and sports open spaces activities. These are the regular daily activities that children often engage in during their free time. This situation of unsecured space which is located alongside the traffic road is really risky for the children and accidents may happen at any time. Therefore, facilities provided in open public spaces need to be located in a safe area and protected from the main roads with appropriate barriers such as wooden fences or integrated bushes from the main roads. All the participants included in this study stated that the most needed facility in their neighbourhood is the safe and facilitated open public spaces such as playground, pitches and soft areas among others.



Figure 5-22: Children play football in the streets; this due to the lack of provision of sports pitches, 9th July GN, picture by author 15/08/2015



Figure 5-23: Non-facilitated public space, Aljazeera GN, Misurata Libya, picture by author 19/08/2015

5.4 Management and policies

Operating and managing the public spaces of the cities including the open spaces of the city centre and the neighbourhood public spaces are some of the issues that have attracted special concern in the past and in recent times. For instance, Carmona and De Magalhaes (2006, p. 76), (Carmona et al., 2008) mentioned this issue in their research; they quote from (Carmona and de Magalhães, 2004) that: 'concerns about public space quality and its better management are shared across the developed world'. They argue that poor public space quality and poor management systems seem to disturb the public realm; thus, there is a need to

focus more on this issue and attempt to connect it directly to its relevance elsewhere (Carmona and De Magalhaes, 2006). In the same way, many other examples of the similar study point out the same concern about the quality of public space management (such as (Goličnik and Thompson, 2010, Keene, 2016, Isendahl and Smith, 2013, Tibbalds, 2012)).

Element	Frequency	%
Missing data	1	1.3
Lack of children's area, green areas	22	28.6
Neglected areas, lack of physical settings	8	10.4
Lack of prepared parks, a weak relationship between the neighbours	4	5.2
Lack of sense of community and no interaction between the residents	4	5.2
Lack of cleaning work and collecting rubbish from city council	3	3.9
Lack of lights and there is some rubbish around	3	3.9
None	3	3.9
Less interaction, the feeling of isolated from others	2	2.6
Low interaction, isolated families and no communication	2	2.6
The negative attitude towards the PS of the neighbourhood	2	2.6
Not enough attention to the cleaning work	2	2.6
Not prepared, lack of green areas and lights	2	2.6
There are some rubbish and neglected spaces	2	2.6
There are some rubbish and neglected spaces and low interaction with neighbours	2	2.6
Lack of cleaning work by the city council services, change of neighbours often.	1	1.3
Lack of cleaning services	1	1.3
Lack of communication between neighbours, no cooperation or sharing activities	1	1.3
Lack of interaction, lack of communication especially males	1	1.3
No appropriate place for children's activities	1	1.3
No social interaction, communication with neighbours except during the significant social events	1	1.3
Not enough attention to the PS	1	1.3
Residents care about their houses, not the PS	1	1.3
Rubbish not in the correct place	1	1.3
Shops' centre is not working	1	1.3
The small size of PS and not prepared	1	1.3
The PS is not prepared well to use for children's activities	1	1.3
There is no sense of coherence or interaction between neighbours	1	1.3
Traffic	1	1.3
We don't interact unless during social events	1	1.3
Total	77	100

Table 5-4: The negative features in the PS of the GN 9th July

In this research, the data show many significant results for both sites, with respondents indicating many important points with regard to the statement that was included in the questionnaire form: 'what is the most negative feature in the neighbourhood'. Respondents from 9th July neighbourhood GN answered in different statements as presented in Table 5-4 while the statements by the respondents of the TN Almegawba in Table 5-5. In fact, most of these answers are related directly to the low quality of the public space management such as the highlighted 'coloured' statements.

Elements	Frequency	%
Missing data	1	1.2
Bad organisation	1	1.2
High density, randomness	5	6.1
Disturbance and high density	1	1.2
Loud noise, traffic	1	1.2
Lack of attention from residents	1	1.2
Lack of children's playground	2	2.4
Lack of cleaning works	3	3.7
Lack of communication between the neighbours	1	1.2
Lack of green and soft areas	6	7.4
Lack of green, public, soft areas and for disabled people	1	1.2
Lack of help between neighbours	1	1.2
Lack of interest in the open public space like operating and cleaning, etc.	1	1.2
Lack of interest in the place	2	2.4
Lack of lights	4	4.9
Lack of lights at night and lack of children's playground	1	1.2
Lack of public areas and their physical settings	3	3.6
Lack of safety	1	1.2
Lack of street furniture like public bins	1	1.2
Lack of trees and other greens	1	1.2
Light and lack of cleaning services	1	1.2
Narrow streets and crowded	3	3.7
Neglected open areas	2	2.5
No place to put litters	1	1.2
No public space for sitting with residents	1	1.2
No space for female	1	1.2
Noise, neglected open space	10	12.3
None	6	7.4
Not enough area for the public spaces and a lack of physical seating in the public spaces	1	1.2
Not enough car parks	1	1.2
Not enough care of the central garden	1	1.2
Not enough co-operation	1	1.2
Not enough support for the public space, limited play equipment for children	1	1.2
Not well landscaped and lack of cleaning work	2	2.5
Nothing	2	2.5
Open roads from all sides	1	1.2
Place for the youth to practice their activities	1	1.2
PS here is not friendly to the disabled, lack of public seats.	1	1.2
Safety, relations, no disturbance	1	1.2
Some slight arguments	1	1.2
Teen behaviour	1	1.2
The car park near my house	1	1.2
There are a lack of prepared parks	1	1.2
Empty areas	1	1.2
Total	81	100

Table 5-5: The negative features of the PS in TN Almegawba

It can be seen from the residents' responses that clearly the level of maintenance and cleaning operation of the public spaces of the residential areas are low. This issue can explain that government fail to manage these areas which reflect on the quality of these spaces. Regarding the respondents from the interviews data, many of the residents for example in GN 9th July the participant F B stated that 'people need more attention from the responsible authorities to serve and manage the spaces of the GN, one these spaces are belong (owned) by the government, they should take care of it'. On the other hand, a participant S E from TN Almegawba stated that 'in this neighbourhood, we have kind of self-organised strategy, as a residents have been living together for a long time and sharing all our life challenges, we usually care about our community. It is one of our responsibilities to keep the public spaces around and between our houses clean because we use them in our social occasions'. The interview data show that, there is kind of cooperation between the residents in TN as they do some cleaning works in their neighbourhood by renting a private company and share the payment amount or they try to depend on their relations with a decision-makers in the government to send them a staff to do the cleaning works, garden work of the public spaces within their neighbourhood.

Overall, it seems that both sites are affected negatively by the low quality of the public space management, requiring more investigation to be taken in this research. With regard to the interview data, the participant H S from the decision-maker group offered significant information about the poor management system of managing the public space areas either in the city spaces or the neighbourhood ones:

'The HIB's main role is to follow the standards and criteria of the Ministry of Urban Planning in terms of the location, size and content of the public spaces in the neighbourhoods, and that determines the percentage of the public space, roads, public buildings and the open spaces...etc. from the total area of the site'.

The participant H S from HIB reported that HIB's role is to build the housing projects, but not operate and manage these places. These duties come under the responsibility of another authority which is the General Services Company (GSC). In addition, H S added that the GSC is responsible for managing all the public and open spaces of the city, so they are responsible for operating, cleaning and protecting the open public spaces. These duties include development and redesign, and improving the quality of these spaces. The HIB representative in Misurata

region argued that public space should always belong to the government to prevent any use by the private sector. He emphasises that even the interior of the neighbourhood should be designed, built, operated and controlled by the public sector to ensure that it is accessible to all residents at all times.

The participant H B, the representative of the GSC in Misurata region, acknowledged their responsibility of operating and managing the public spaces of the city in general. However, the duty of the GSC is to operate this site after the end of the construction work by the HIB or the similar organisation when the GSC officially receives the site for the management. Sometimes, however, sites are not handed to the GSC which causes this confusion and overlapping of the management systems. Moreover, for the small projects, the usual process is to sign a contract with a private company to design and construct the project including management. After that, the GSC is responsible for the watering and replacing the plants and supervising the site according to the contract between the GSC and the owner which is the government. Therefore, the GSC deals only with the locations that fall under the contract with the ownership of these areas, but the responsibility of the cleaning operations, which covers all the city's regions fall under the company's scope of work.

Another important organisation is the Housing and Utilities Office (HUO). This office actually was the main party that managed the housing projects but, since 2006 due to political changes in this sector, much of the scope has shifted to the HIB as a new policy scheme for the entire country as explained in the introduction section. Therefore, the role of the organisation now is to supervise part of the projects including the old projects such as Aljazeera neighbourhoods. The GSC and GO are companies under the authority of the HUO which are related to public spaces management. In the meeting with the representative of the HUO, the head of this department, S Z, as a decision-maker participant stated in the interview that the latest policy has affected the quality of the projects' management as many of the responsibilities are moved from one board to another, which has led to confusion in their specialisations. The author contends that the public space of the neighbourhoods should belong to the same sector which runs the project; as is the case with the housing units, the infrastructure and the landscaping which include the open public spaces inside the neighbourhood. In this case, the constructor ensures the end of all the works before handing the site to the owner. The owner can then sign a contract for the operation and the management separately with the GSC or the GO.

In a similar indication of the management confusion that impacts negatively on the public space management and quality, a professional participant, A S, explained the confusion that occurs in the public space management, whereby as a result of the government increasing the housing units in the last decade, there is less land area for public spaces in many of the governmental neighbourhoods. He stated that in Libya the management system is not efficient because they do not work on a strategic plan for long-term, instead they just make a temporary solution which they do not last long and everything return back to the first point. In fact, the government focuses on quantity, not quality, and the provision of a large number of housing units with lack of urban quality consideration has led to this result. Moreover, it has consumed a large amount of land on account of the public space area of these sites. The confusion of responsibilities between the public sectors due to a large number of projects with a poor management system has worsened the quality of the public spaces of the city. In addition, he stated that according to the similar practices in developed countries, these projects should be handed to the private sectors in order to be more successful and to fulfil the resident's needs, as the private sector provides more quality and can meet the international specifications through more professional delivery.

Involving the private sector in management tasks is not a new issue that has been noticed in the research data. Many participants particularly the professional group suggested a new scheme that might become a practice very soon. This scheme is a strategy of combination between both sectors. According to the size of the projects, the construction works can be done by the government while the management of these projects can be divided among companies in the private sector. In this issue, a debate can also be noticed between the two groups of 'decision makers' and 'the private professionals'.

5.4.1 Public Space Operation

Operating the public spaces ensures the stability and the quality of the public spaces. This task includes the cleaning works, watering the green areas/trees, and replacing missing/damaged items such as bins and seats. It is clear from the research findings that there are negative effects on the quality of public spaces because of the conflict and overlapping responsibilities between the government authorities. This situation, in fact, has become significantly worse after the political crisis in 2011 which has affected all the country's firms in many ways. Since that time the situation of operating the public spaces has deteriorated and a gap of

responsibilities has emerged place between the public and private sectors. The research findings highlighted several important points with regard to this issue.

First, respondents from both case study sites stated that they have not witnessed any work on the public spaces of their neighbourhood for a few years. They pointed out that it is even unknown whose responsibility it is to operate these places as they have not seen either public or private organisation in the site for a long time. On the other hand, by interviewing the head of the General Services Company GSC (see Table 5-5) which is the main company involved in operating and managing the public spaces of Misurata city through the city council, the respondent H B stated that,

'The role of their company is to operate and apply all the works needed in these public spaces either of the city centre or of the neighbourhoods, but this job is through a contract between GSC and the city council which has not been signed for several years due to the instability of the political situation in the country'.

According to further discussion with other decision makers from the city council, S Z and H S from HIB and A Z from the MUP, it can be seen very clearly that there are disorder and overlap in responsibilities which has led to the falling quality of these public spaces. To conclude, complete urgent action should be taken from the higher level of the country government to restructure the management policy of the main firms and organisations at both levels – the city council and the higher authorities of the government. This action can provide a clearer distribution of the services and responsibilities among the local organisations including those responsible for the public spaces services and operations.

5.4.2 Public Space Maintenance

Public space maintenance is fundamental to maintaining the same level of high quality of the place. Similar research highlighted the importance of maintenance for the public space development (Beck, 2009). Table 5-6 shows that maintenance is one of the important features that impact directly on the quality of public space. Regarding the physical elements of the public spaces, maintenance is one of the important factors that can indicate the level of the quality of public space. It is very clear that public spaces such as children playground, public seats in parks, sports facilities and similar physical settings can lose their quality through the time due to the frequent daily usage by residents of the neighbourhood.

Type of feature of quality of public space	Feature
Condition/maintenance	Robust Adaptable
Design	Well-designed Legible Has a sense of enclosure
User	Healthy Has space for social interaction Fulfilling Relaxing
Function	Community resource Vital and viable Functional

Table I.
Features of quality of
public space not
measured in national
datasets

Table 5-6: The indicators' categories linked to the quality of public space, (Beck, 2009, p. 245)

In this context, there should be a plan of keeping the same quality by replacing the missed items and fixing the broken ones in a monthly or other specific time of checking and maintain these places. Therefore, in the Table 5-6 can be seen that not only the design, use and function of these features are important, but also the maintenance is very important in terms of the public spaces quality.

5.5 Local Environment and Weather Conditions

Libya has moderate weather conditions; thus, people have a wide range of social activities in public spaces, particularly outdoors, such as weddings. This type of weather condition during most of the year contributes positively and effectively to enriching the public space value. On the other hand, it is not an easy task to maintain the green areas and plant trees to provide greenery and shade. It is significantly expensive because of the long drought period and the lack of water resources. In Libya's case, the appropriate solution to this issue is to create a balance between the green and paved areas, so the costs of watering and replacing the green spaces can be reduced.

Environment plays an essential role in creating a sustainable qualitative life for the residents particularly in open spaces where the environment has a direct reflection on the people's activities and movement. As explained previously in this research, local weather is good for the outdoor activities; it is within the average of comfortable temperature for most of the year. The average of a comfortable temperature is between 18°C and 26°C, (Taleghani et al., 2015, Chen and Ng, 2012, Honjo, 2009) – refer to Figure 5-24.

PET °C	Thermal Perception	Grade of physiological stress
4	Very cold	Extreme cold stress
	Cold	Strong cold stress
8	Cool	Moderate cold stress
13		
18	Slightly cool	Slight cold stress
	Comfortable	No thermal stress
23		
	Slightly warm	Slight heat stress
29	Warm	Moderate heat stress
35		
41	Hot	Strong heat stress
	Very hot	Extreme heat stress

Figure 5-24: Shows the thermal perception towards the temperature in outdoor spaces. Source: (Taleghani et al., 2015, p. 66)

Due to the advantages of the local outdoor environment, people in Libya seem that they spend more time outdoors compared with people who live in other cold regions as explained in this source for the difficulty of outdoor interaction in the cold weather regions (Chen and Ng, 2012). Therefore, this requires more attention to the public spaces to fulfil their needs. According to the research data, people from all the age categories and from both sites spend most of their free time outdoors. In GN 9th, it can be seen that almost 80% of the respondents spend at least two hours per week up to more than 15 hours as per Table 5-7. In TN Almegawba similar percentage was noted by around 80% as well as per Table 5-8. The majority of the respondents in both sites spend between 3 and 15 hours per week, which are considerably high which indicate the clearly high level of enjoyment of spending time outdoors.

		Frequency	Percent%	Valid Percent	%
Valid	none	21	27.3	27.3	27.3
	1/2 h/w	4	5.2	5.2	32.5
	1 h/w	4	5.2	5.2	37.7
	2 h/w	11	14.3	14.3	51.9
	3 h/w	4	5.2	5.2	57.1
	4 h/w	5	6.5	6.5	63.6
	5 h/w	6	7.8	7.8	71.4
	6 h/w	6	7.8	7.8	79.2
	10 h/w	9	11.7	11.7	90.9
	15 h/w	5	6.5	6.5	97.4
	more than 15 h/w	2	2.6	2.6	100.0
	Total	77	100.0	100.0	

Table 5-7: Illustrates the participants' length of stay in the POS, in GN 9th July

		Frequency	Percent	Valid Percent	%
Valid	none	20	24.7	24.7	24.7
	1/2 h/w	5	6.2	6.2	30.9
	1 h/w	8	9.9	9.9	40.7
	2 h/w	11	13.6	13.6	54.3
	3 h/w	8	9.9	9.9	64.2
	4 h/w	8	9.9	9.9	74.1
	5 h/w	4	4.9	4.9	79.0
	6 h/w	6	7.4	7.4	86.4
	10 h/w	7	8.6	8.6	95.1
	15 h/w	3	3.7	3.7	98.8
	more than 15 h/w	1	1.2	1.2	100.0
	Total	81	100.0	100.0	

Table 5-8: Illustrates the participants' length of stay in the POS, in TN Almegawba

On the other hand, there are around 20% of the respondents indicated that they do not spend any time in POS. According to the further data of the interviews, it appears that 90% of this percentage is female. This show that the female has a very low rate of participation in POS in their neighbourhoods. This issue will be explained in-depth in section 6.6.2 Chapter 6.

The residents' desire to spend more of their time outside indicates a very important conclusion that people enjoy being outside in the public spaces, for the following four reasons:

- a) The weather conditions are welcoming at most times because compared to other regions and countries there is less rainfall and the temperatures are higher as described by more than 80% of the respondents.
- b) In TNs, all the people are familiar with each other; this makes the social interaction and sharing the activities smoother and easier. In GNs, the level of interaction might be slightly less than it is in the TNs; however, there is a relatively acceptable range of vitality between the residents, particularly in the small groups of houses where they have the time to get to know each other and became familiar enough to get involved in the social activities and local events in the public spaces.
- c) The cultural background of the residents: in the local community, all the participants admitted that being outdoors around the house and in the public spaces of the neighbourhood is a part of their culture and satisfied them mentally and socially. It is more than just free time; it is a social value where getting involved in any type of activities with your neighbour is a must from their perspectives.
- d) The safety and security aspect; more than 70% of the participants from both sides explain that being present in the public spaces of the neighbourhood and around the house means taking care of all their belongings and those of their neighbours. In this case, the residents play a significant role which can be described as an exclusive mentality, whereby everyone in the community self-acts to stop and act upon any negative action that may have been done by strangers to any of the neighbouring properties.

5.5.1 Environment Protection

Although the local weather conditions and environment characteristics are often acceptable and preferred by the local residents, more initiatives are needed to protect against the undesirable effects of the weather. For short and specific periods of time during the year two non-preferred weather conditions can be noticed. These times are the **dusty hot wind** and the **high temperature with strong sunshine**. In the summer season from June to August there are expectations of a high temperature which goes up to 48°C on some days with direct strong sunshine (EL FADLI, 2012). This condition could affect negatively the

outdoor activities, meaning that people, cannot undertake their usual activities as a result. The precautions that are usually taken to protect the outdoor space is to provide more shaded areas and shelters in order to encourage people to find a shaded place to spend time in activities such as sitting, chatting, drinking a cold drink and having times of relaxation.

Similar actions are needed to prevent the effect of the hot dusty wind in the spring season which come from the South West of the country towards the North (figure 5-25) (O'Hara et al., 2006, Tafuro et al., 2006). The public space needs to be protected from the non-desired weather conditions. According to the interviews with the professional's group a participant, A G, pointed out that providing shade by increasing the number of trees and providing rows of trees around the playground and other outdoor spaces will decrease the negative impact of the non-preferred weather conditions such as dusty hot winds (Figure 5-26).

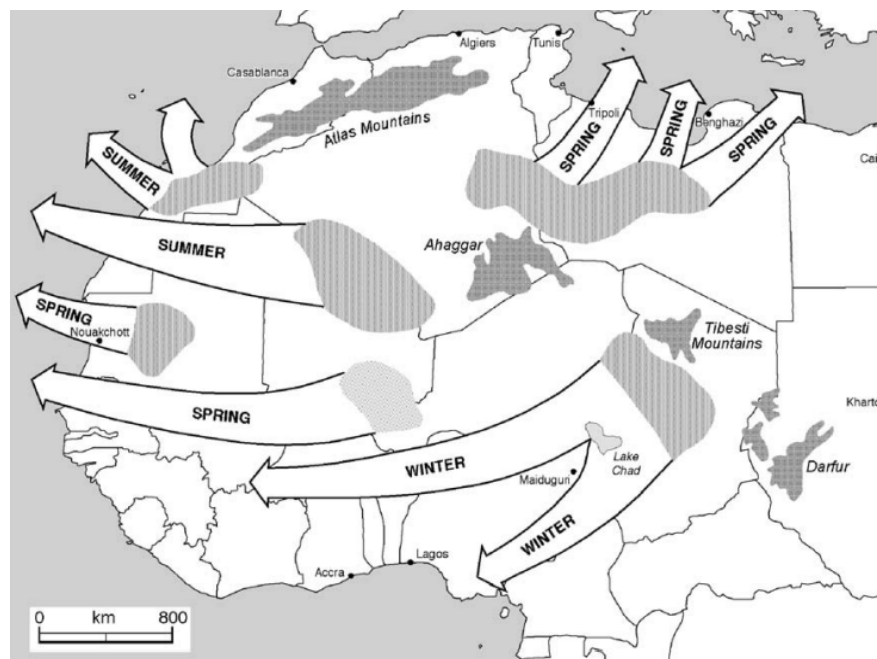


Figure 5-25: Shows the movement of the dusty hot wind from central large Sahara to the north towards the Mediterranean Sea through Libyan coast, source, (O'Hara et al., 2006, p. 3882)



Figure 5-26: Public parks surrounded by a low-height wall and compact bushes, picture by author 22/05/2005, Misurata, Libya

For example, from the observation, it can be clearly noticed that people are usually present in the good weather which is 'a moderate temperature and moderate sunshine'. In Figure 5-27, during the time of the strong sunshine between around 12:00 pm to 16:00, the playground is hardly used, while from around 16:00 and afterwards, the users are actively present. They clearly enjoy their time when the sunshine is less impact and lower temperatures, as shown in Figure 5-28.



Figure 5-27: No activities occur in undesirable weather, (strong sunshine and high temperatures) 11:44 am, picture by the author, 13/08/2015, PS in Misurata, Libya

Figure 5-27 and Figure 5-28 show the contrast at two different times at the same place. In addition to the contrast in the weather conditions, there is also a very important element which is the provision of plants. As can be seen in Figure 5-28, the adults who are looking after these children are relaxing under the shade. Adults who are accompanying their children benefit from the shadow of the trees so they can sit and watch and/or read papers/books, and some of the adult groups can engage in conversation.

Figure 5-29 shows good examples of a shaded public space creation which encourages the users to enjoy sitting and having a break. Therefore, it is important to enhance the local environment to support the sustainability of the public space. This example of successful places should be considered in the new development of the city and can be used in the public spaces of the neighbourhoods which can improve their quality and support the physical elements of the place.



Figure 5-28: Activities occur in good weather, (low sunshine + less temperature degree) 17:00 pm, picture by author 13/08/2015, PS in Misurata, Libya



Figure 5-29: Shade in public spaces (public park) protection from strong sunshine in hot days of the summer, picture by author 22/05/2005, PS 'central park' in Misurata, Libya

5.5.2 Green Areas

The green area is an effective physical element in the public realm as it reduces the high radiant temperature and decreases the negative impact of the strong sunshine. Green areas support the public spaces in many aspects; they improve the space in terms of the environment, usage, sustainability and aesthetic values. Green surfaces between the buildings, along with the streets and in the playground are one of the most effective methods to improve the quality of these spaces (Klemm et al., 2015). Moreover, green spaces reduce heat sink effect, create microclimates and seasonal shade, slow wind and improve air quality and aesthetics.

According to the findings of this research, it seems that there is a massive lack of green areas particularly in the open public spaces of the neighbourhoods. It is very clear in Figure 5-30 that over than 65% of the respondents from the 9th July neighbourhood are not satisfied with the range of green areas provided. Figure 5-

31 shows the answers of the respondents to the question, 'is the area of public spaces for children (i.e. green area and ...) appropriate in this neighbourhood?' Most of them stated that the provided range of green areas are less than the needed areas and the existing areas need watering as most of the grass has dried up. Also, there are some other areas in the neighbourhood that are un-grassed, which may become a source of dusty wind in the summer (Figure 5-31).

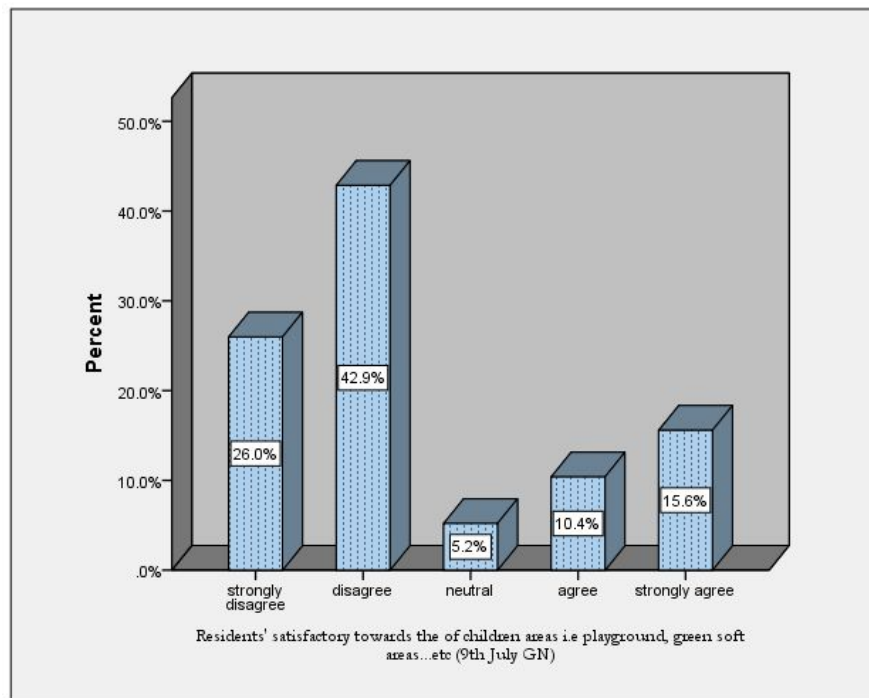


Figure 5-30: Responses to the statement 'you feel satisfied in terms of the quality of the children area such as playgrounds, green, soft areas', in 9th July GN



Figure 5-31: Un-grassed area inside the neighbourhood, 9th July GN, photo by author 20/10/2016, Misurata, Libya

Surprisingly, in Almegawba neighbourhood TN, about 50% of the respondents answered positively on the former question which means that half of the respondents are satisfied with the provision and quality of the green areas in their neighbourhood see Figure 5-32. This difference in the percentage of the residents' satisfaction towards the green areas between the two neighbourhoods is due to the high amount of trees in the TN which contribute positively to provide shaded areas.

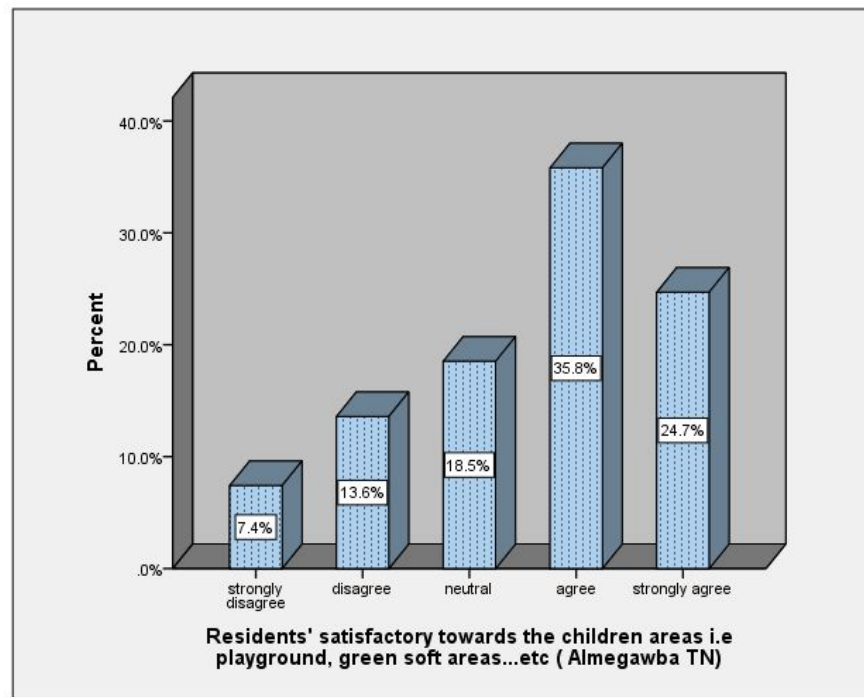


Figure 5-32: Responses to the statement 'you feel satisfied in terms of the quality of the children area such as playgrounds, green, soft areas', in Almegawba TN

In general, more efforts are needed by the responsible authorities to improve and provide more green areas in the empty land, not only to provide appropriate play places for children but also to improve the quality of the local environment and decrease the impact of negative weather conditions.

In addition, referring to the qualitative data from the interviews, professionals and decision-makers highlighted that green areas are fundamentally important to improve the quality of the open public spaces. For instance, A S from the professional's group stated that 'The people, in general, like the green areas and it is natural that they will be satisfied to have green areas near their houses to use it for many social and entertainment purposes'. The participant A S argues that the providing the green area is one of the government's responsibilities because the residents cannot afford the cost of such projects. Furthermore, with regard to the discussion with the head of the General Services Company (GSC) as the responsible

organisation involved in providing the green area within the region of Misurata city, the participant H B stated that the GSC is currently experiencing a huge challenge in terms of the amount of work related to the green spaces. This challenge includes a shortage of budget and confusion between the organisations which unfortunately impacts negatively on the quality of the public green areas around the entire city. To conclude, the lack of the green areas either inside the neighbourhoods or elsewhere in the city is due to many reasons which can be summarised in the following points.

- a) The mismanagement of open public spaces including the green areas which is one of the government responsibilities towards the city as has been stated in the research data through the interviews and the questionnaires.
- b) The local climate (lack of rainfall levels and very dry weather most of the year) does not help in retaining the green area and it needs much effort and expense in watering and keeping the green area green.
- c) C) The actions of the residents (users), it seems that the users of these green areas are not acting positively towards the green areas. For instance, in the situation of the recent struggle with the local government, there are no local actions that can offer a temporary solution to take care of the existing green areas, particularly those within the neighbourhoods.

5.5.3 Outdoor Public Space

Outdoor public spaces are the most used and popular spaces in Libyan cities. People spent their time outdoors more than indoors, particularly in the spring, summer, and autumn. Outdoor public spaces can be within the neighbourhood or other ones elsewhere across the city and can have different forms such as the public parks, sports open spaces and walking districts, etc. Nasution and Zahrah (2014, p. 586) state that 'Public open space is a free place for people to be accessed. Everybody is free to do many various activities at the place'. In this view, it clearly appears that public spaces – either outdoor or indoor – should be designated to meet all the users' needs regardless of their age, gender and other characteristics. However, they may have different rules in how these can be used such as the time limit and the possible types of activities that can be undertaken.

In this context, open public space does not mean only green areas; it is broader than that because it includes all outdoor spaces which are accessible and free for all

the users. Koohsari et al. (2015, p. 76) clearly state that 'public open space does not necessitate to be green, but does require that the intended purpose of the space is for amenity or recreation purposes'. Therefore, it can be mainly considered that open space recreation and development includes many other methods than simply providing green spaces. In fact, all the development of the open public space is done particularly to increase its quality regardless of its content or its physical forms.

From the research data, it appears that local community is facing a real challenge in terms of the use of the open space due to its lack of quality. From the observation, it can be seen that residents are using the outdoor space in many different activities. However, they are not completely satisfied with its quality and the range of facilities. Interestingly, parents stated that their children play in nearby spaces around their houses even though the spaces are lacking facilities and equipment. This particular result indicates that the outdoor spaces are the most preferred for the children. The children want to discharge their energy and communicate with their friends with the basic tools that are available to them such as footballs, bikes and traditional games. They will not wait for the provision of facilities; instead, they invent their own games with the minimum tools that are available.

The research results indicate that the majority of the parents of both sites are completely not satisfied with the situation of the open public spaces as can be clearly seen in Figure 5-33 and Figure 5-34. This results from the respondents' answers towards the statement 'Open public space and green areas play a fundamental role in providing a high level of well-being and social value', which illustrates the massive need from the residents for the facilities in the open public spaces. It is a similar result obtained from both sites (the Almegawba TN and 9th July GN), which explains the lack of physical elements not only in the traditional neighbourhoods but also the governmental ones.

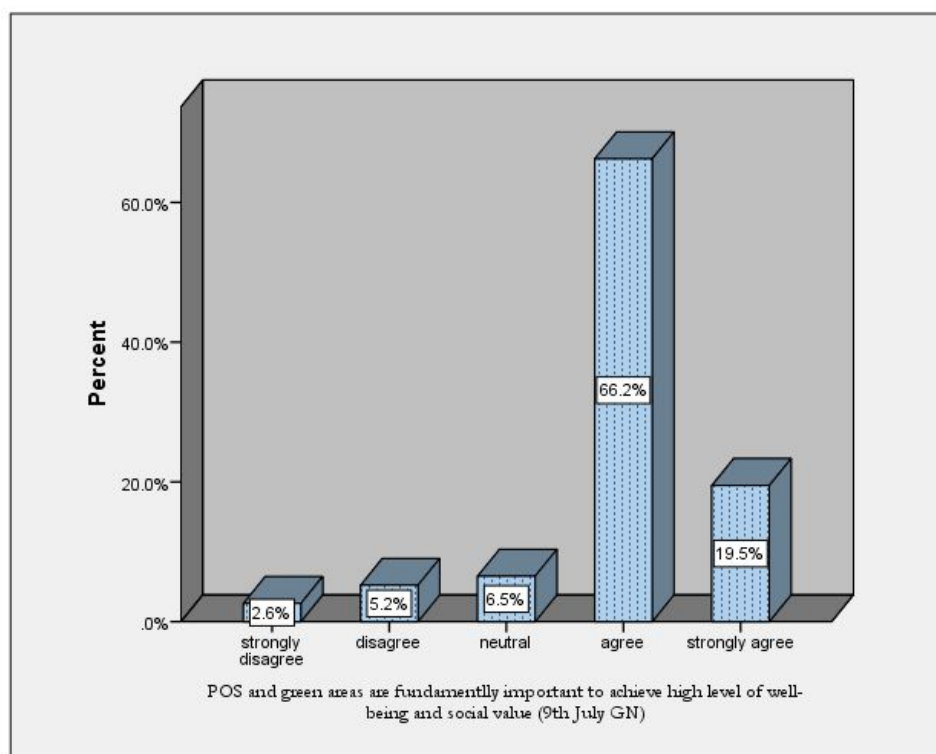


Figure 5-33: Responses to the statement 'POS and green areas are fundamentally important to achieve a high level of well-being and social value', in GN 9th July

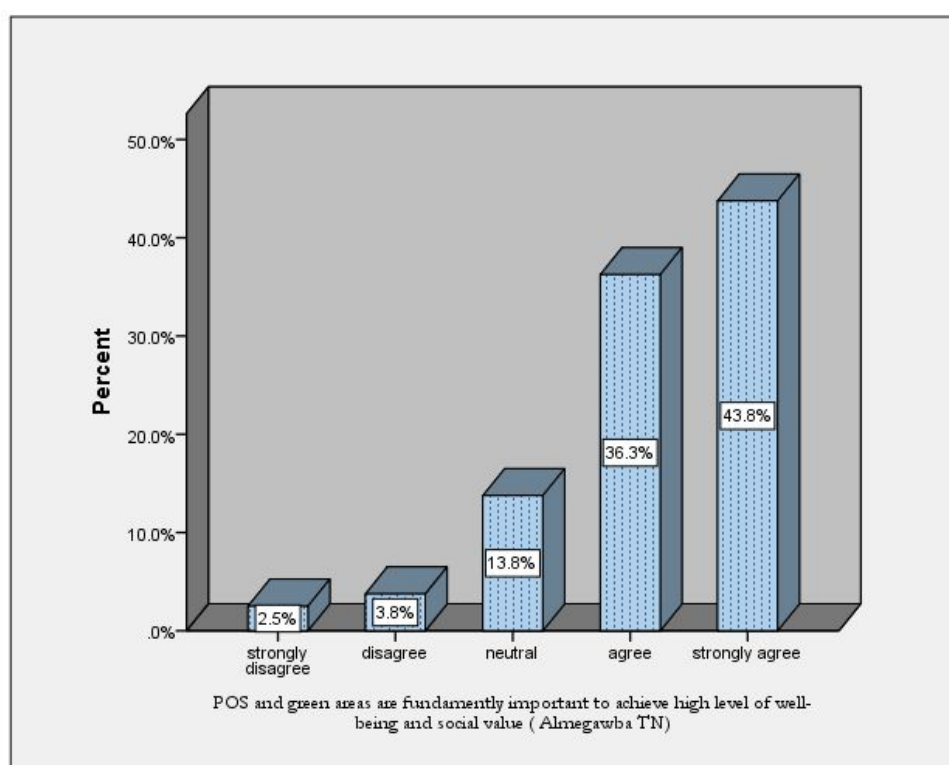


Figure 5-34: Responses to the statement 'POS and green areas are fundamentally important to achieve a high level of well-being and social value', in TN Almegawba

The Figure 5-35 highlights some examples of the activities that are happening in the open public spaces. Children can be seen using their bikes, sitting in groups and chatting. They are trying to adapt to the public space they have by creating simple and available physical tools to spend their time according to their desires of communicating with each other.



Figure 5-35: Several forms of activities that are happening every day in the outdoor spaces and the residents love to be present during most of the daytime, pictures by author 20/10/2016

For example, in Figure 5-35, children are trying to enjoy the outdoor space with the basic tools and games which are available and affordable such as biking and hide and seek games. The attached photos show many types of outdoor activities which illustrates a good level of social interaction and desire for communicating with others. Some of the activities are really basic and show the lack of equipment

provided in the space. Children are using bricks to sit on because there are no public seats in the area and, and they are playing football on the sandy ground.

5.6 Summary

In conclusion, the research has emphasised that the design of the neighbourhood in general and the public space, in particular, are below the standards set by the local authorities of the country. This assessment is based on the results which have shown an incompatibility between the actual situation and the standards of the MUP. Also, there is evidence from the professional group and the decision makers who stated that the existing quality is not enough to support the function of the public space in the neighbourhoods. Finally, the residents confirmed that there is a lack of facilities which should be provided by the responsible organisation of the government. At the same time, the official government organisations are aware of the role that the design of public space should play in terms of improving the quality of the neighbourhoods. The quality of the current situation of public space of the case study neighbourhoods is not at a satisfactory level and this is the case for most of the city neighbourhoods.

The research has also shown that the residents of both types of neighbourhood appreciate the necessity of the quality of the public spaces of their neighbourhoods which support and enhance their comfort. Probably, the design of the public spaces in the neighbourhood needs to be improved to a more effective and practical design. It has been importantly stated by Gehl (2004) cited in (Cilliers et al., 2015, p. 1373) that,

'A public space plan (site-scale and neighbourhood-scale) is the first step in the planning process where life, buildings and spaces are equal partners. This formula is made up of high density, integration, diversity, good public spaces and active ground floor facades'.

Therefore, this indicator is fundamental for consideration in the design process of the neighbourhood spaces.

This chapter has discussed specific physical elements such as size, location and central spaces. The results have pointed out that some of the existing sizes of the case study neighbourhood public spaces are not enough to include the local activities in most of the parts of the neighbourhoods because they are less than the local Libyan standards which are 20–25% of the total land of the neighbourhood

(Utilities, 2000). Public spaces are located along main roads in some cases and far from the central density of the neighbourhood in other places. On the other hand, findings also discovered some positive features such as the concept of the central space in the middle of the neighbourhood which has an effective impact on the residents to get more involved in social activities and encouraging them to share and participate positively within the public space. After all, any decision in creating semi-public and public spaces of the neighbourhoods should be made with the desires, needs, practices and values of residents otherwise they will not be satisfied and may lose interest in their spaces (Rouhi et al., 2016).

The other significant issue from the results is that in some GNs, large open spaces can be seen; which is a positive indicator. However, these spaces are attracting less attention and hence cannot be used properly by the residents. Most of the GNs have wide large open spaces, which is one of the advantages of its design but with the current lack of greenery, landscaping and plants provision, it makes them less beneficial. Rouhi et al. (2016, p. 458) confirm that,

'Green space is a symbol of cultural and social thoughts of a society and it is considered an important factor in urban space that it is considered by all people from the social, cultural, psychological aspects and plays an important role in urban planning'.

The findings also highlighted that residents face a challenge accessing the open areas through the semi-public spaces where some neighbours use obstacles to create their own private boundaries such as fences, vehicles and blocking the pathways. This is because of the lack of management and control of the public spaces and the gap in applying fines against these actions by the government or other responsible organisations. There is a really weak control system in the public spaces; this is one of the most negative issues impacting on the quality of public spaces.

The lack of facilities has been noted in both sites. Residents have stated that they are in massive need of the physical provisions such as children's playground, seats, parasols, sports pitches and other related equipment to facilitate the open areas. These physical elements can improve the vitality of the public spaces and make the users more engaged in their activities. As Riki et al. (2016, p. 60) state, 'Providing appropriate facilities and equipment for urban parks increases the satisfaction of visitors to the parks'. The results have also shown that because of the change in the rhythm of life and the ways in which people communicate, there should be a

development in the design of the new neighbourhoods to meet the requirements regarding the new form of lifestyle; for instance, creation of modern places such as a centre of electronic games and cultural centre where similar needs can be met.

The management and operations of the public spaces need more attention. The research has discovered a critical gap in the management and operation system of the public spaces due to many local factors. The overlapping between the government firms and disorder in their responsibility has a negative impact on the public spaces' quality. Residents expect that the government is responsible for all the services of the public spaces; therefore, in the GNs, it can be noticed that public space is left without attention from the public authorities. In the TNs, the concerns may be fewer but the operations are still below the needed level of organisation.

Finally, the weather conditions of the outdoor spaces is an essential physical element which needs to be considered in the new development of the city urban plan. The research has explored the impact of the local environment in outdoor spaces where the protection from non-preferred weather should be addressed. In fact, it appears that a few positive solutions have been applied in some parts of the neighbourhoods such as green areas, trees and shaded areas to protect against extreme weather conditions such as hot dusty winds and strong sunshine in the summer. This research highlights the role of outdoor spaces which the residents favour highly; thus more focus is needed to ensure that the spaces are adequate and suitable for the comfort of the users through several environment solutions; for instance, providing the appropriate amount of trees and green areas in these spaces to support a cooling system in summer, provide shade, and protect against winter temperatures. This has been also been suggested in similar research in the same region which has a 'Mediterranean climate'. Cohen et al. (2013, p. 295) emphasised that 'The importance of treed open spaces as the most effective tool for the mitigation of heat. The benefit of the cooling effect of treed urban spaces in summer far outweighs its disadvantages during the winter'. The question here is what can encourage the residents to communicate positively with each other more active and effective. From the research information collected in the interviews and from the questionnaire responses, the following points are the most effective characteristics that make the public space effective and vital:

- ❖ The good provision of suitable size and location of public open space, close to the housing clusters and appropriate area for equipment placement.

- ❖ Division of public space to separate areas for all the residents' categories such as children, youth, adults, female, disabled and elderly.
- ❖ Creation of a good range of facilities that can provide the users with their necessary needs during their time spent in the public space like small shops and café.
- ❖ Protection from the weather conditions particularly in open space, such as shelters, high trees, and green areas.

Most of the respondents who represented the majority of the residents agree that the former points are fundamentally important in order to create a valid active place in neighbourhoods' public spaces. As a result of this discussion, the previous points should be included in the design process of the neighbourhoods which become more necessary for future urban development.

CHAPTER SIX: INTANGIBLE 'Non-Physical' ELEMENTS

6.1 Introduction

This chapter focuses on the social side of the residents' relationships in the public spaces of the city neighbourhoods. The residents' relationships within the residential areas and cities' neighbourhoods are one of the most fundamental issues that urban quality is facing in the country of the case study (Salhin, 2011). In the following section, the researcher attempts to illustrate the significance of these relationships and their impact on the urban development of the residential areas including both types of common neighbourhoods of the local region: the traditional neighbourhood TN and the governmental neighbourhood GN.

6.2 The Relationship between the Residents

Evaluating the nature of the communications between the residents is one of the essential tools to examine the social side of the community composition. Interactions such as greeting, chatting, sharing sports activities, having a walk within the neighbourhood public areas or even sharing social events and cultural occasions are all forms of community interactions (Weil et al., 2012) which can vary from one region to another. In the case study locations, people use the public space of the neighbourhood on many social occasions, not only for daily activities but also for the most important social events such as weddings.

Regarding this view, public space is considered as a crucial part of the neighbourhoods' composition; it also affects the modality of the residents' relationships within their community. This section illustrates the main significant statements that were gathered from the research data including the questionnaires, in-depth interviews and the site observations which relate directly to the importance of the residents' relationship as well as involving the local residents in decision-making procedures. Relevantly, Middleton et al. (2005, p. 1725) stated that: 'The relationship between the neighbourhood one lives in and the extent to which one knows neighbours is highly significant'. Scholars also point out that trust between neighbours and knowing each other for a while is the key of enhancing the relationship among them and this reflects positively on the neighbourhood activities

as well as improving the level of interaction (Rasidi et al., 2012, Poldma et al., 2014, and Middleton et al., 2005). In a similar study in Malaysia, Rasidi et al. (2012) concluded that the level of interaction between the residents of each neighbourhood in the town is affected directly by the public spaces because these places are the places where everyone shares, interacts and gathers with others.

6.2.1 Social Relationship

Establishing an effective relationship between the neighbours depends on many factors such as creating the opportunity for the users to meet and interact in a comfortable atmosphere. Public space is one of the places that provide this opportunity for the residents to get involved in several activities. Behrad and Bahrami (2015, p. 89) state that 'People have an innate need to establish social relationships and therefore, they can provide opportunities so they can experience the social relationships'. Social relationships in the local Libyan communities are one of the most important features that all the residents appreciate and try to improve because of this impacts on the social satisfaction and psychological comfort within the neighbourhood. This value has been emphasised by most of the participants of both neighbourhoods in the research data.

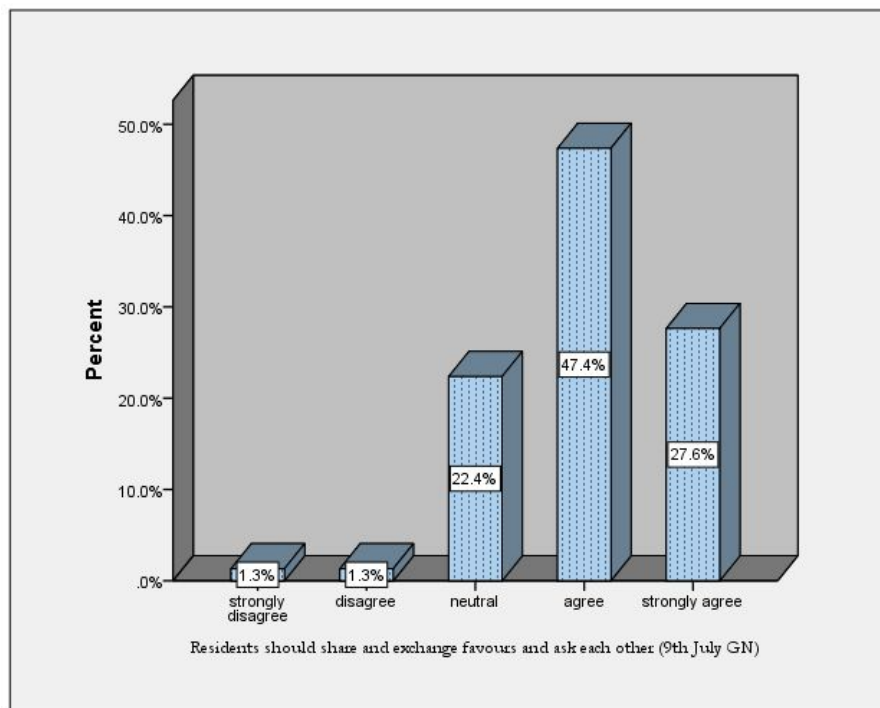


Figure 6-1: Responses to the statement 'Residents should share and exchange favours and ask each other', in GN 9th July

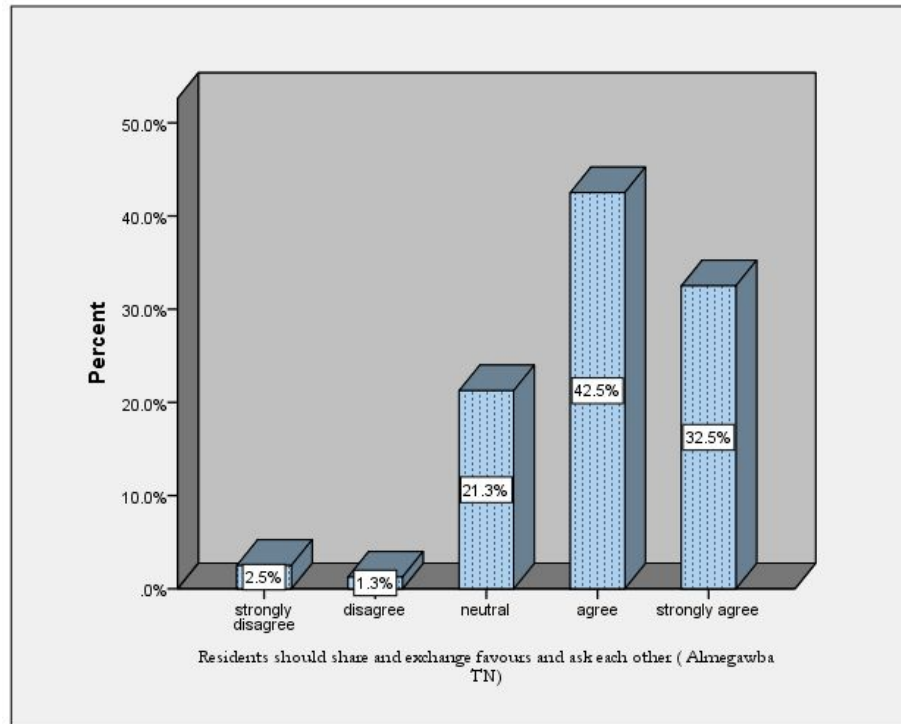


Figure 6-2: Responses to the statement 'Residents should share and exchange favours and ask each other', in TN Almegawba

According to the research data, it has emerged that the relationship between the residents of the neighbourhood is one of the strongest characteristics in the local community within the two sites. First, it can be seen in Figures (6-1, 6-2 and 6-3 a and b) that around 75% of the participants either agree or strongly agree that residents should have good relationships, support each other, and exchange favours. This belief from the majority of the respondents reflects the perceptions of the residents relating to the value of the social relationships. The results are similar in both types of the neighbourhood which indicates the strength of this element and it is not affected regarding the type of the neighbourhood – whether TN or GN. Therefore, this point can be considered as a permanent element of the local community which is present and strong in both types of the neighbourhood. However, by looking to the data, it can be seen that around 35% as per Figure xx of the respondents do not participate in the public spaces, therefore, there is a clear difference between the perception of the residents and what exactly happening in the site. Hence, some people have the intention to use the space but they actually do not do so. In the interview, there is more investigation on this findings. The results of in-depth interviews illustrate that people do not use the public space because of one or more of the following reasons:

- 1- Female do not participate, as highlighted by I S, because they don't feel comfortable in places where are mostly used by men and they were pointing out that 'there is a need for a special zones in the public spaces of the neighbourhood where female can have their privacy and apply their activities such as sports, social activities and so on.
- 2- Some of the respondents such as F I stated that families take their children to other places where there are facilities such as sports centre, Although they prefer that their children to stay in the community, because of the lack of good facilities they have to look for that in somewhere else.

Therefore, lack of suitable facilities, quality of the existing public spaces and appropriate categorised spaces will lead to a less integrated community. People will start to go different places to find their needs which can be negative in terms of social interaction and community cohesion.

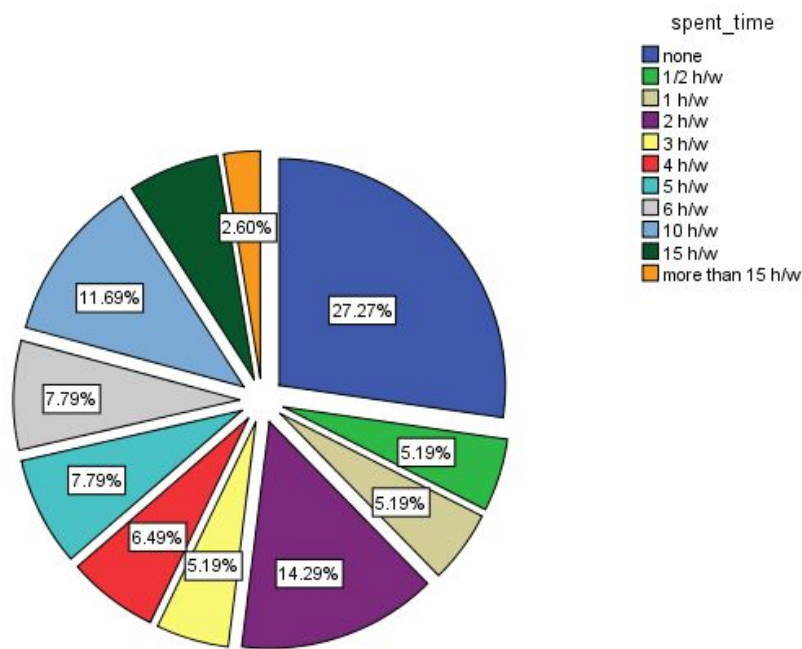


Figure 6-3a: Responses to the question how long do you stay in the PS', in GN 9th July

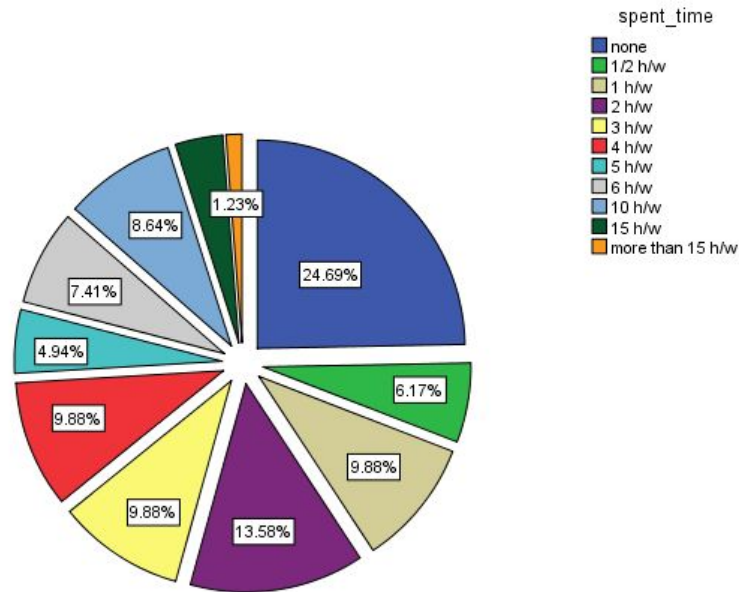


Figure 6-3b: Responses to the question how long do you stay in the PS', in TN Almegawba

In-depth data also indicate similar information. It stated that the insistent desire from the majority of the respondents to have an active and positive relationship with their neighbours. Moreover, most of them pointed out that the public space of the neighbourhood is the most appropriate place to practice their social activities. For example, activities such as watching children in the playground, sitting as groups or families and walking in the public space increase the interaction and the communication between the residents. This natural relationship of the residents creates a kind of familiarity among the residents; thus, it leads to stronger relationships.

On the other hand, some of the participants from 9th July GN expressed their disappointment towards the minimal opportunities for communication with other residents of the neighbourhood. Due to the lack of quality public spaces in this regard, residents have less chance to build up their relationships with other neighbours (participant I B from GN). As a result, many of them have a strong relationship and social communication with the next door neighbours; usually, from four to six families see Figures 6-4 and 6-5. This has limited the range of communication to the very important and big events only.



Figure 6-4: The residents (a group of next door neighbours) of GN 9th July sitting in a POS chatting and drinking tea and coffee while some children are playing around as well, picture by author 04/08/2015



Figure 6-5: The residents (a group of next door neighbours) of GN 9th July sitting in a POS chatting and drinking tea and coffee while some children are playing around, picture by author 04/08/2015

According to the qualitative data from the in-depth interviews, the reason for this low level of relationship between the residents of the same neighbourhood is the lack of public space. Participants in the in-depth interviews such as (I I and F I) clearly stated that: 'this weakness of the social relationship between some of the residents of the same neighbourhood is due to the lack of the public spaces'. From this, it can be concluded that public space enables the residents to meet outside of their houses in a more casual and flexible manner because this space belongs to everybody and their children can enjoy playing comfortably at the same time.

6.2.2 Participation Forms – 'Meeting, Chatting and Socialising'

People have several ways to communicate with each other, and these forms arise from many environmental, social and behavioural factors. Creating effective, successful and renewable space for people is not just offering a place to meet and participate; it is much more complex. Making a vital public space that can socially attract people to enjoy using it and developing their relationship needs more focus on each component of its elements '... more important is in which activities are allowed to develop. It is not enough merely to create spaces that enable people to come and go' (Gehl, 2011, p. 129).

The basic initials of the communications between people, particularly the residents who live with each other and have frequent contact on a daily basis are probably the greeting, chatting and asking each other about local issues. However, there are many further developments that need to be addressed in the place in order to create a wide range of recreational activities. Provision of some physical elements and design characteristics are important, although these are not enough to guarantee the effectiveness of the users in the place (Rasidi et al., 2012). Therefore making, developing and providing public spaces needs in-depth investigation about the local features and a full understanding of the forms of communication that take place between the local users. This can be gained through a combination of social and physical determinants. This approach is more likely to conclude a reasonable result which can satisfy the residents and meet their social needs.

With regard to the research data, it seems that the most developed and satisfactory part of the public spaces compared with other factors is the communication between the residents. The local community has a very strong sense of communication and social relations. According to the observation of both sites on several occasions, it can be seen in Tables 6-1 and 6-2 that many forms of communication already exist every day on the site. Findings show that residents, in general, have the readiness to communicate and interact with each other at all times and without limitation. However, the results show also a low participation of the female gender, which is the most noticeable feature which appears clearly on both sites.

9 th July Neighbourhood GN						
N.	Date of visit	Time length	Activities observed	User's category	Gender	Where?
1	26/07/2015	Sun 4:00- 6:00 pm	Walking Football Chatting Cycling	Adult Children Adult and elderly Children	Both Male Male Male	Public spaces between houses clusters
2	04/08/2015	The 9:00- 11:00 pm	Chatting Football	Adult and elderly Children	Male Male	Public spaces between houses clusters
3	06/08/2015	Thu 10:00- 11:30 am	Football Cycling Walking Sitting and Chatting Other children games	Children Children Adult and elderly Adult and elderly Children	Male Male Both Male Both	Public spaces between houses clusters
4	15/08/2015	Sat 5:30- 8:00 pm	Football Cycling Walking Sitting and Chatting	Children Children Adult and elderly Adult and elderly	Male Male Both Male	Public spaces between houses clusters
5	20/10/2016	Thu 4:30- 7:00 pm	Biking Walking Sitting and Chatting Playing	Children Adult and children Adult and children Children	Both Both Both Both	Public spaces between houses clusters
Table 6-1: The time schedule of the site visits and the occurred activities that have been observed, compiled by the author, GN						

Almegawba neighbourhood TN						
N.	Date of visit	Time length	Activities observed	User's category	Gender	Where?
1	13/08/2015	Thu 12:00- 1:00 pm	Walking	All	Both	Public spaces between houses clusters
2	13/08/2015	Thu 5:30- 6:45 pm	Play in ground play Walking Cycling Gathering in groups, sitting and chatting	Children All Children All	Both Both Male Male	Public spaces between houses clusters
3	17/08/2015	Mon 10:15- 11:45 am	Football Cycling Walking Sitting and Chatting Other children games	Children Children Adult and elderly Adult and elderly Children	Male Male Both Male Both	Public spaces between houses clusters
4	25/08/2015	Tue 3.00- 400 pm	Walking	All	Both	Public spaces between houses clusters
5	03/09/2015	Thu 8:30- 10:15 pm	Sitting in groups, chatting and drinking tea. Gathering on street, chatting.	Adult and elderly Children	Male Male	Public spaces between houses clusters
6	22/10/2016	10:00- 11:30 am	Social event Playing football Sitting and chatting Biking Walking	Adults Children Adult and children Children Adult and children	Male Male Male Male Both	Public spaces between houses clusters
7	25/10/2016	4:14- 6:00 pm	Play in ground play Walking Cycling Gathering in groups, sitting and chatting	Children All Children All	Both Both Male Male	Public spaces between houses clusters
Table 6-2: The time schedule of the site visits and the occurred activities that have been observed, compiled by the author, TN						

During several visits to both sites, the author used the photographing method to capture the forms of communication and activities of the residents. In Figure 6-6, it can be seen that children have different activities including football and biking in the space between the buildings of their apartments. Space actually is for car parking; however, the children feel safer and find it more convenient to play in this area as it is a closed road and surrounded by the buildings.



Figure 6-6: Children's activities, football, bicycles and other similar activities in the public space between the buildings, GN 9th July neighbourhood, picture by author 15/08/2015



Figure 6-7: Children's activities, football, bicycles and other similar activities in the public space of the GN Aljazira neighbourhood, picture by author 26/07/2015 and 19/08/2015



Figure 6-8: Children's activities, football, bicycles and other similar activities in the public space of the GN Aljazira neighbourhood, picture by author 26/07/2015 and 19/08/2015



Figure 6-9: Children's activities, football, bicycles and other similar activities in the public space of the GN Aljazira neighbourhood, picture by author 26/07/2015 and 19/08/2015

Figures (6-7, 6-8 and 6-9) show similar activities in different GNs which are 9th July and Aljazira neighbourhood as other examples of the residents' activities. It can be concluded that during the day-time the activities are dominated by the children aged from 6-15 years. This category usually undertakes different types of activities such as football, hide and seek and biking, etc. The adults often undertake their activities in the public spaces around their houses during the evenings as shown in Figures 6-4 and 6-5.

However, there might be a chance on some occasions to witness a few adults who normally sitting front of their houses to watch their children or have a quick chat with their neighbours, but there are no real long-lasting activities, as shown in Figure 6-10.



Figure 6-10: Children are playing football and adults are chatting and watching, GN 9th July neighbourhood, picture by author 28/07/2015

To conclude, the only concern in this aspect is the level of participation of the female and disabled categories. No activity was observed for these particular categories, which indicates the deficiencies in the public and semi-public spaces of the neighbourhoods (also stated by all of the interviewees). This result highlights a need for suggestions at least to be included in the future development and there should be more focus on making better public spaces which enhance these categories to communicate with the rest of the residents of the neighbourhood.

6.2.3 Children's Involvement

In the local population of Libya, children represent a big percentage of the whole population of the country which is around 32.8% for the age from 0 -15 years (Figures 6-11 and 6-12). This indicator means that there should be more attention to this category of the residents. In addition, the children and young residents are particularly referred to in numerous research papers as the main beneficiaries of the open spaces, both the public and the semi-public of the neighbourhoods (Woolley, 2006). These activities have a major impact on the people during their childhood which is one of the most important periods of our life being a period of time that everyone can remember, impacting on the person's personality and their way of communicating with others in the later age periods of life (Woolley, 2008). Therefore, this section focuses on the social and health benefits of involving this category in the open spaces and what kind of impact that may bring that might improve the quality of their life.

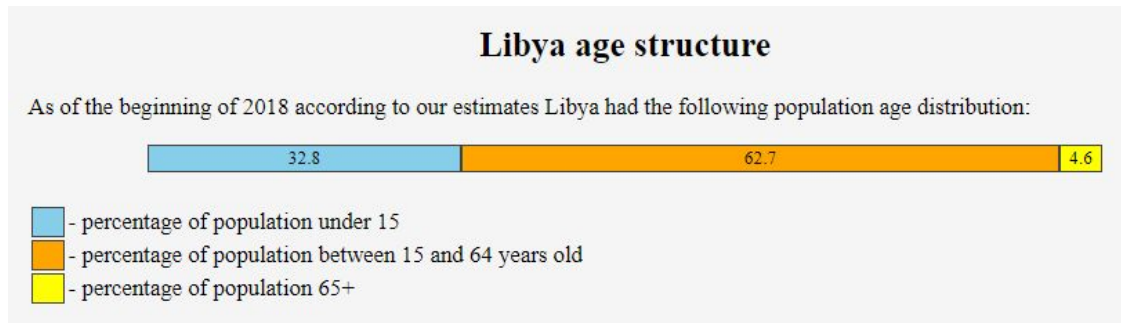


Figure 6-11: The percentage of the main categories of the Libyan population, (Meters, 2018) accessed 16/01/2018 12:55 pm

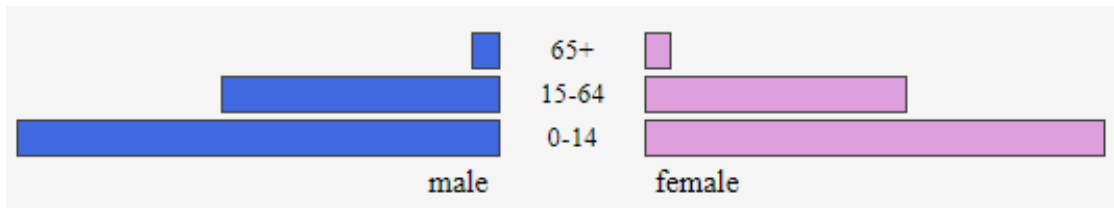


Figure 6-12: The Libya population pyramid of 2017, (Meters, 2018) accessed 16/01/2018 12:55 pm

According to the research literature, many essential points have arisen about the importance of a healthy environment for the children and the health benefits of applying the physical activities in open spaces. Gehl (2011, p. 21) highlights that 'People in general inspired to others action, children see other children at play and get the urge to join in, or they get ideas for new games by watching other children or adults'.

One of the measurement tools in this research is discovering the ease of using the POS around/near the houses' clusters. In GN 9th almost 70% of the participants disagree with the statement 'Children have easy access to the public space such as the play area, playground and open green space', which illustrates the weaknesses of the link between the houses and the public spaces as per Figures 6-13a while in TN Almegawba the Figure 6-13b show that only around 25% of the respondent who disagrees which this statement. This can highlight that TN residents have better accessibility to the public spaces around their houses than in the GNs.

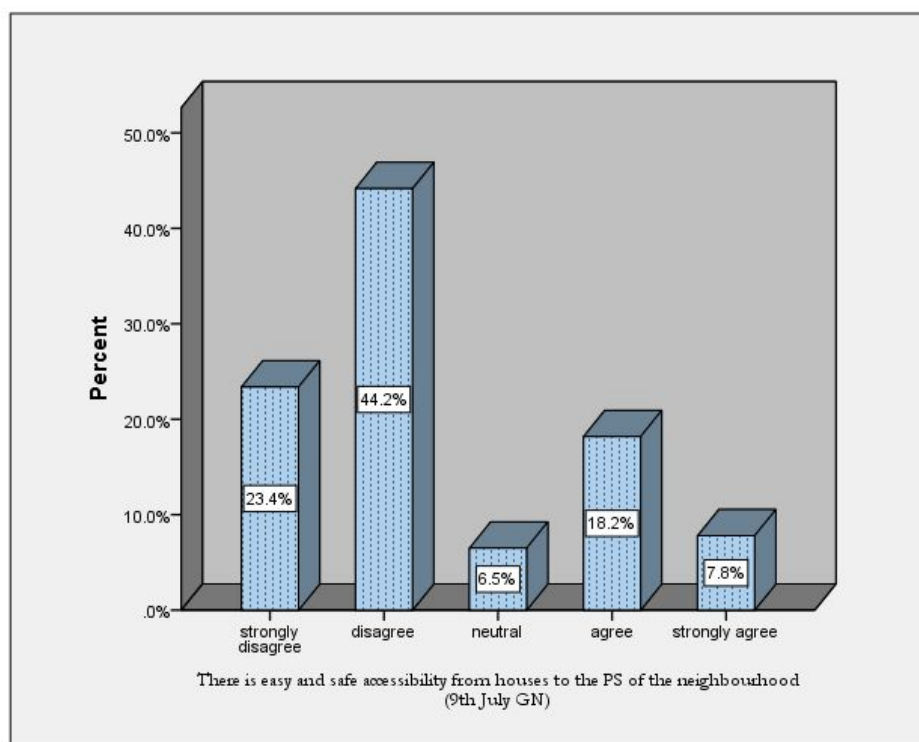


Figure 6-13a: Responses to the statement 'Residents has easy access and use of POS around their houses', in the GN 9th July

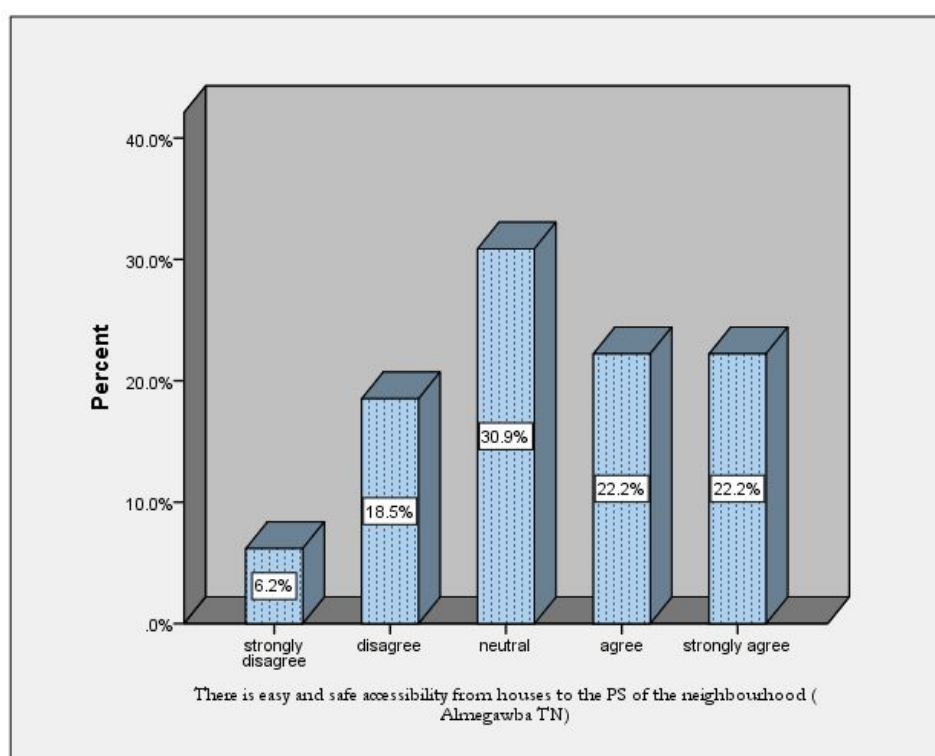


Figure 6-13b: Responses to the statement 'Residents has easy access and use of POS around their houses', in TN Almegawba

However, the findings show that TN has better quality in terms of usability of the POSs, there much more improvement can be done in this regard such as facilitating the empty areas with more qualitative equipment especially for the young children and providing designated sports place which can be safer for them. On the other hand, the percentage is higher in GN because as respondents stated that existing barriers that made illegally by the residents which make it impossible for other neighbours to access and use. For example, residents build fences around some attached spaces to create their own gardens as per Figure 6-14.



Figure 6-14: Using the public space front of the housing building as a private garden which disturbs its ability of use by other residents

Moreover, regarding the answers of the respondents in both sites, they pointed out that there is a lack of physical equipment on the sites such as play area, football pitches, facilities and green spaces, etc. Residents complain that the ability to use the public spaces of this neighbourhood is limited because the government does not build playgrounds and such facilities for children in a reachable location. Therefore, because the children have no better place to practice their activities, they use the surrounding space which is not really ideal regarding the health and safety issues (Figure 6-15). This space can be rough and may contain some sharp items which can hurt the children who play without shoes as seen in the attached Picture in Figure 6-15. Thus, there should be an appropriate facilitated ground play such as a football pitch and sports facilities which can be safer and more adequate for the children to practice their activities.



Figure 6-15: Children play football outdoors, picture by the author, location 9th July GN, 15/08/2015

With regard to the social aspects of the children's activities, there is clear evidence from the research data that a designated children's area plays a fundamental role not only in terms of children's entertainment but also in strengthening the integration between the families of the community. Hence, one of the key interactions among the residents is the place of the children in the public area of the community. That is when people usually get involved in the basic communication such as greeting, chatting, sitting and sharing some food or drink. This spontaneous natural way for the neighbours to meet each other for the first time is of high value; thus, these actions are likely to develop over time into stronger relationships.

Regarding the age groups in this research, results show that children often use the public space as a place to discharge their energy and strike up friendships with other children during the play activities in their free time. Therefore, the successful open space is not only to provide the space but also to make it attractive to the residents, especially the children. Findings show that in terms of the social impact the children have a strong role in supporting the social relationships for the adults through the opportunities they present that can gather all the categories of the neighbourhood in one place. This chance of meeting the neighbours is more likely to be developed during deeper interactions and close communication (Figure 6-16).



Figure 6-16: The risk of road accidents for the children who play outside along and/or on the road, GN 9th July, picture by author 20/10/2016



Figure 6-17: The risk of road accidents for the children who play outside along and/or on the road, GN 9th July, picture by author 20/10/2016

The other point is that some of these areas are located near the roads, so the risk of children crossing the road to follow their ball or run towards each other is higher. This lack of safety in children's districts indicate part of the disappointment of the residents towards the public spaces, and raise the important for the responsible authority to redesign these areas with attention to be safer and more convenient to the users. Because of these circumstances, some of the respondents stated that they are trying to provide as many toys and entertainment tools at home so they can alternatively fulfil the desire of their children from going outside their houses, in order to avoid these types of concerns, although the residents are aware that playing outside and undertaking physical activities is much more beneficial to their children in many aspects including the health advantages.

The other factors which are related directly to the activities of the children, particularly in the open spaces, is the safety. Regarding the interview data, participants pointed out that the largest concern about letting their children play outside the houses is due to safety issues as there are limited areas that are considered to be safe. These are mainly the spaces between the buildings which are in particular away from the main roads see Figure 6-18. For instance, the available places in the rest of the neighbourhoods are not surrounded with fences which might be dangerous for children regarding the vehicle flow especially the children of early ages who are not aware of crossing the roads see Figures 6-16 and Figure 6-17.

To conclude, neighbourhoods of the city are facing a real challenge in terms of the children's activities' support. In this sense, there should be significant care paid to this issue for the development of the open public spaces of these neighbourhoods to be more convenient and appropriate to fulfil the children's needs in terms of quality, safety and social aspects. As Elsley (2004, p. 156) clearly states that 'Adults' fears for their children and their desire to provide the best for them"; however, this does not mean that the public space is the best place for children to be as O'brien et al. (2000) cited in Elsley, (2004) points out:

'Parents/Adults always need the best for their children, although, this means that they do not necessarily view the public space of the street as a place for their children to be. Anxiety about crime, possible threats from others and fears about traffic dominate their concerns'.

On the other hand, as mentioned above, parents are completely aware that it is beneficial for the children to get physical exercise and socially interact with the other children of similar ages. This also has been confirmed by Matthews (2001, p. 259), who states that,

'Outdoor places are regarded as highly important by children themselves. For children from families who are less economically well off, the multi-dimensional nature of the physical environment becomes more important with the street offering an alternative to costly recreational and leisure opportunities'.

Therefore, there is a challenge that not only the responsible authorities are facing, but also the adults and parents, who all have different aspects of concerns about the engagement of their children in the public spaces of the neighbourhoods. This issue calls for a deep and comprehensive study in the stage of making spaces either

in neighbourhoods or similar places where the users are including multi-categories such as children. There is a need to take time to assess every single aspect that is somehow going to impact on the quality of those spaces.



Figure 6-18: Shows the types of activities that children apply in daily bases activities, pictures by author 20/10/2016 9th July GN neighbourhood

6.3 Interaction and Social Value

In terms of social interaction, participants stated that neighbours often used to meet in the semi-public space near their houses to drink coffee, chat, and discuss life's challenges, and exchange ideas and advice with each other. They believe that these features are very important for their social life, and therefore to their feelings

of satisfaction and happiness. One of the interviewees, L S, who is a psychologist, highlighted that based on recent study and long experience about communities' interactions, public space in the neighbourhoods plays a fundamental role to improve the quality of the residents' lives. She indicated some examples such as social events in her neighbourhood as a fundamental element. For instance,

'When a family of the neighbourhood has an event, either a happy or sad ones, such as a wedding, new birth or loss of a family member, it is, however, an opportunity of meeting and sharing feelings which naturally integrates the residents and strengthens their relationship'.

This principle can be seen in both neighbourhoods, although it seems more apparent in the TNs as respondents stated that the level of interaction between the residents is positive because they have known each other for a long time. Moreover, it is noticeable in GNs as well but more in individual groups who become more integrated over time.

One of the keys to having a good opportunity of people's interaction is to create an appropriate place to encourage them to be present which can be the first step to the social interaction. Rasidi et al. (2012, p. 465) suggest that 'A sense of interaction among urban residents provides an opportunity to get to know their neighbourhoods as well as their friends in the area'. Along with a similar line, Abada et al. (2007, p. 2013) emphasise the importance of the place-making and highlight the social negative impact when there is lack of interaction '... a lack of integration may contribute to feelings of hopelessness, thus increasing the risk of depressive symptoms'. Previous literature has shown that people have a better chance to interact in the favourable spaces for activating social interaction. Although, newer communities may have less social interactions with strangers. Most of the people might feel more comfortable communicating with the groups that they belong to rather than to be open to social interaction with others. Thus, it can be concluded that interactions with strangers are likely to be less common than those with known people – either individuals or as groups (Rasidi et al., 2012).

In the case of this research, the lack of interesting places is one of the factors that impact negatively on the nature of the social interaction. Participants of both sites indicated that they can share only a limited range of activities in the public realm of their community due to the lack of the public space itself and the poor quality of the space that does exist. Instead, they use the private spaces in their houses such as gardens and open areas most of the time for daily leisure activities. Therefore,

this could lead to less interaction which may weaken the social value of the community as a result.

In fact, the social value of the community is directly linked to the open and public spaces as they are the main spaces regarding interaction (Gehl, 2011). These activities create a better chance for the residents to interact; therefore, this will strengthen the level of relationships between the residents by involving them in activities that can build a good level of communication (Gehl, 2013). Moreover, the social function of the public space can help to get residents more involved and promote the level of participation between the neighbours. One of the significant findings in this research is that participants support the idea of mixed age groups in the public space which can be the base of creating these types of activities for the age groups with an appropriate range for each one. This involvement can integrate the residents in a more social manner which eventually can lead to a better feeling of enjoyment and satisfaction.

From a social perspective, more than three participants indicated in the interviews that when the revolution in Libya started in February 2011, social problems such as force moving out from the neighbourhood had happened in the GNs, with far fewer problems were taken place in TNs. Actually, this statement indicates that the levels of integration between the residents are not the same in the two types of neighbourhood, it much stronger in the TNs. This case confirms that the relationship between the residents of the same GN was not enough to support the residents who come originally from other cities. Many residents had to move from a certain neighbourhood to another, as they had experienced different acts than what their neighbours were expected. Therefore, the residents who are not originally from this community prefer to return to their original area or city because the social links were very weak, while in TNs this situation did not happen because all the residents knew each other and they faced all the problems and the reaction of the government during the revolution together and they help, share, cooperate and support each other.

One of the TN participants, K S explained that the relationship between the residents in a TN can be described as a strong integrated relationship: 'I am not exaggerating that we were like one family in the previous community'. For example, when a mother of next-door neighbours has an illness and cannot take care of their family, one of our community mothers will join that family to take over all the housework and take care of the children of that family until she recovers

from her illness. Similarly, the relationships of youth who are of a similar age are very strong. This makes them feel like brothers and even more because they were spending the most of their time together outdoors in the public spaces of the community. Many participants argued that this strong interaction between the neighbours has decreased a great deal compared with the last few decades.

To summarise, the most common forms of the social interactions between the residents in the public spaces of the neighbourhoods are meeting other residents, exchanging ideas and chatting (Iveson, 2011). These activities create a high level of social integration which confirms the preference of the integrated communities. Therefore, based on the research findings, public space of the neighbourhoods is the most effective area that impacts the level of interaction between the residents and therefore the cohesion of the community. Theoretically, the relationships between the residents of the neighbourhood are known as a crucial element that can impact the urban form and quality of the local inhabitants' life. Importantly, Mahdavi and Habib (2016, p. 61) state that,

'Social relationships and human connection are known as important and serious factors in life and residence of people, although industrial and modern life consequences have faded the human relationships in current years. So researchers and investigations have increased on this issue and they expressed social interactions as principal and also believe these relationships are inseparable from district properties and human society'.

Hence, this research focuses on this element as one very important factor which can illustrate the strong and weak points of the local community in terms of the social satisfaction of the residents and the quality of their neighbourhoods.

6.4 Community Cohesion

One of the essential keys to the community cohesion is the public space where most of the residents can share/participate in their social activities. Middleton et al. (2005, p. 1722) state that, 'If the residents of the same neighbourhood do not think they are part of the same physical space, they may be less likely to act as a coherent community'. Therefore, the quality of the public space of the neighbourhood contributes effectively to promote the community cohesion. The research used several tools to examine the level of residents' cohesion and the magnitude of their social links such as sharing activities, feelings of empathy and asking about each other. Findings show that almost all of the participants stated

that public space plays an essential role to strengthen the community cohesion by allowing the chance of meeting and discussing social matters together (Figures 6-19 and Figure 6-20).

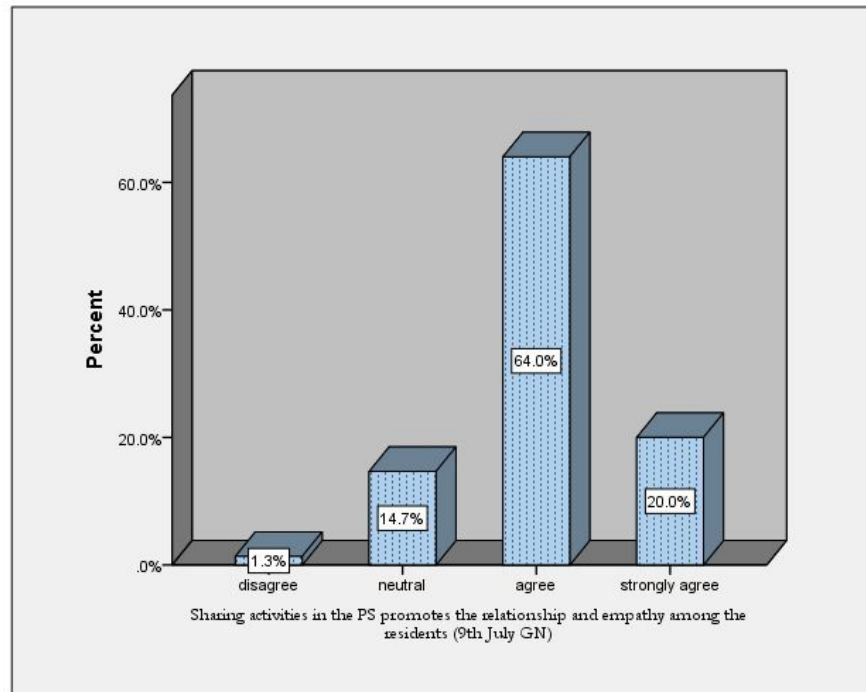


Figure 6-19: Responses to the statement ' Sharing activities in the POS promotes the relationship and intimacy among the residents', 9th July GN

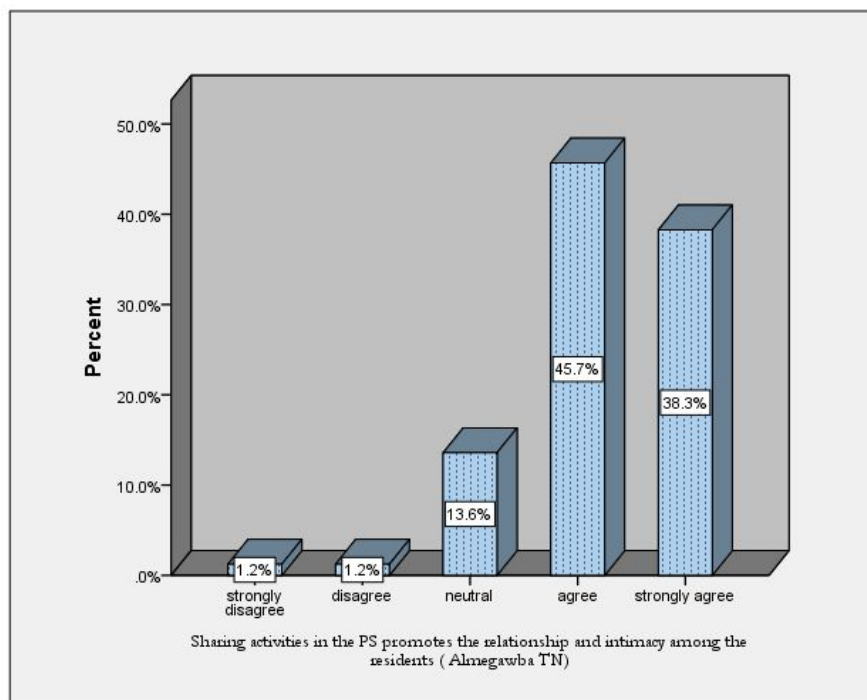


Figure 6-20: Responses to the statement ' Sharing activities in the POS promotes the relationship and intimacy among the residents', Almegawba TN

Figures 6-19 and 6-20 show that around 97% of the respondents in TN has the belief that sharing and participating in the public space of the neighbourhood can strengthen the community cohesion while in the GN show around 85% which is lower but still high level in terms of their attitude and intention. The observation and the qualitative data highlighted that only between 40% and 50% of the respondents who share and interact with each other in the POS. This contradiction between the belief\desire and the actions in real daily life can clearly show very interesting findings. The residents have the intention to use these spaces but because of some reasons, they do not do so. Regarding the qualitative data, the evidence shows that the cause of this lack of engagement in the public spaces is due to one or more of the followings: the POS does not meet their needs, there is lack of good accessibility from\to the POS, the relationship between the residents is not very strong, lack of facilities, lack of enough spaces and finally lack of POS quality.

Furthermore, it is defined that most of the activities that involve residents to be together and create a sense of engagement with each other are as follows:

- 1- Children activities can be all the times that children interact and play together in most of the times and places.
- 2- Adults, neighbours of a group of next-door houses usually have few times from 3-4 times/week to sit together in the space between the housing blocks where they socialise with each other over a tea/coffee.
- 3- Female also have some type of interaction, often in-door activities as stated by the interviewer L S.
- 4- This limitation between the intention to share the public spaces and really using it is because of the lack in physical elements which should be provided to these spaces so residents can encourage to be present and can stay a longer time. These physical elements such as seats, shaded places and children playground.

Overall findings, there is the full intention of using the public spaces by most of the residents in both sites GN and TN but in fact, the level of interaction is low in TN and far lower in GN because of quality and facilities provided in the POS.

6.4.1 Culture Background

Basically, the past of any community is as important as the future is (Lang, 2014), and the culture of human persists throughout time. Many scholars and experts believe that it is essential to know the background of culture to understand properly what needs to be planned for the future. In their Article 'Explaining the role of

cultural, social and economic factors on quality of residence in urban neighbourhoods', Mahdavi and Habib (2016, p. 61) quote from Ahmed Ibrahim (Arab world scientist) who defined culture as follows, 'To know, humans are going to where, is important as much as to know human is coming from where, and culture ties this bygone issues and also will provide the ability to leap into the future'. Therefore, it is clear that there is a direct link between the cultural background and the nature of the residents' relationships which emerges from the residents' reactions towards the matter of adaptation within the same neighbourhood. Adaptation in this context means to get used to the local traditional communication, events and social interaction forms. These features are slightly different from region to region of the same country. This relationship can be recognised even more significantly in the governmental neighbourhood because of the variety of householders who comes from different parts of the city and also from other cities. The way that residents interact with their neighbours depends to a great extent on how they expect others to respond in the public sphere.

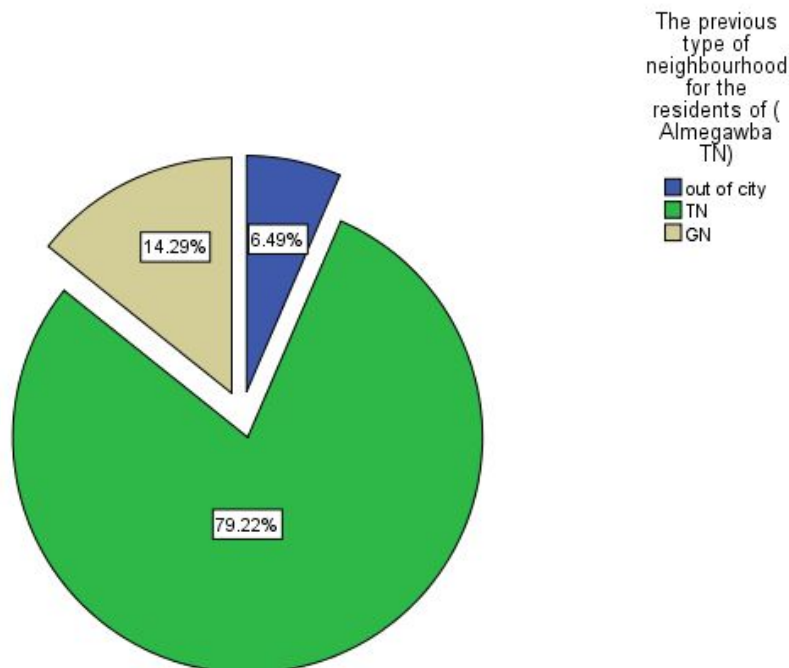


Figure 6-22: The distribution of the residents regarding their previous place of living who currently live in the TN Almegawba

Respondents from GN stated that the cultural backgrounds of their neighbours are varied in terms of the way of living, welcoming others, and joining the social events. On the other hand, in TN, it is very clear that the ways of living are very similar to most of the residents due to the similarity of their cultural background. As explained previously, most of the TN residents have been neighbours for a long

time, mostly since birth; also many are relatives, which is completely different than the GN. In GNs, the majority of the residents come from other small towns around the city and from other cities of the country.

In Figure 6-22, it can be seen clearly that almost 80% of the participants in the TN Almegawba are from the same type of neighbourhood which is the traditional 'spontaneous' neighbourhood while only about 15% who come from GN which was their temporary place of living until they returned to their original neighbourhood. The third category is the residents who come from other cities for whatever reason to live in this neighbourhood; these form the smallest group which is around 6.5% of the total respondents of the neighbourhood. This Figure 6-22 shows clearly the similarity of the majority of the neighbourhood which illustrates that they have a similar background. Therefore, the traditional neighbourhood has fewer concerns regarding the unity and integration of the residents, particularly in the public spaces of the neighbourhood.

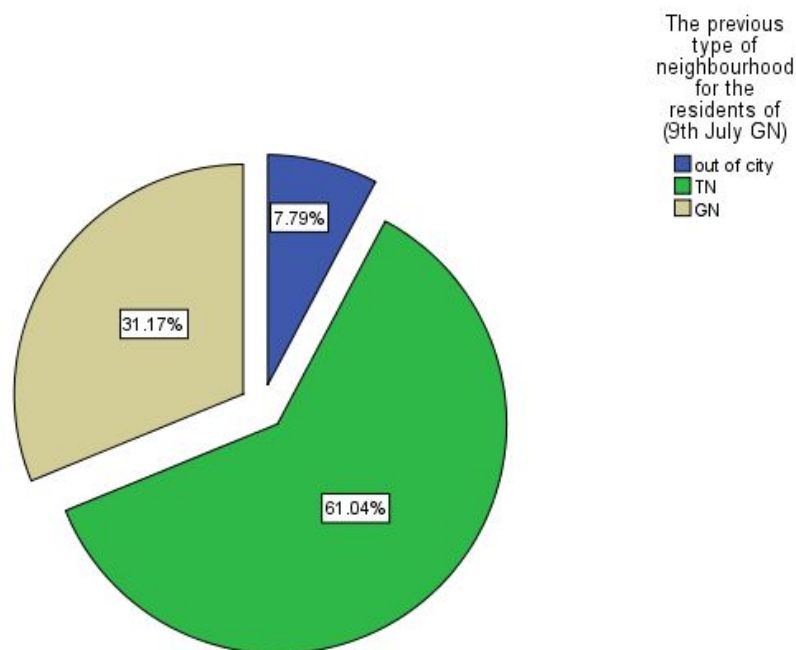


Figure 6-23: The distribution of the residents regarding their previous place of living who currently live in the GN 9th July

In the GN 9th July, Figure 6-23 shows that the percentage of the people who come from other cities is higher than the residents who are moved in from the same city. The research data show that only 8% of the existing residents are originally from the city while around 30% of the respondents stated that they were live in another GN. The majority of the respondents- more than 60% - come from TN. Again, it is

still less than the last figure which means that the variety of the cultural backgrounds here in the GN is more than those in the TN.

In fact, with regard to the research data from the in-depth interviews, the residents who have moved from a TN to a GN usually stay for few years after moving in. As a small family, they accept staying in the GN as a temporary residence until they can afford to build their house in a better TN location. They usually prefer to move back to their original area as soon as they could manage to afford a house there. This is the most stated view during the interviews with the participants. This phenomenon of a 'temporary living and planning for a return to the traditional neighbourhood' indicates that this particular category might not act positively in the GN to contribute to help the community due to their plans to leave the neighbourhood in a few years. This may illustrate the low participation in the public space of the neighbourhood from this specific category of residents.

According to the interviews, data show more positive actions from the residents who plan to stay in the neighbourhood as the final destination of their living. Data also show that residents that come from other cities are struggling to adapt to the new way of life in the new neighbourhoods. However, this challenge has less impact on the GNs than the TNs because of the variety of the residents' cultural backgrounds in the GN. Thus, this is one of the factors that set the preference of each neighbourhood for each group of people. This also depends on the action and the reaction of the other residents on that neighbourhood and their behaviour towards other people who come from different cultural backgrounds.

6.4.2 Residents' Behaviour

In addition to the discussion of residents' background and its impact on the social communication and residents' cohesion, there is another important issue which is the social behaviour of the residents, particularly in the public and semi-public spaces. This issue is important in terms of evaluating the impact of the intangible elements of the public space in the city neighbourhoods. Regarding the research results, all the participants pointed out that the public space is the dominant space where they can undertake most of their social activities. Results also show that one of the most important factors for measuring the quality of public spaces is by identifying the residents' behaviour in that space. Mainly, the local behaviour is based on residents' actions towards others during the times they share activities. The behaviour of the residents can be assessed regarding their actions towards

others around them; they might be kind and caring to the neighbours or may be careless and negative.

Many researchers such as (Amin, 2008, Bondi, 1998, Butler et al., 1969) have highlighted the importance of identifying the local behaviour in order to draw a clear picture of how the community should be developed and in terms of designing and creating the appropriate solution for the public spaces. In the GN, where most residents come from different parts of the city and from other cities and live in the same neighbourhood, the reduced possibility of interaction with others can exist according to much evidence from the interview data such as the residents' participants in the GN. Participants from the GN demonstrated that they often spend time with their friends from the families that they know even if they live in another area, at least until they become more familiar with their new neighbours. From the research data, the behaviour of the residents seems more positive in the TNs than in the GNs. This finding can be one of the considerations that should be taken into account in new developments and future projects.

Another point of view, according to similar research in the literature, states that in some cases the action of the residents which is often based on their behaviour might be different than others. For instance, some residents may be not interested in sharing public spaces. Others may do not like an open space next door to them because they do not have children so they prefer quiet places where there are no activities near their houses. These and more opinions from people are discovered during this research. For example, one of the respondents, S M, from TN Almegawba stated that some of the residents argue that they do not need the playground and sports pitches near their houses because of the noise of the children who use these places.

On the other hand, some participants complain about the long distance between their houses to these public open spaces. One more factor related to the residents' behaviour is the classification. Many participants stated that choosing the playmates for their children is important in terms of behaviour and manners. This issue sometimes imposes limitations on the children to interact and share the public spaces. For instance, some children spend more time outdoors whereas others spend more time indoor doing their homework and study due to a request from their parents. In this case, parents prevent their children from becoming engaged with a specific category of children according to their manners and length of time they spend outside their homes.

To conclude, there are always different views from the residents of the same neighbourhood. This cross perspective might be a common indicator which encourages the urban planner and the developer to investigate the local behaviour in depth to maximise the place quality and meet the majority of the residents' desires. Along the same line, Bonilla (2013, p. 40) highlights that: 'there are residents who are not interested in public space and usually show indifference towards the neighbourhood's communal places' so he suggests that: 'In future research the interest and opinions of those residents who oppose to the development of public spaces must be studied'. However, it seems from the data and research findings that majority of the responses agreed to the importance of the participation in the public spaces which match the desire of the most of the residents in their answers in the questionnaires as well.

6.5 Residents' Needs

Madanipour et al. (2013, p. 50) highlight that in a public sphere there is a fundamental question which always should be asked: 'To whose service should public space be built?' This key issue reflects the consequences of focusing on the public space and its contribution to the community. In Libya as elsewhere, the answer to this question is that public space should mainly serve its local users; the users in such neighbourhoods are the residents who are a mix of many categories. Residents are varied in age categories such as elderly, children, youth and adult and are also a mix of educated, qualified, unemployed, retired and both genders, male and female. In order to serve all these categories, their needs should be determined at the first stage, and the needs also must be addressed in which aspect should be fulfilled.

For example, creating an appropriate space for each category without ignoring a part of the residents' population is crucial for making successful public spaces. In order to create vital areas to support the social aspects, the public space of the neighbourhood should respond to these needs. In many similar research studies, it has been proven that the original function of public spaces is to cover the daily needs of the inhabitants of that place (Kamalipour et al., 2013, Hanibuchi et al., 2012a, Behrad and Bahrami, 2015). It is important that the designer of the place should consider the local needs particularly the social ones, by creating a suitable place and providing the appropriate facilities that meet the residents' desires; in this way, the place will be more likely to be vital and active. Therefore, it will

enhance the interactions between the inhabitants and improve the relationships between them.

Regarding the quantitative data from the questionnaires, there is a significant difference in the satisfaction in terms of the appropriateness of the public spaces to the users of both sites, the GN and the TN. First, in GN, figure 6-24 presents the percentage of the participants who agreed (satisfied) or disagreed (unsatisfied) with the appropriateness of the public spaces regarding their needs. It can be seen that 75% of the respondents are unsatisfied; this shows the significant lack of providing what residents are expecting to find in the public space of their neighbourhood. Following this result, it appears from the quantitative data that residents express a high desire for physical settings and provision of facilities such as chairs, children attractions, sports equipment and facilities. Therefore, it can be clearly concluded that the quality of the current public space in this neighbourhood is unsatisfactory for its residents and does not match their needs.

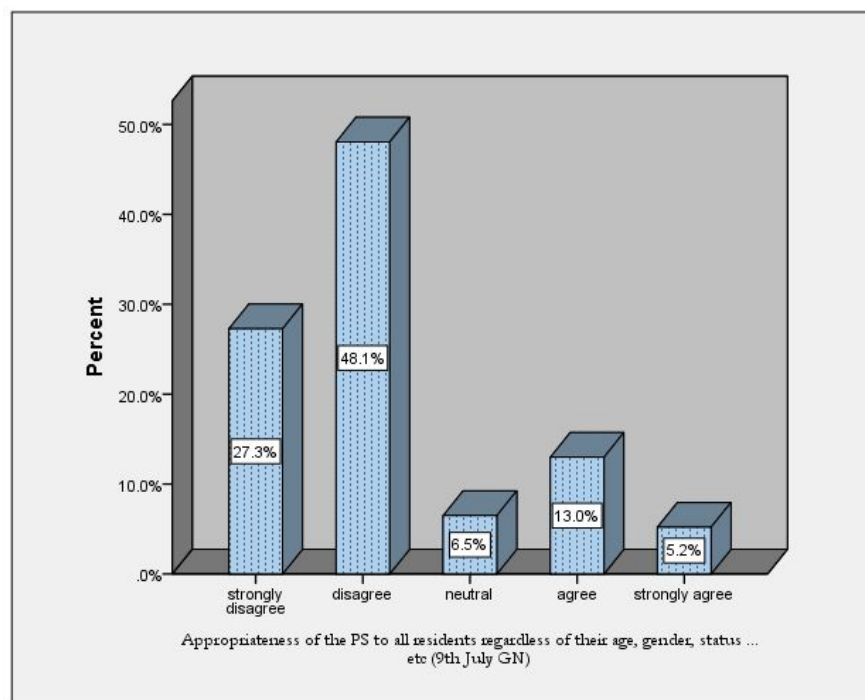


Figure 6-24: Responses to the statement 'PS is appropriate to the all residents categories', in 9th July GN

In TN, the indication is slightly better in terms of the appropriateness of the public space; however there still many need of development regarding the qualitative data. Figure 6-25 shows that around 55% of the respondents are unsatisfied with the range of facilities provided on the site. This percentage is 20% less than the percentage of the GN, which illustrates that the TNs are relatively better than the

GNs in terms of satisfying their residents and regarding the appropriateness of the public space quality. On the other hand, 45% of the respondents in TN stated that the public space suits their needs and expressed their satisfaction, yet are asking for more development and increasing the attention to this space. The important issue here is to find out the reason for this difference between the two neighbourhoods. The research data show that the main reason lies in the fact that the closer residents are to each other socially, the more they can cooperate and develop their community. For instance, in the Almegawba TN neighbourhood, residents help each other to undertake voluntary work and raise money to provide some attractions for children in the site (participant S E). Also, they express that on many occasions they send a petition to the council asking for some physical equipment such as public bins, chairs and grass provision for open areas (participant S M). In the GNs, however, there is less cooperation and team-work to develop the community and the neighbours are more isolated in small groups which are not helpful in terms of general development such as improving the public and open spaces of the neighbourhood.

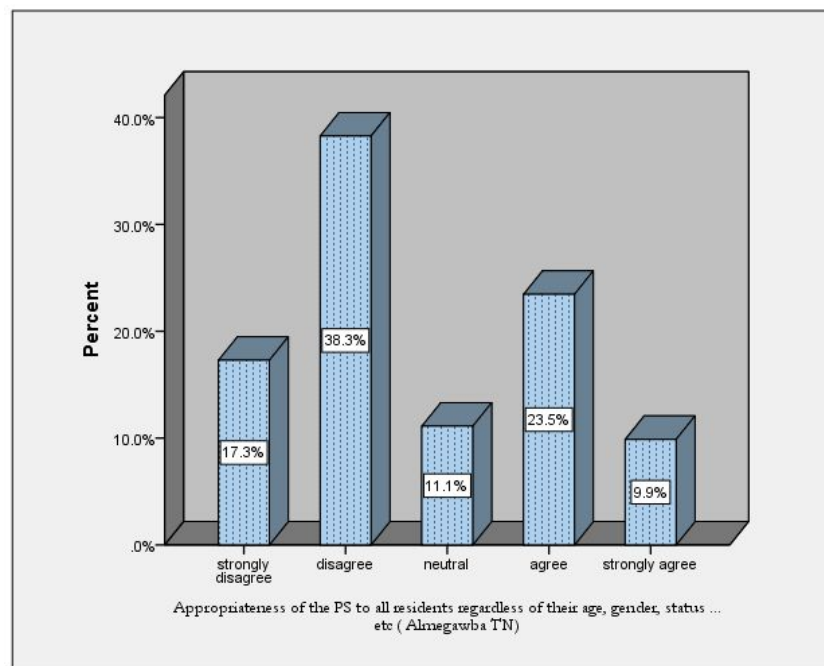


Figure 6-25: Responses to the statement 'PS is appropriate to the all residents categories', in Almegawba TN

Moreover, based on the data collected from the interviews, further findings show that according to the local needs the public space is below the expected quality. Respondents of the GNs 9th July explained that the most common activities in the public space of the neighbourhoods are the children and youth sports activities, chatting, bike riding and other local traditional games. Adults and elderly may walk

around their houses or sit with neighbours to have a drink. On the other hand, in TNs such as Almegawba, respondents stated that the public space has been used by everybody in the neighbourhood because it contains a variety of spaces for all age categories. During the interviews, most of the residents in both sites indicate that public spaces need more improvement to meet their needs. For instance, they need more playgrounds, football pitches, open spaces for social events and walking paths. Therefore, it is important for the public space to fulfil the needs of all the types of activities and enable the residents of all ages to use it effectively.

In addition to all the previous findings, the researcher decided to observe some spaces in the sites including the similar neighbourhoods to identify the level of residents' desire to participate in the public spaces such as children's playgrounds and some other activities. In Figures (6-26 and 6-27), it can be seen that children's playground in between the TNs which is located just outside the Almegawba neighbourhood. During the visit to this place, the researcher noticed a significant desire among the children to spend a long time in the playground. This, in fact, illustrates two main issues:

- ❖ There is a lack of their neighbourhood of similar facilities which made them come to this place.
- ❖ These types of children's attractions are very important from the parents' perspective and they match the children's needs.



Figure 6-26: Children's playground in between TNs next to Almegawba, it called 'Almangoush' neighbourhood, Misurata, Libya, 23/10/2016 picture by the author

During the observation, the numbers of children were exceeding with fewer users were leaving which indicate the strong enjoyment by children to the place as they need to spend a longer time. Children in total did not leave the place less than two hours and some of them even stay longer as the author spent more than two hours in the location and they were still in the place. The parents were having a chance to meet each other and have a social conversation. This is a result of these activities which are considered as one of the advantages of such places to increase the sense of interaction between the residents.



Figure 6-27: Children's playground in TN near Almegawba neighbourhood, its name ;Almangoush' neighbourhood, Misurata, Libya, 23/10/2016 picture by the author

Finally, to sum up, the key aspect of creating and making a successful vital place for the local inhabitants is to meet their desires to establish the appropriate place that they can practice their activities in the way that satisfies them. As Jalaladdini and Oktay (2012, p. 667) state that 'Meeting people's needs and adapting to their activities is then a key objective of a good public space'. Falahat (2006) also summarises this point in an effective way,

'The physical factors, due to the quality of design, improve the concepts and activities. And meeting the biological, mental and social needs of the human, the physical factors will be the result of a series of perceptions, satisfaction and finally a sense of place'. Cited in (Ghoomi et al., 2015, p. 277).

This is clear evidence that matching the needs of the residents is a critical issue and it is a key advantage in terms of improving the quality of the public spaces. The satisfaction of the residents can be measured in many ways but to provide them what they need, expect and desired is the main success of the urban development particularly their neighbourhoods as they spend most of their time and activities there.

6.5.1 Social Events

Public spaces in the local community of Libyan cities are used like some other cities in the world for social events. With regard to the local culture, open public space is the main place that people rely on in their big social events such as weddings. Figure 6-28 show the old tent that Libyan were use in social events as a private space can be used separately for each gender. Now, this type of shelter has developed to a new form which appears in Figure 6-29 and Figure 6-30.



Figure 6-28: The original historical tent which was used in the 18th century until the beginning of 19th century in some parts of the country, especially in the desert area in Middle and South of Libya, picture by Reda Kerbouche 08:57, 24 November 2014, accessed on 12/12/2017.

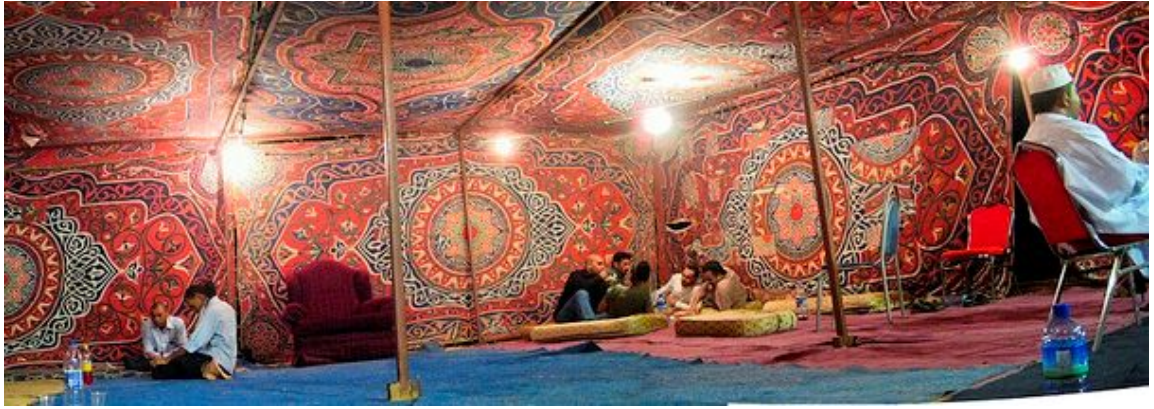


Figure 6-29: The use of public open space in social events, wedding tent from inside view, Tripoli, Libya, source: (Anas, 2014), accessed 12/12/2017

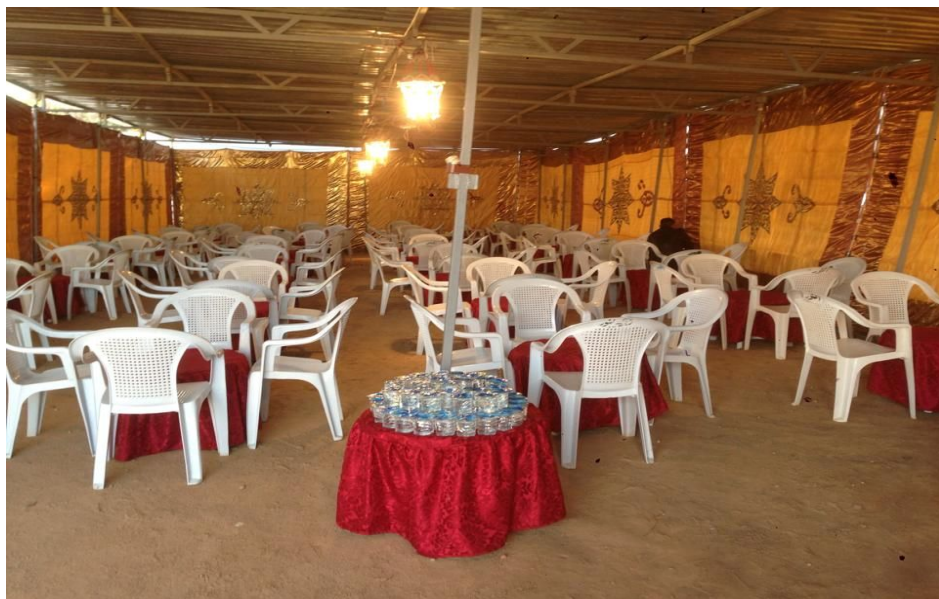


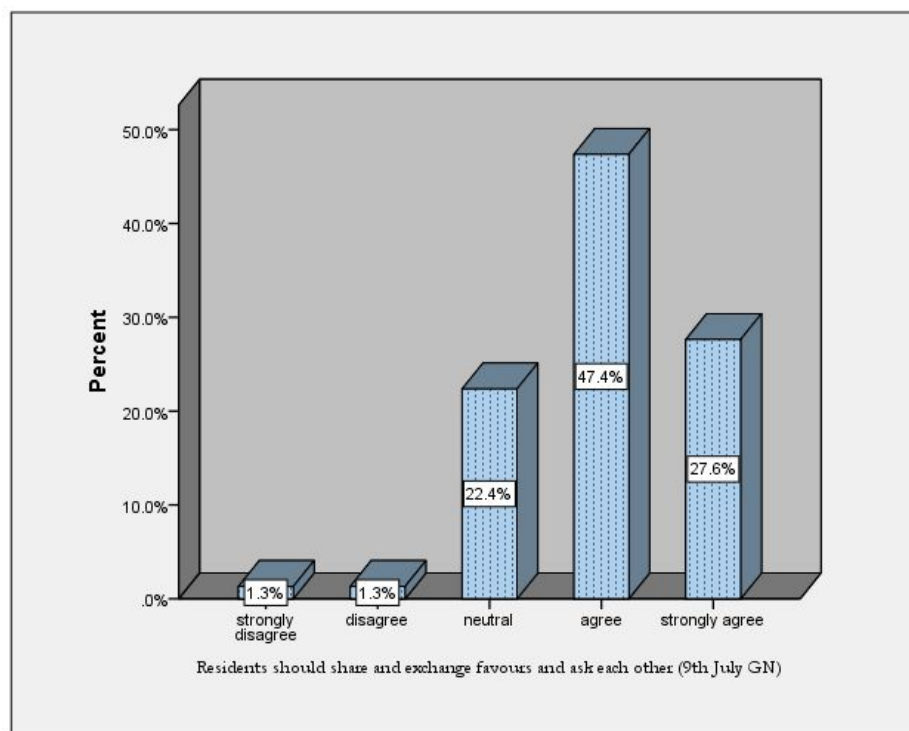
Figure 6-30: The inner of the weddings and Week temporary tents that are used in the public space of the neighbourhoods, picture by author 03/03/2016

In Figure 6-29, it can be seen that a social event is taking place in the public space of the neighbourhoods (wedding). In the Figure 6-30 the local wedding tent in Misurata city in one of Traditional Neighbourhood named (Al-Jehanat) to show the scale and details of the wedding tent from inside. Having social events are one of the characteristics of the local community. The advantage of this social form is to create a chance of meeting and communicating with the residents. Regarding the observation and the author experience, the following points can be summarised to describe the main features of this type of event:

- This type of gathering does not need public facilities but an appropriate size of open space which should be enough for the expected number of the

audience. The size of the Tent varies according to the number of the people who are invited to the event.

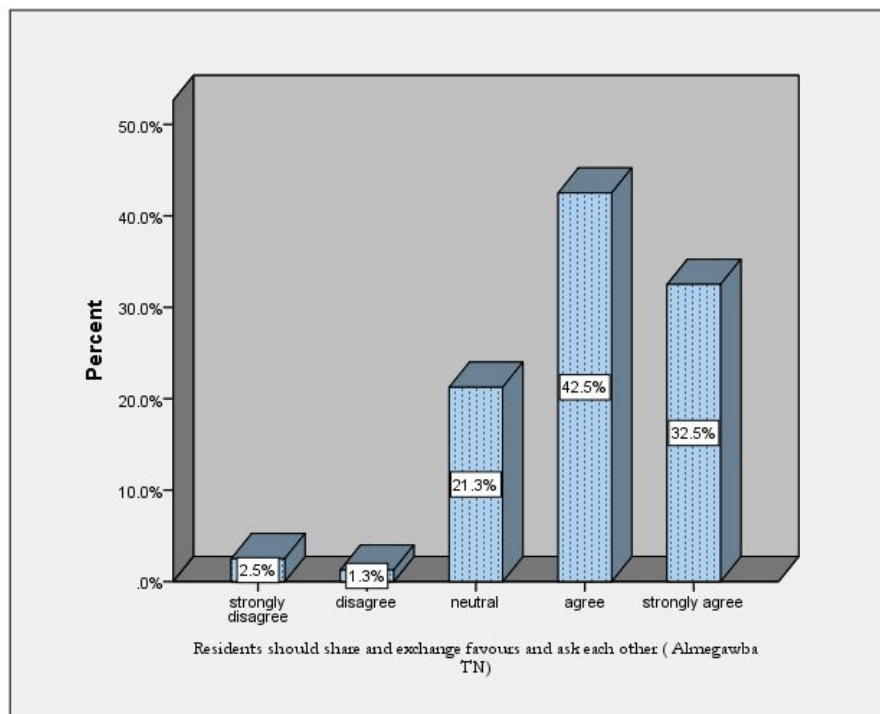
- Residents of the community and the event-maker relatives who are managing and serving the invited people. All residents' ages are involved in these events; each one has a different role relevant to their interest and age group. For example, elderly often welcome the guests, adults serve and manage the food and distribute to the guests at the tables, and teenagers serve tea and water.
- The event usually lasts for between three and five days. Each day has a different form of celebration up to the last day which is the marriage day when the groom takes his wife to their home in a very big gathering that ends the event.



Figures 6-31: Responses to the statement 'residents should share, exchange favours and ask about each other', in GN 9th July

The research result is very clear according to the participants' answers towards the following question, 'Residents should often participate in the community events, exchange favours and ask for an advice to/with neighbours'. Figure 6-31 and Figure 6-32 show that almost 75% of the respondents from both the GN and the TN indicated that social interaction and having close relationships with their neighbours

are important and are some of their social needs to feel satisfied which, therefore, increases the level of their quality of life. In this specific element, the findings show that most of the residents contribute and participate in the social events. Although the question was to examine their desire and perception towards this characteristic, the answer, in fact, matches the level of the real contribution which measured through the observation and through the interviews data. For example, participant S M from Almegawba TN stated that 'in the social events all of the neighbourhood residents participate and contribute in different ways, especially in Weeks. It can be seen that everybody want to help and give a hand to the neighbours'. And also K S from the 9th July emphasised that there is a level of integrity between the residents in the social events. This level is less than in the TNs but still in a good level, the only difference that findings show, in TN all of the neighbourhood residents participate while in the GNs may less in quantity as the residents of the next 10 – 20 next-door houses will be more likely to be present.



Figures 6-32: Responses to the statement 'residents should share, exchange favours and ask about each other', in TN Almegawba

The social value of the community actually is directly based on the open and public spaces as they are the main spaces for interaction and integration between the residents. Many of the respondents stated that they need the space not only for the entertainment activities but also there are social dimensions which are related to the availability of the open public spaces of the neighbourhood. These social events

such as weddings, wakes, a celebration of a baby's birth and other similar events usually continue for several days. Therefore, this aspect is very interesting in the local community. Based on the author's experience and from the research data generated from observation, in-depth interviews and questionnaires, it can be concluded that social events in Libyan cities are the key of the social link between the residents. Therefore, these events are the best time and place where people can meet and socialise with each other which eventually increases the social value. Local community places great emphasis on the social side of their life and considers it one of the essentials of their quality of life. However, this might not be the case in other regions with different cultural backgrounds and influenced by different desires and social needs.

6.5.2 Period of Living

Knowing how long a resident lives in a specific neighbourhood and identifying the residents' actions and reactions towards other residents in the community give an important indicator to evaluate several social aspects. According to the research data, it appears that often the residents who have lived in these neighbourhoods for long periods of time have stronger and closer relationship with neighbours.

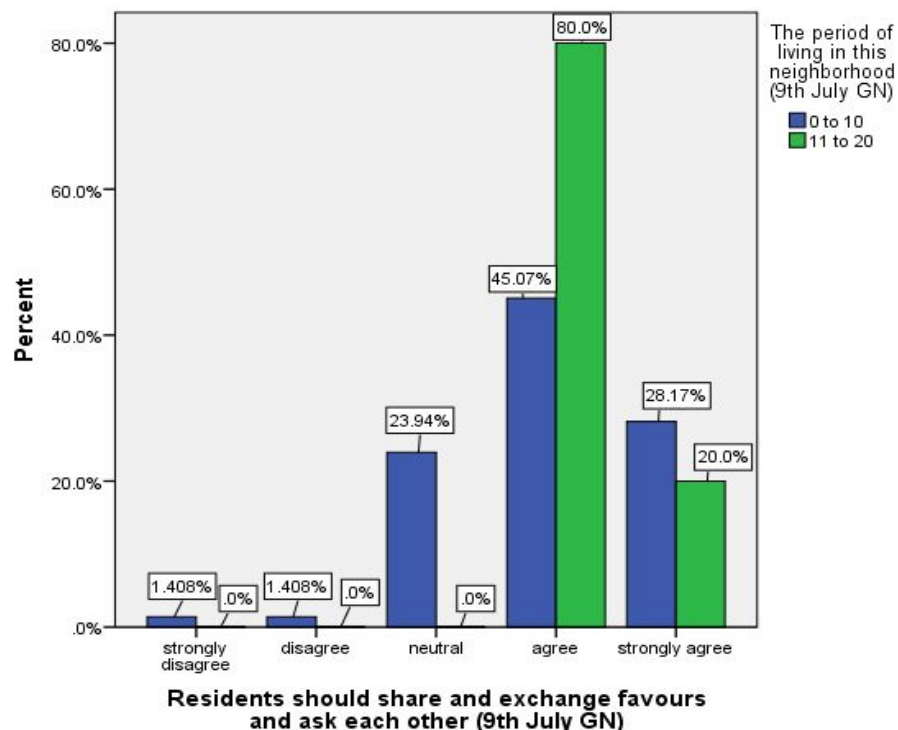


Figure 6-33: Responses to the statement 'residents should share, exchange favours and ask about each other' classified in the two categories regarding their length of stay within the neighbourhood, in 9th July

For instance, in the GN 9th July, this statement 'neighbours should share the public space and seek for advice and exchange favours' was used in the survey as a tool to examine the extent of communication and level of interactions between the neighbours. The group of the residents who have lived in the neighbourhood the longest answered more positively as shown in Figure 6-33. Almost all of the respondents (100%) who lived in the same neighbourhood from 11 to 20 years either agreed or strongly agreed with the previous statement while the percentage of the other group who lived in the same neighbourhood for a period of 1 to 10 years (73%) agreed and strongly agreed with the same statement. This result illustrates that time is a crucial element that can play a significant role in helping the residents become more familiar with each other and enhance the social life in the community. This contrast between the two groups reflects the role that length of time plays to improve the communication between the residents, and therefore, create a more integrated and valuable community.

6.6 Feeling of Equity

'Equity' in this research means that everyone in the neighbourhood has the same opportunity to practice their own activities regardless of their gender, age and other elements. Residents need the same opportunities to participate in the public space of the neighbourhood where they are supposed to enjoy their daily activities such as social, entertainment, play and sports activities. For instance, Musterd et al. (2016, p. 234) argue that 'We expect that households prefer to move to areas in which residents are not very different from themselves'. This expectation is based on a case study which shows clearly that inhabitants prefer to live in the community which they feel the sense of equity in their status in this case. In other cases, people might have different perceptions as they probably consider that the equity in religion or the cultural background is a priority for them. Therefore, understanding the features of the residents who are going to use this place is the key to providing the right solution in the most appropriate form that best meets their needs. The urban design of the neighbourhood should be based on a deep investigation of residents' perception in order to fulfil their desires, and thus to provide them equal opportunities that enable all the categories of the residents to get involved and interact socially within the same neighbourhood.

It has been argued by many scholars that to create a sustainable successful public neighbourhood, there should be a balanced provision of economic, environmental and social dimensions including equity and justice (Saha and Paterson, 2008,

Walker, 2015, Jacobson and Forsyth, 2008). Hence, the social aspects such as equity are one of the intangible elements that impact on the quality of the neighbourhood. This leads to its importance to be analysed in this research to comprehensively understand its impact on the local community.

The following Figure 6-34 depicts the attitude of the respondents of both sites towards the equity among the residents. The figures show the percentage of the respondents who agreed or disagreed with the following statement, 'This public space is appropriate to all the residents' age group, gender... etc.', and it can be seen very clearly from Figure 6-34, 6-35 and Figure 6-36 that more than 75% of the respondents in the GN 9th July disagree with this statement. In TN Almegawba also about 55% of the respondents disagree. It appears that in both neighbourhoods – refer specifically to Figure 6-28 – most of the participants in the GN are not satisfied in terms of equality within their neighbourhoods. The results also show that many of the neighbourhoods' residents are facing a lack of equivalency among user groups in terms of female, elderly and disabled people.

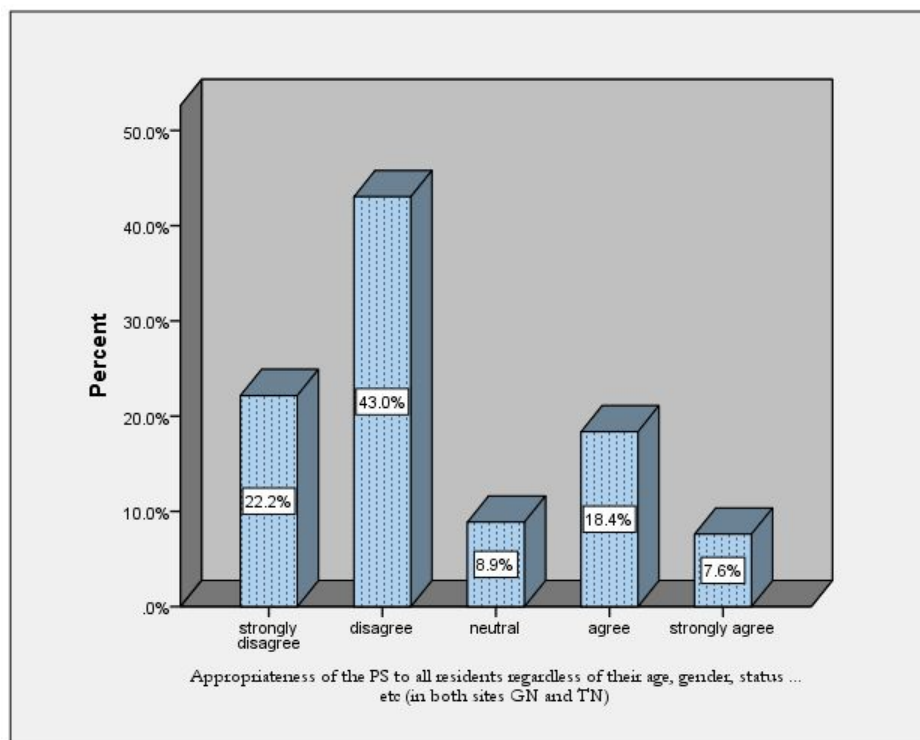


Figure 6-34: Responses to the statement 'PS is appropriate for all the residents' categories regardless of their age, gender, and status', in both sites TN and GN (average)

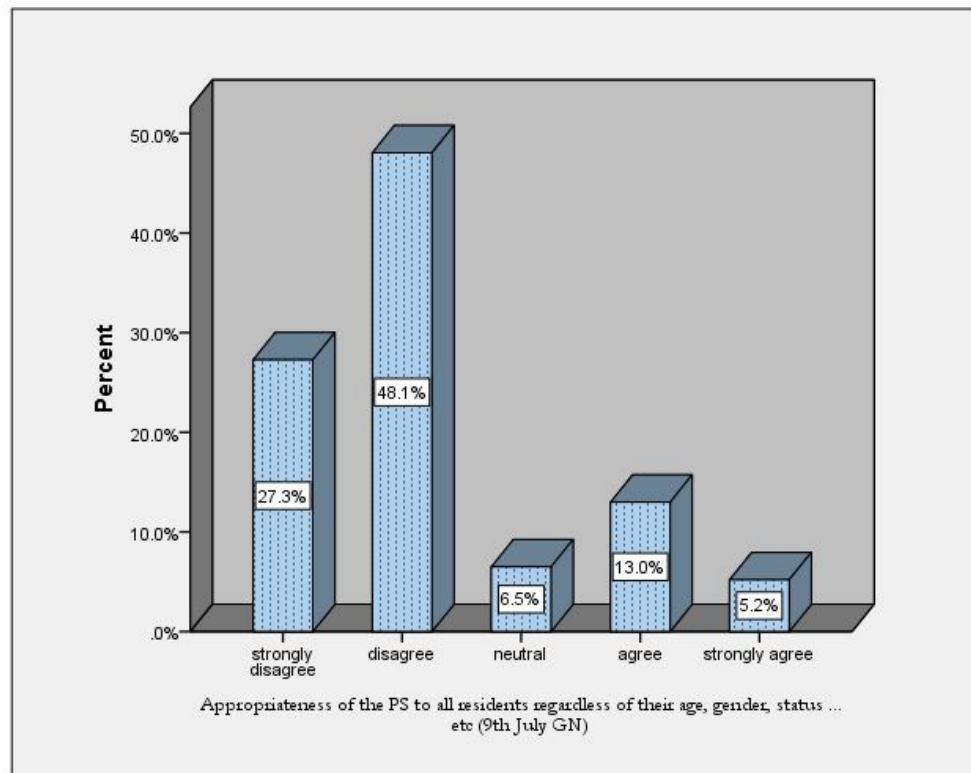


Figure 6-35: Responses to the statement 'PS is appropriate for all the residents' categories regardless of their age, gender, and status', in 9th July GN

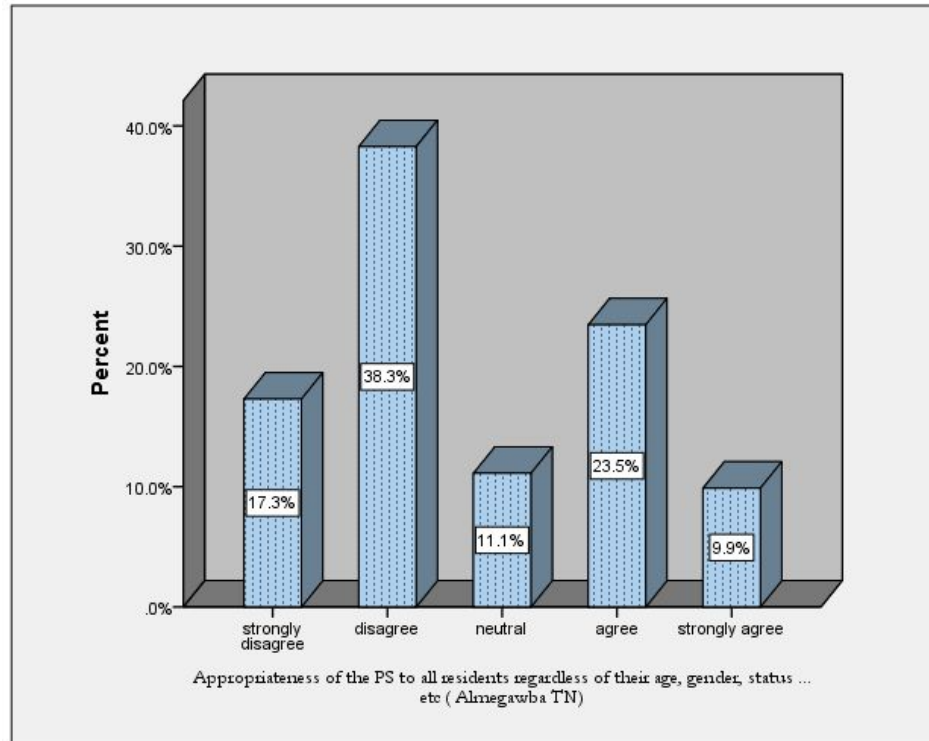


Figure 6-36: Responses to the statement 'PS is appropriate for all the residents' categories regardless of their age, gender, and status', in Almegawba TN

According to the survey findings, the total percentage of the respondents who disagreed with the previous statement in both sites together is around 65%. Furthermore, in-depth interviews highlight that there are three main categories of residents who are feeling a lack of equity in using the public spaces of their neighbourhoods. a) The youth: this category, aged from 12 up to 20 years, is facing a lack of amenities such as football pitches, tennis courts and other sports equipment; also a lack of prepared landscaped open space which can be used in many activities suitable for this specific age. b) The disabled and the elderly: disabled residents feel isolated from other residents who are in their age group due to the lack of infrastructure that can help their movements from one place to the other. Elderly also cannot find a place w to spend some time with the people of their age. C) Female residents: this category has expressed their feeling of injustice in many parts of the research methods. These three categories should be taken into account in any future development as they represent almost 60% of the residents.

This overall result points out that more efforts are needed to create more opportunity for the rest of the residents who could not find their appropriate place such as female spaces, quiet sitting areas for elderly, and special pathways, routes and sloped 'ramps' for the disabled people.

6.6.1 Age Groups

The Libyan community can be classified in four main age categories according to their type of activities: the young children from 5 to 12, the youth from 12 to 18, the adults from 18 up to 55 and the elderly from 55 and above (figure 6-37). Each of these classes has different interests which require different forms of space that can fulfil their needs. For example, providing a playground for children is not enough in a certain place as the adults who bring these children need a place to undertake their activities such as chatting, drinking and walking around with others who are of a similar age. The participant, S M, from the residents' group of a TN, pointed out that,

'I remember that when I was 6 years until I grew up, all ages from 6 up to 60 are active in this space. Many different activities occurred from the playground to sports pitches to sitting places for the older residents'.

He concluded that the public space has a variety of areas or zones where different ages can undertake their favourite activity. Additionally, S M explained that the scene of the public space was amazing because most of the ages were present like

a big family. Children were playing on a football pitch, adults were watching and supporting their children, all neighbours would come and sit as groups and chat with each other, which was one of the most interesting moments in his childhood.

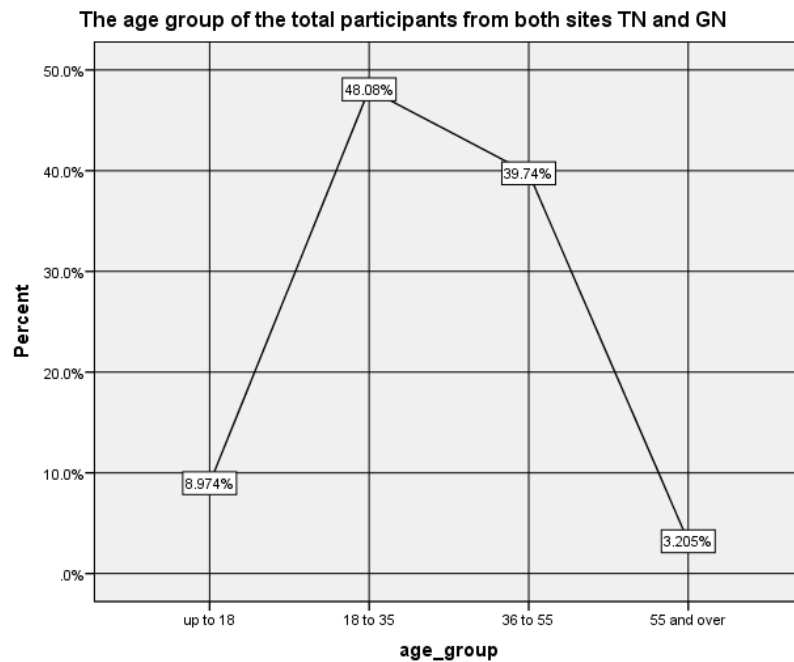


Figure 6-37: The distribution of the respondents' age groups in both neighbourhoods TN and GN

On the other hand, findings revealed different opinions with regard to the qualitative data from the interviews. One of the professional group interviewees, A M, stated that recently there are concerns over using the public space due to age differences between the residents. For example, there is less interest among the adults and elderly to use the public space because of the lack of appropriate spaces for them as explained in **section (6.6)**. The children still use the public space, perhaps less than before but they utilise the public space more than adults. Along the same line, some other residents emphasised that the lack of activities in the public space by adults and elderly attributed not only to the shortage of suitable places but also to the change of living style. Therefore, these groups prefer to have their social meetings and activities in another place such as social clubs or cafés in the centre of the city.

6.6.2 Residents' Gender

The participation equity according to the gender of the users in this local community can be considered as one of the important issues. According to the importance of this issue, it is influenced by many factors such as religion which

restricts traditional backgrounds and has done through history. In fact, the complexity of this issue is not only in Libyan communities; it can be seen in many of the Middle East and North Africa (MENA) regions. Kirby (2008, p. 77) highlighted that,

'Recent research that is consistent with these insights is emerging with new feminist scholarship in Iran and Turkey; this work is valuable in showing just how difficult it was, and how rough it remains, for women who attempt to occupy traditional public space in these countries'.

The results of the research show that the participation of the female gender is very low compared to the male. This result is relatively similar in both types of neighbourhood TN and GN (Figure 6-38).

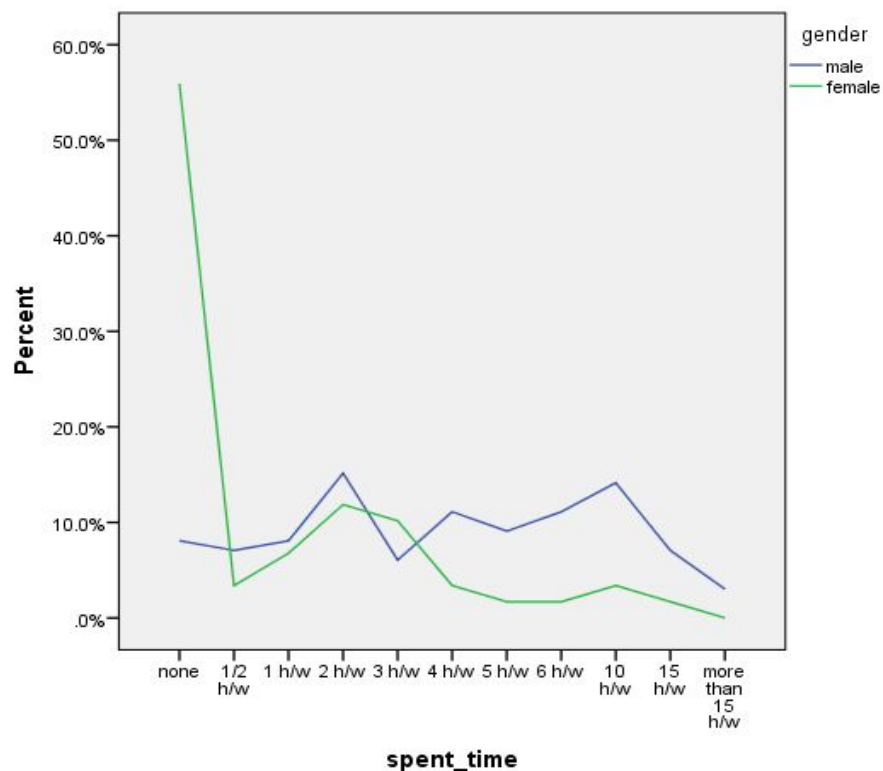


Figure 6-38: Illustrates the extent of participation in the outdoor space of the neighbourhood by gender

It can be seen that almost 45% of males spend 4 to 15 hours per week in the public spaces while the presence of females is far lower as per Figure 6-39. For example, it appears that about 56% of females do not spend any time in the outdoor space of the neighbourhood and only a few spend just a few hours a week. From the research results, the findings show that there is a contrast between the

results of the two genders in their participation within the public spaces, and this, in fact, is due to a number of reasons:

- Culture background: females in the Libyan community cannot go out of their house unless accompanied by an adult male or as a group of females. This will decrease her chance of contribution as an individual participant.
- Religious restrictions: the majority of Libyans are Muslim, and females in Islam are not allowed to meet and chat with strangers, must cover their bodies and must use a particular dress which might not be suitable for some activities in the public space such as sports.

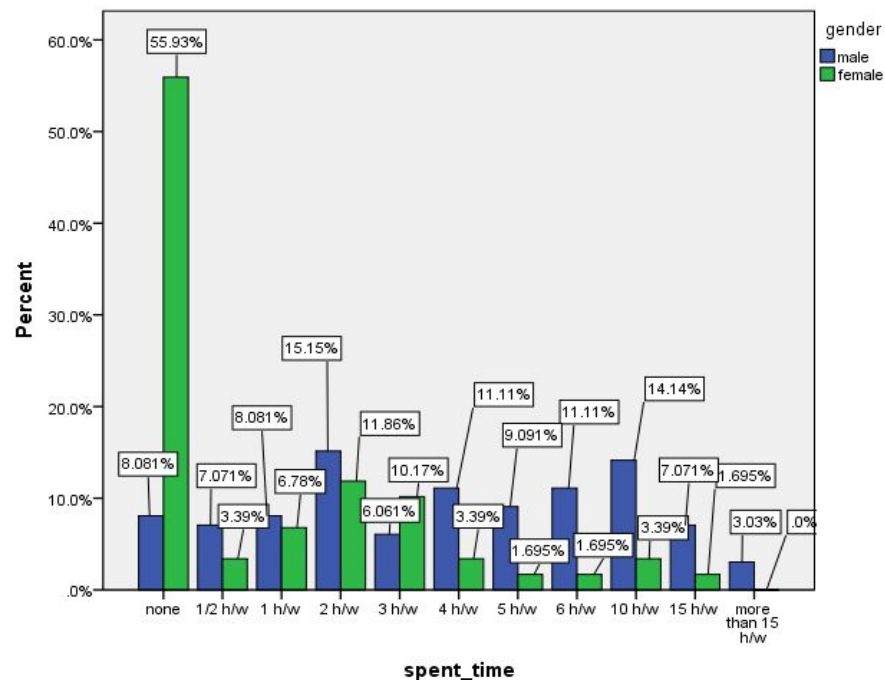


Figure 6-39: Illustrates the extent of participation in the outdoor space of the neighbourhood by gender

On the other hand, the level of participation depends on the category of the residents - whether they are male/female, individuals/groups and children/youth, etc. (Loughman and Montias, 2000a). For instance, men tend to use the public spaces more than women because of the traditional restrictions which are different to other nations such as in Europe and USA. In this local community because of traditional and religious culture, it is not common for the women to interact directly in a physical activity with men, and women are usually accompanied by a male relative such as her husband, son, brother or father in public spaces. Another side of the study is to find out female contribution in the public spaces, how women use

the public space and whether they have the motivation to be part of the residents who are supposed to be sharing and interacting within the neighbourhood public space.

According to the research data, a few of the female participants stated that they sometimes met, chatted and walked in the public space of the neighbourhood; however, they pointed out several negative issues with regard to public space quality. For instance, females indicated that there is a need for separating the space to zones which allow them to be more private as in the local culture there should be no direct contact between strangers of different genders. The second point they raised is that they need a special place to practice their sports activities which should be for females only. Finally, they highlighted that there is a lack of seats and shelters near the children's play-area which makes it difficult for them to spend long times as they need some facilities so they can use this time to gather with other female neighbours and enjoy social activities while their children are playing.

In terms of community behaviour and culture background, the females do not share the public space equally, as they need to have a private place within the public space which does not exist in most of the neighbourhood. The common situation is that females are only active in the public spaces when they are participating as a group with their children, parents and brothers/husbands or with another family. In this case, women can spend some time in public, but this is considerably low participation. Therefore, many female participants in this research suggest that there should be private places for women to undertake their activities such as walking, sitting and chatting with their friends and watching their children in a positive comfortable atmosphere. Figure 6-40 illustrate the percentage distribution of the participants' gender.

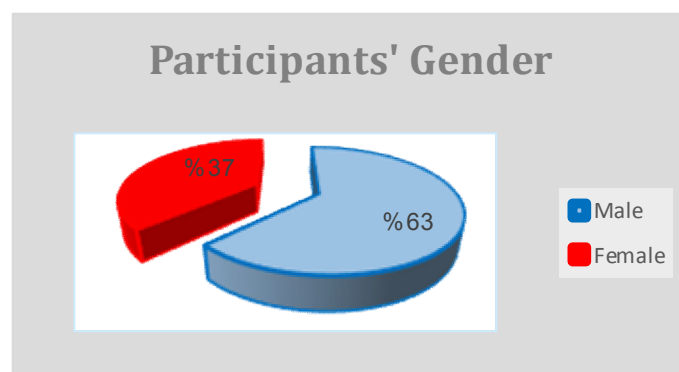


Figure 6-40: The percentage of the participants' gender in both sites (GN and TN)

In terms of the type of activities, many limitations can be found according to cultural and religious restrictions. That is why most of the female participants indicated that they need a separate space within the public space of the neighbourhood exclusively for them, especially who are youths. One of the female participants I S stated in the interview that, 'If we want to use the nearby space we should go as a group of female or as a family which limited our participation in the public space'.

For example, they cannot get involved in such physical activities which might have close communication with males unless they are in groups or as a family. In this case, local communities usually provide separate spaces for females such as Masjid, sports centres, central parks and other similar places. In neighbourhoods, females suggest that there should be areas exclusive to them so they can enjoy their activities in a private atmosphere. It has been noticed that almost all of the females who took part in this research either via questionnaires see Figures 6-41 and Figure 6-42 or through interviews insist that an urgent response is needed to create private spaces for them in order to be equal with the men's facilities. This point is one of the significant findings that can be redeveloped in future schemes of the public space and the design of the neighbourhoods.

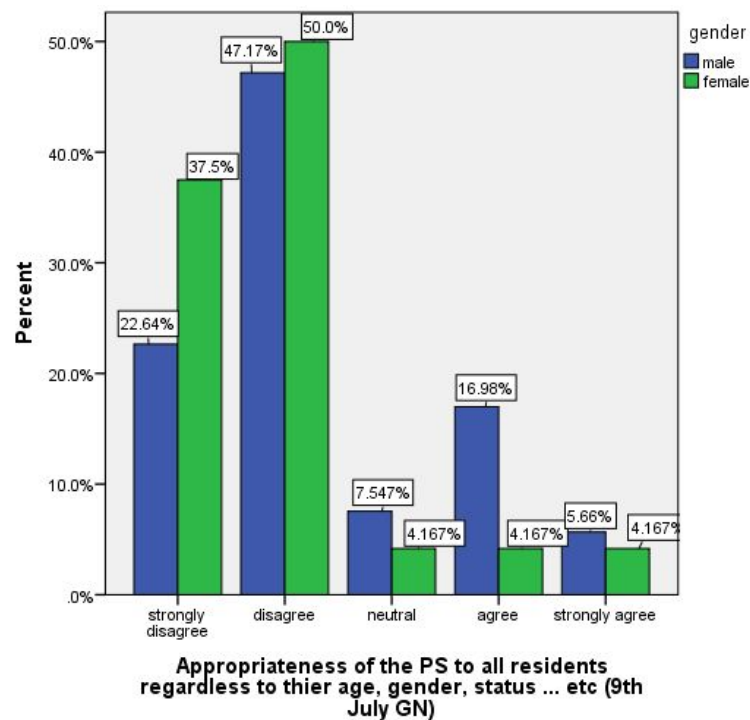


Figure 6-41: Responses to the statement 'PS appropriate to all the residents regardless of their age, status and gender', in GN 9th July

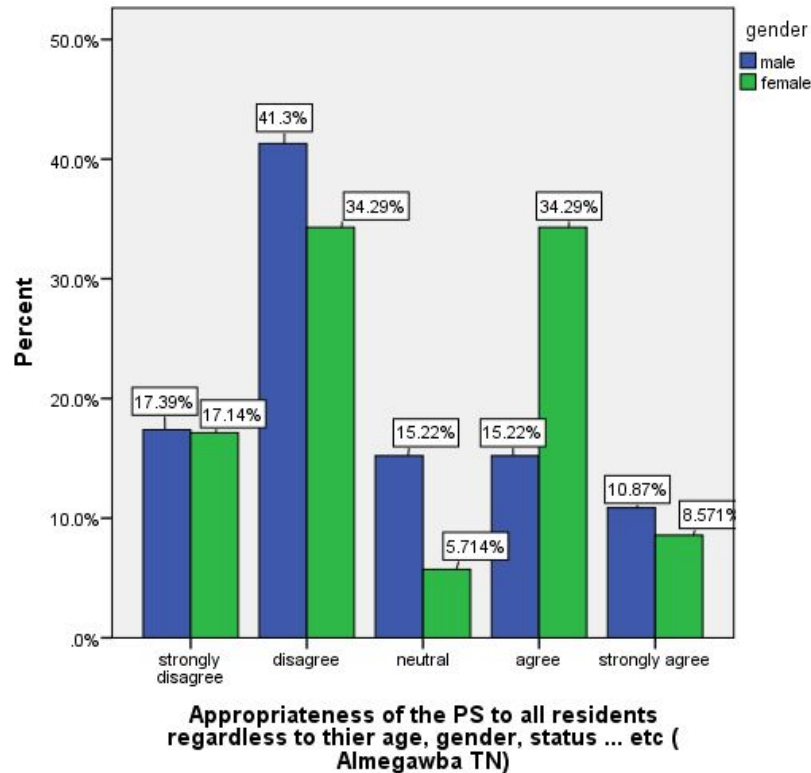


Figure 6-42: Responses to the statement 'PS appropriate to all the residents regardless of their age, status and gender', in Almegawba TN

6.6.3 Lifestyle

The impact of the current revolution of the network technology and the new communication methods has changed the features of our lives; at the same time, it has decreased the contribution of people in social life. This has impacted on many face-to-face communication activities such as shopping, socialising and managing businesses – all these can now take place over the internet services (Banerjee, 2001). This new form of our lives may have a negative impact on the people who live within the same social network as neighbours and community members. It also can reduce the social connections which is one of the most important values for many regions such as Libya. These concerns have been the focus of many studies in several regions as it has stated by Gómez et al. (2015), Musterd et al. (2016) and Hughey et al. (2016) , so they conclude that quality of life is directly linked to the social comfort and the quality of communication with other people because when people are interacted and connected to each other feel more secure and peaceful, this feeling helps to be more comfortable and have a better life quality (ibid). Therefore, investigating alternatives to providing a better life and modern ways to keep the value of the social network is fundamentally required.

In Libya, as elsewhere, people are facing a challenge of retaining the vitality of their traditional events and the same momentum of the community value. Many of the cultural-based characteristics are at risk of disappearing or at least are reduced in their effectiveness. According to the research results, residents pointed out that the vitality of the public spaces is now less than two decades ago due to the change of lifestyle and rhythm of life. This perspective raises a concern about the impact of life change on the use of public space and enquiries, in which one influences the other.

One of the interviewees S M aged 36 years indicated that 'I think children are less motivated to use the public space like in our time before 10-20 years because now they have many games and electronic devices at home'. Another opinion from A S, one of the professionals' group, explained the impact of life change and the transfer of the lifestyle to new forms,

'We were spending most of our time outdoors in public space with our friends. Now, this relationship has changed, it may due to the lack of time that residents spend to share activities. People now are busier and have more responsibilities according to the speed of the rhythm of our life. The simplicity of the lifestyle has changed referring to the use of new technology such as using computer games and internet services more than in the last few decades. This lack of interest to use the public space may include the adult more than children. The children still use the public space, perhaps in a less frequent manner but they still present in the public space more than adults'.

With regard to the findings, the following points might be the most dominant reasons for this change which has led the parents to have concerns about their children in many aspects of daily activities.

- The way of life has changed, now there are more risks for children: the number of cars has increased; the parents are busier as they work more hours so the control of watching their children may become less. Therefore, most of the people prefer not to let their children play out in public spaces. Instead, they go together with them to the beach in the summer season or to any central gardens or countryside in another season.
- Recently, there is more traffic on the streets of the neighbourhood; it becomes more crowded (high density) which needs a special design for the pedestrian movements. There should be a safe area for children to play in;

this can also create weaknesses in the social communication and risk to the children who play in the public spaces of the neighbourhood.

- Many children are addicted to the new technology tools such as computer games, X-box, iPad and other electronic devices rather than going out for physical activities.
- Because of lifestyle changes which mean people work more hours, the carers/parents literally have less time to share activities with their children; thus, it is more convenient to keep children at home because it is safer and easier to watch them.

According to the change of the life-rhythm, one parent, M G, from the GN 9th, July stated in the interviews that "we have less time for social activities than before". He explained that,

'when parents come back from work at 16:00 pm they need time for lunch (lunch in Libya is usually between 14:00 to 17:00) with the whole family, then everyone will have some rest, then children need to study and do their homework, then it is dark so it is difficult to let them go out to play, so instead they will use some electronic games'.

Other respondents also emphasise that this is probably the case for many local people nowadays, everyone's children go to school and they have less time to spend in a social life; as a result, the only chance that they would use the public space is for social activities is at the weekends. This limits the time they participate in the public space within their neighbourhood. They mostly use the weekends for going out to the beach, visiting other families, and picnicking. As Gehl (2013, p. 159) states,

'For most people working life has changed in terms of the work itself, the workplace and transport ... this is a dramatic historical shift from the days when work was physically demanding and conducted outside or in front of open windows, and transport was by foot or bicycle ... we will still need purpose-built tracks and other facilities where people can meet their need for fresh air and exercise'.

Therefore, the changing rhythm of life also affects the relationships between the residents even though they live together in the same neighbourhood. Yet, there are some other features which minimise the chance of interactions between the residents and decrease the social communication. These new issues are becoming

more and more essential in our life such as spending more time at work, travelling and spending time on electronic devices than socialising with neighbours.

6.7 Summary

To summarise, the research has pointed out that intangible elements have a major impact on the quality of the public space of the neighbourhoods. These elements, in fact, are related to many factors, including the relationship between the residents, social interaction, and cultural aspects. It has been noticed in this chapter that the relationship between the residents depends very much on the length of time they have been neighbours. The longer the period the stronger the relationship will be. As Nasar and Julian (1995, p. 180) state, 'Sense of community is a key psychological construct that the residents of urban neighbourhoods build over a period of time'.

Therefore, "The length of residence thus becomes important in fostering a sense of community, in addition to the neighbourhood association and mutual cooperation" (Chitrakar, 2016, p. 215). This indicator illustrates the reason of why, in the TNs, the relationships among the residents are often stronger than those in the GNs. The main feed for these relationships is the social communication such as greeting, sitting, chatting and sharing activities. In both sites, the findings have discovered a reasonable range of social interaction between the residents but more improvement is needed in order to create an integrated community which is one of the aims of this research.

The children of the neighbourhood are one of the most active and vital residents' categories; they have more energy and a wider range of activities to be shared as Gehl (2013, p. 158) indicates that 'Children's play has always been an integral part of city life'. The research has emphasised that children play a fundamental role in improving the social interactions and encouraging the residents to get involved in more social activities. For instance, the playgrounds and sports activities usually bring the parents and adults together and encourage them to communicate in these places.

Moreover, it can be seen from the results that the TNs are more integrated and have higher community cohesion; this indicator has been explored due to the strong communication and social involvement between the residents of the TNs. On the other hand, similar elements have been observed only in small groups in the

GNs which are built up over the time through daily interaction rather than via more social communication. In addition, the level of social interaction and community cohesion also depends on the cultural background. The findings have highlighted that in some cases the differences in a particular way of applying some events might lead to rejection of participation. In the GNs people might have different forms of social events which are different than those of other neighbours, which might decrease the chance of engagement between them.

Finally, this chapter has explored that there are a few categories of residents who have less opportunity to enjoy the outdoor spaces; these categories are the females, disabled and elderly. They are not provided equally with the local needs and the appropriate spaces to undertake their social activities in the public or semi-public spaces of the neighbourhood. It has been widely emphasised that public spaces such as neighbourhood parks should serve all types of inhabitants as Rouhi et al. (2016, p. 458) assert that 'The best parks are those that pay attention to the social, cultural, psychological needs of different age and sex groups and provide charming and appropriate atmosphere for them'. The research has concluded that these categories need more attention in future urban development and in the new projects. Improvements to the quality of the public space need to be considered to serve these particular users.

CHAPTER SEVEN: THE SOCIAL SATISFACTION OF THE RESIDENTS

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7.1 Introduction to the Chapter

This chapter illustrates several themes to be measured in order to find out the level of residents' satisfaction in both neighbourhoods of the case study. It presents the research findings with regard to the social satisfaction, safety and security, privacy and the local initiatives. Finally, it concludes the main results which should give a clear identification of the research issue and suggest an appropriate development to improve the current situation of the residents' social satisfaction.

7.2 Social satisfaction

Social satisfaction of the residents within their neighbourhoods is the aim of the designers, urban developers, local authorities and the decision-makers of the local community. Social satisfaction can be measured by examining many factors such as length of stay, sense of community, attachment and even the psychological comfort of the residents of their community. This section discusses the research results and the most significant findings that show the perception and the level of satisfaction of the residents towards the quality of the public space in their neighbourhoods.

Research has been conducted in other regions to examine the satisfaction of the residents referring to the fulfilment of their social needs particularly in the public spaces of the residential areas. For instance, Nasution and Zahrah (2014,p. 585) state that,

'One of the urban environment's elements is public open space. Thus, the satisfaction level with public open space can be an indicator of satisfaction with the urban environment and next can affect people's quality of life'.

Meanwhile, in a similar research Kamalipour et al. (2013, p. 134) concluded that, '... The results of the interviews and questionnaires indicate that most of the participants (72%) were not satisfied with the quality of the public realm'. Therefore, measuring the quality of life directly depends on the level of the

residents' social satisfaction and their feelings in which the public space can fulfil their local needs (Beck, 2009).

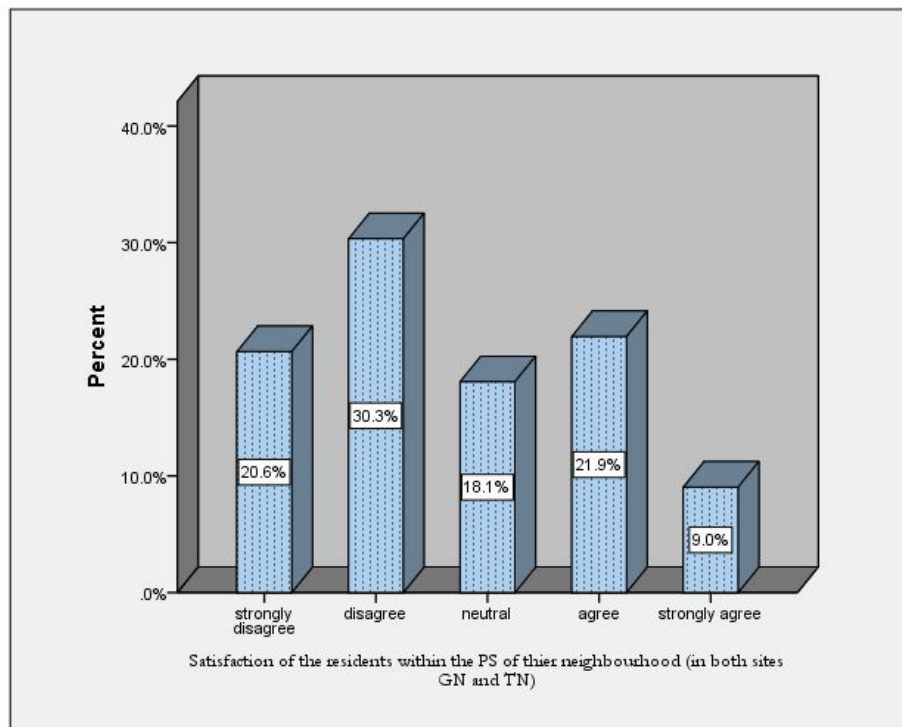


Figure 7-1: Responses to the statement 'you are satisfied towards the PS of your neighbourhood', in both GN and TN

With regard to the research findings, Figures 7-1 show the overall level of satisfaction regarding the social satisfaction of the participant towards the public space's quality and the extent of meeting their social needs in both sites TN and GN by around 50%. It can be seen that almost 70% of the participants are not satisfied with the current quality of the public space in the GN 9th July as per Figure 7-2 while around 34% of the respondents from the TN Almegawba stated that they are socially not satisfied as per Figure 7-3.

The main key question here is why people are not satisfied and why the satisfaction in GN is lower than in TN. With regard to the qualitative interviews, it can be highlighted that: in general, there are many problems which impact negatively on the level of satisfaction for the residents in both sites. Nevertheless, there are some positive points in the TN which make the situation slightly better for the residents. In TN respondent S E stated that 'people in this neighbourhood feel kind of social satisfaction because they are familiar which all the residents they often receive a very good amount of support and help from each other especially in the social events and local occasions'. Notably, this advantage is far less in the GN as they

are a new occupier in the area and most of them are moving within a few years. Therefore, the sense of cohesion and social interaction is less, this makes people feel less satisfied being in such a neighbourhood.

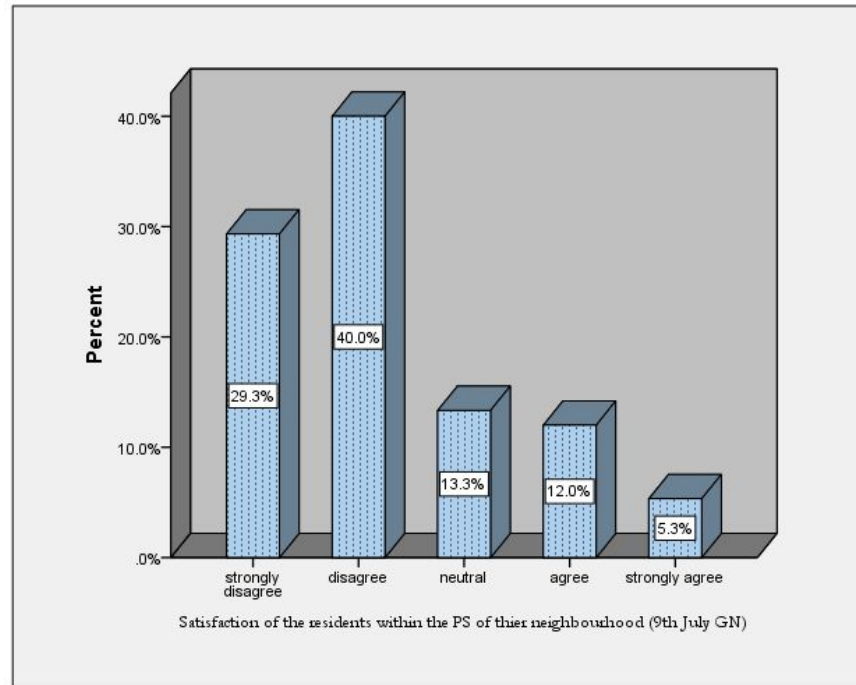


Figure 7-2: Responses to the statement 'you are satisfied towards the PS of your neighbourhood', 9th July GN

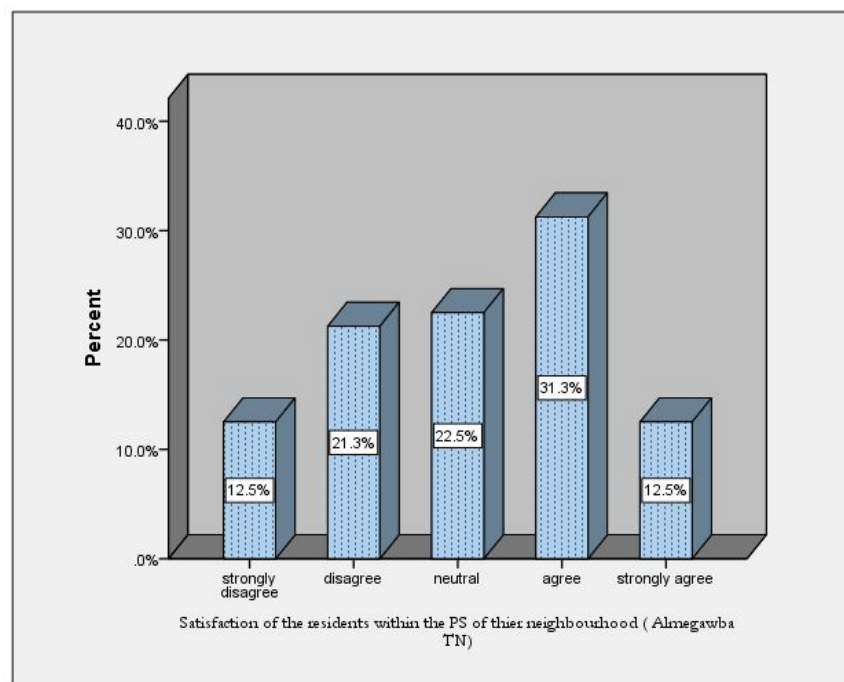


Figure 7-3: Responses to the statement 'you are satisfied towards the PS of your neighbourhood', Almegawba TN

Therefore, it can be concluded that most of the residents of GN are not satisfied with the current quality of the public space. On the other hand, residents of the TN are more satisfied; this can indicate the value of the social satisfaction in the local communities. Thus, creating a link between the new neighbourhoods and providing the features that keep the value of the TNs is one of the recommendations for new projects.

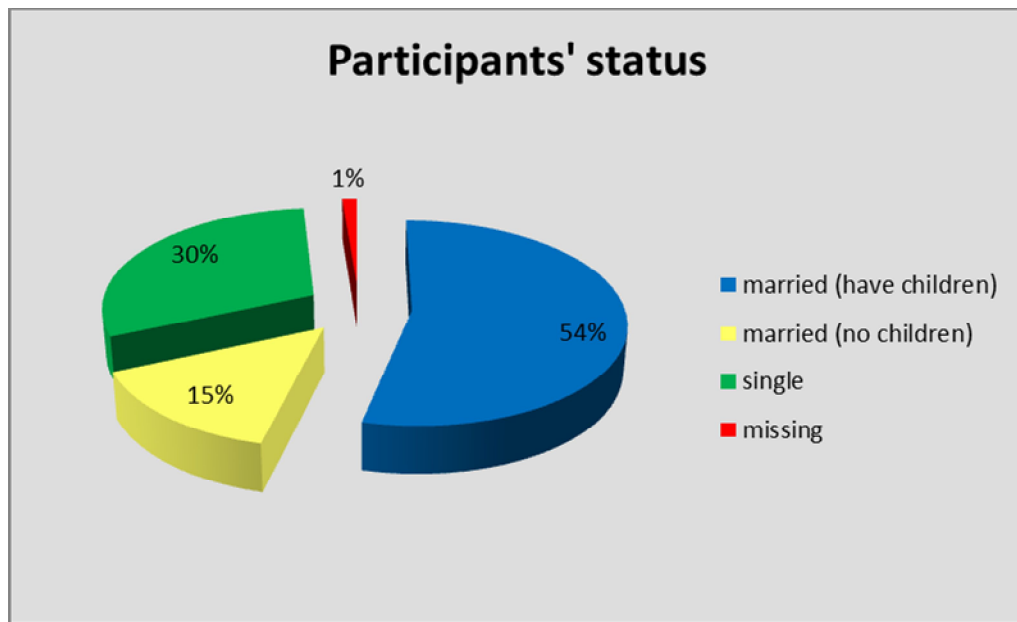


Figure 7-4: The percentage of participants' status in the two neighbourhoods show clearly the variation in both GN and TN

Figure 7-4 shows the overall percentage of the respondents of both sides; it clearly shows that the highest percentage of the families within the neighbourhoods have children. This indicator describes the extent of the facilities for children that are required in such spaces in order to support and enhance the use of the space and, therefore, the residents' social satisfaction. Relevantly, there is a massive need for identifying the local features of the residents such as the common games and habits; this can give the designers an overall understanding of what to include in the new projects and how these are going to best serve the users to satisfy them not only physically but also socially. This is one of the research tasks which is going to be illustrated in the last chapter with the overall results and recommendations.

7.2.1 Sense of Community

The sense of community has a broad meaning. In this context, attention is drawn to the question of what makes the community valuable; or, put another way, why people choose the neighbourhoods beyond the consideration of the individual house. Hanibuchi et al. (2012b) suggest that the quality of life starts from the community scale as the unit that provides a range of comfort and pleasure to all the residents in that community. The sense of community is a much greater association with those around you in the vicinity of their residence where people spend most of their time (Wood et al., 2010). Roger S. Ahlbrandt (1986) explains that the idea of the community is to prevent individuals from the effects of alienation and increase their level of sociability. Therefore, the main aim of creating a quality community is to establish a proper context that can protect the residents from the impersonal world and enhance their feelings of engagement through a range of activities they can take part in within the public and semi-public spaces. Residential areas or 'neighbourhoods' are the middle stage of organising space, decreasing the impact of the gap between the public and private realms (Madanipour, 2003).

The sense of community gives a clear indication of the public space's quality. Measuring the sense of community of the residents is necessary in order to evaluate their satisfaction within the local community (Cattell et al., 2008). Therefore, it is not only the physical boundaries of the public space which have a direct influence on the quality of the neighbourhood that needs to be examined; the perceptions of the residents about their well-being and social satisfaction are also crucial (Middleton et al., 2005).

The research findings indicate several interesting points to help clarify the role of sense of community in making successful neighbourhoods. According to Figure 7-5, it can be noticed that more than 40% of the respondents in 9th July GN either disagreed or strongly disagreed with the statement, 'in this neighbourhood residents have a strong sense of community', while about 30% answered 'neutral' which is also significant. As evidenced below, in the local community the expression of the word 'neutral' means that the person is not satisfied which might differ from its meaning in other cultures. Therefore, it can be considered that around 70% of the respondents are not feeling a sense of community in their neighbourhood.

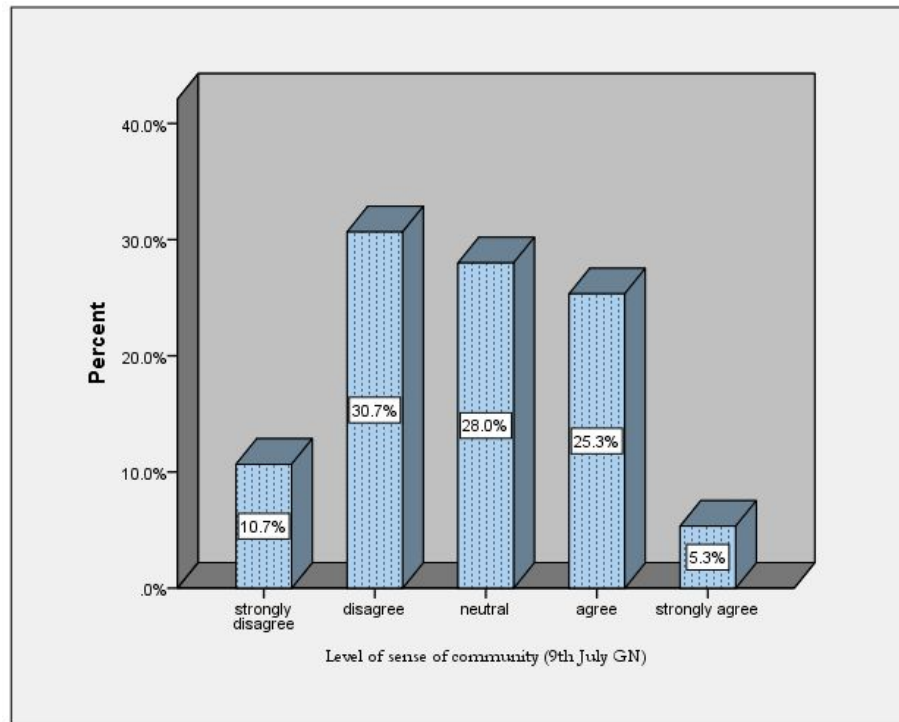


Figure 7-5: Responses to the statement 'you feel a sense of community in this neighbourhood', in GN 9th July

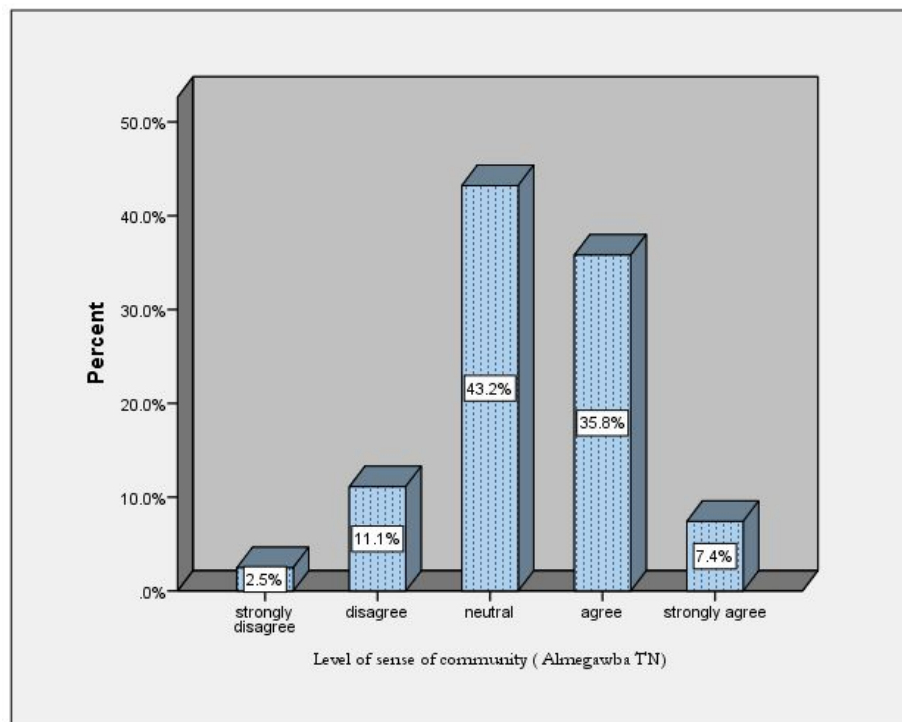


Figure 7-6: Responses to the statement 'you feel a sense of community in this neighbourhood', in TN Almegawba

On the other hand, in Figure 7-6, it can be seen that only 13% of participants do not feel the sense of community. The percentage of the participants who answered

'neutral' is high on both sites, which has encouraged the researcher to find out the reason for this indication. From the interviews, further questions were asked to the local community to identify this point and it appears that when the respondents answer 'neutral' in fact it means 'not satisfied'. Thus, it can be considered that more than 55% of the participants of this neighbourhood are not feeling the sense of community. This result indicates that the sense of the community of the residents in the TN is higher than among the residents of the GN; however, both are still between 30% and 55% which clearly shows room for improvement.

One of the most important measurement tools to investigate the sense of community is to find out the level of interactions between the residents in the public spaces of the neighbourhood. The interaction can be in many forms as explained in **section 6.2.2** (participation forms). In this context, more evidence was collected from the in-depth interviews to specify the results and provide more details about the feeling of a sense of community within the public space of the neighbourhoods.

This view is concurred with by a participant, A G, from the professional's group, who indicated that the feeling of a sense of community depends on the residents themselves, it is about their feeling and emotions towards each other and the level of the social interaction between them. The TNs usually have better feel of a sense of community than the GNs because their residents have lived together for a long time and they own the houses from one generation to the next. In the GN most of the residents still linked to their original community and they are staying in this neighbourhood for 5 to 10 years; however, they always look forward to building their own house in their original place where their relatives live.

From another point of view, participant, H B, who is one of the decision-maker group and the head of GSC, stated that the physical elements such as green areas, playgrounds, landscaping the open areas and other facilities have a positive impact on the residents' satisfaction which promotes their sense of community even though they are in a GN. The quality of the neighbourhood public spaces is one of the major encouragement features that make the residents happy and satisfied their neighbourhood. Therefore, residents who live in a good-quality GN are more likely to have a better sense of community through time than those in the new GNs that have less quality. The opportunity of improving the social interaction is higher when the place provides more chances of meeting and participation which finally might impact positively to make the residents feel the same sense of TNs. Another

interviewee, (I I), from the residents' group, lives in a GN and pointed out that the activities that take place in the public space of the neighbourhood are important in terms of engagement with others and might develop the feelings of satisfaction. People within the same community need to feel socially similar in order to participate and interact together in the public spaces, which finally leads to a high sense of community.

7.2.2 Neighbourhood Attachment

Neighbourhood attachments are comprised of two different aspects – behavioural and attitudinal; however, both are likely to be linked in some cases (Greif, 2009). The attitudinal attachment includes emotional dimensions which are based on the perceptions and the interaction of the residents. It is also linked to the assessment aspects which refers to the residents' needs and desires (Guest and Lee, 1983). The behavioural aspect is clearly related to the residents' behaviour and the extent of their social relations which comes as a result of the involvement and the participation through the local activities (Woldoff, 2002, Greif, 2009). In this research, examining the attachment of the neighbourhood can indicate the social value of the community and therefore the level of social satisfaction of the residents.

Similar research also highlights the importance of focusing on this dimension. For example, Woolley (2006) states that both physical and emotional memories of the person that are formed through the past years influence their sense of attachment to that place where they were generated. The attachment to our community is a positive sense, as it encourages the contribution and development of positive voluntary acts. It should support the sense of giving to the neighbours and at the same time can keep the channels of communication open with the other communities. Ahlbrandt (1986, p. 121) suggests that, 'people are committed and attached to their neighbourhoods for a variety of reasons, but that residents maintain linkages with the external community'. Thus, from many perspectives, neighbourhood attachment is a fundamental element that impacts effectively on the quality of the neighbourhood public spaces and by implication the quality of the residents' lives. Greif (2009, p. 28) concludes that 'Evidently, residents benefit significantly from their own personal neighbourhood attachment as well as from residence in a neighbourhood with highly attached residents'. It can be highlighted that a sense of attachment towards the neighbourhood serves as an essential indicator of the residents' quality of life. It also enhances the social network and supports the determination of the local needs. The neighbourhood that has

residents with strong attachments and a good range of engagement is more likely to have good residential stability and less social disorder (Jean, 2015).

With regard to the findings of this research, it appears that on both sides residents highly evaluate the sense of attachment. In Figure 7-7, only 5% of the participants opined that attachment to the community is not very important while more than 85% of the participants believe that residents should spend more time with each other in the public space to be more attached to their neighbourhood.

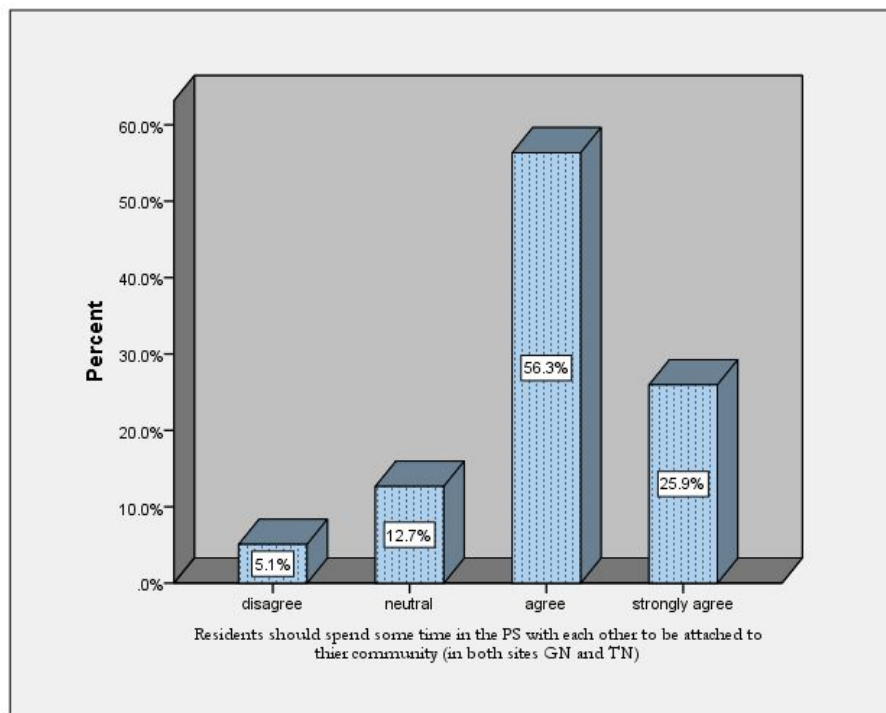


Figure 7-7: Responses to the statement 'residents should spend some time in the PS with others to enhance the sense of attachment to their community', in both sites TN and GN (average)

Interestingly, questionnaire data results show that almost 80% of the participants of both sites believe that residents should spend more time with each other in the public space to be more attached to their neighbourhood. Similar results were noted from both sites with a slight difference whereby, in TN, more respondents indicated the same belief with a percentage of more than 80% while in GN the percentage is just less than 80% see Figures (7-7, 7-8 and 7-9). Therefore, respondents are aware of how these features are connected to the feeling of attachment. The question now is that, (Are these residents really attached to their neighbourhoods and what is the results of the two types of neighbourhoods?). The qualitative data through the interviews show that sense of attachment in the TN is higher than in the GN.

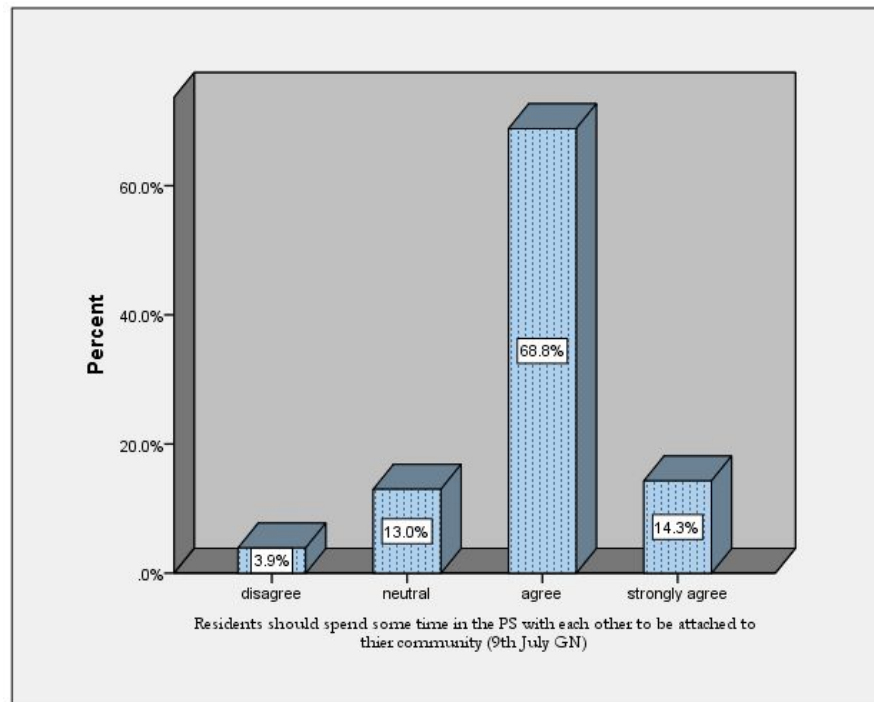


Figure 7-8: Responses to the statement 'residents should spend some time in the PS with others to enhance the sense of attachment to their community', in 9th July GN

The participant M G who lives in 9th July said ' Honestly, I like this place because it is my home but I still feel that I am living between strangers because I left the place that I grow up in and I still go nearly every day to spend some time with my older community'. This sense of attachment to the original place of the residents can be seen also very clear from the respondent K S as stated that ' if not all of these residents, probably most of them are planning to move back to their original neighbourhoods when they could afford a reasonable living there. Even if that is difficult but we all still have that wish'. In this context, it can be concluded that residents of TNs are more attached to their neighbourhoods because they feeling familiar with those neighbours. So the future enquiry could be (will these residents still have the same level of attachment even after 20 or 30 years?).

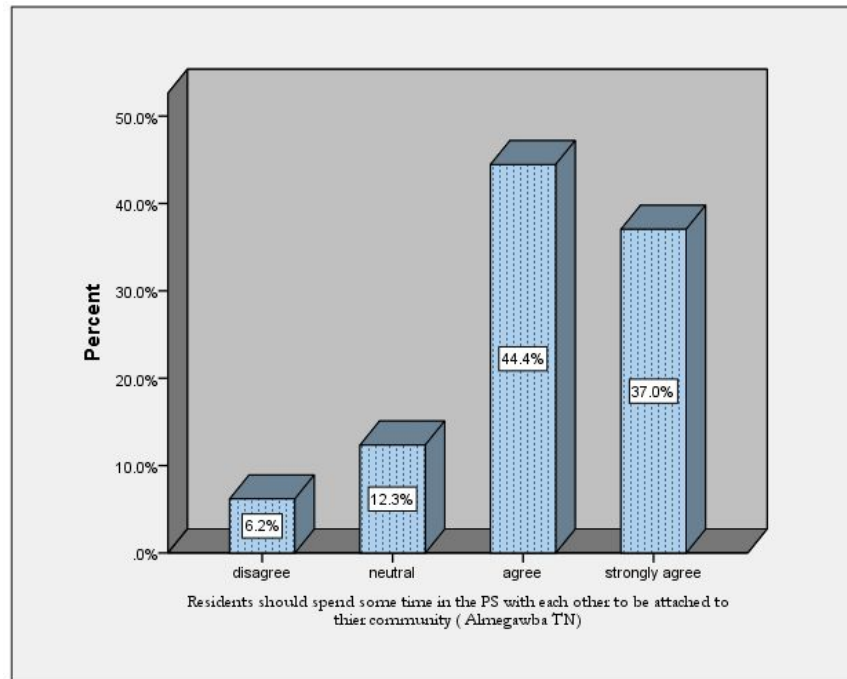


Figure 7-9: Responses to the statement 'residents should spend some time in the PS with others to enhance the sense of attachment to their community', in Almegawba TN

The qualitative data also show that because of the local culture and community features people are inspired to belong to a specific place; however, in many cases, they are not completely satisfied with the level of quality in this place. This perspective indicates a significant point about the impression of the local residents and their attitudes to the place that they are living in and their perceptions towards the local community.

Further results from the in-depth interviews show that there are direct correlations between the residents' attachment to the neighbourhood and the physical quality of the public spaces of the neighbourhood. Respondents of professionals group argue that residents in TN are more attached to their neighbourhoods because they have a greater range of physical settings and open spaces which support their social life. However, the research discovered that the majority of the residents who live in GN for a period of time such as 5 to 7 years also have a very good level of attachment to their community which leads to the conclusion that sense of attachment is related more to the local culture and the residents' perception towards their community, and not related directly to the physical quality of the neighbourhoods.

7.2.3 Psychological Comfort

As explained in the literature section, the psychological aspect of this research is one of the measurement tools for the residents' levels of social satisfaction. Therefore, it is essential to investigate the relevant issues according to this element. The research included several methods to focus on this aspect such as questions related to the residents' psychological satisfaction and also further discussion with all types of residents' categories to clearly identify the existing situation and also possible improvements to this issue.

Starting with the direct question that was posed to the participants to determine whether they agree or not with the following statement, 'Public space contributes to providing psychological comfort to the residents', the answers show that almost 80% of the respondents from both neighbourhoods agreed with this statement while only about 7% disagreed (Table 7-1). Focusing on the results of each individual neighbourhood, it can be seen that there is a slight difference between them. It appears that an extra 10% of the respondents from the GN 9th July agreed with this statement which can be considered a significant finding as per Tables (7-1, 7-2 and 7-3). This indication led the author to extend the investigations with more participants from the in-depth interviews to discover the reasons for this difference in the residents' perceptions of the two sites.

Public Space contributes to providing psychological comfort to the residents (in both sites GN and TN)					
		Frequency	%	Valid %	Cumulative %
Valid	strongly disagree	1	.6	.6	.6
	disagree	8	5.1	5.1	5.8
	Neutral	21	13.3	13.5	19.2
	Agree	79	50.0	50.6	69.9
	strongly agree	47	29.7	30.1	100.0
	Total	156	98.7	100.0	
Missing	999.00	2	1.3		
Total		158	100.0		
Table 7-1: The participants' attitude towards the impact of the public space on the psychological comfort of the residents, GN					

Public Space contributes to providing psychological comfort to the residents (9 th July GN)					
		Frequency	%	Valid %	Cumulative %
Valid	disagree	5	6.5	6.6	6.6
	neutral	6	7.8	7.9	14.5
	agree	43	55.8	56.6	71.1
	strongly agree	22	28.6	28.9	100.0
	Total	76	98.7	100.0	
Missing	999.00	1	1.3		
Total		77	100.0		

Table 7-2: The participants' attitude towards the impact of the public space on the psychological comfort of the residents, TN

Public Space contributes to providing psychological comfort to the residents (Almegawba TN)					
		Frequency	%	Valid %	Cumulative %
Valid	strongly disagree	1	1.2	1.3	1.3
	disagree	3	3.7	3.8	5.0
	neutral	15	18.5	18.8	23.8
	agree	36	44.4	45.0	68.8
	strongly agree	25	30.9	31.3	100.0
	Total	80	98.8	100.0	
Missing	999.00	1	1.2		
Total		81	100.0		

Table 7-3: The participants' attitude towards the impact of the public space on the psychological comfort of the residents, GN and TN

The following part of the examination draws from the in-depth interviews which show a slight contrast between the perceptions of the respondents' categories. According to the interview data, most of the residents in the GN expressed that they have less psychological comfort in their neighbourhood compared to their previous neighbourhood. Most of them, in fact, moved from TN; the reason for this was, as pointed out by a few of the respondents (F I, M G and A G) because of the lack in communication with the neighbours.

Another point of view from a professional group respondent, M L, stated that the psychological comfort cannot be achieved individually, there are a pack of requirements that should all together let you be satisfied with the surrounding

including good relationship with neighbours, feeling integrated with the community, the existence of the nearby attractions which allow the enjoyment of sharing and taking part with the other residents in the public space around home. The whole scene in the neighbourhood places is important to fulfil the psychological comfort of the residents.

The local understanding of psychological comfort and social satisfaction was clearly expressed by many of the respondents as it is "the feeling of others who are around them". This statement can show the significance of the residents' interactions as well as the participation in the social life within the local community. A respondent F I illustrated this feature as,

'By contributing and sharing activities in the public space from the children, youth and the adults, the level of familiarity, empathy and communication between the residents will be increased, and that will lead to the social satisfaction and psychological comfort in the neighbourhood'.

In addition, similar opinions were collected from more than one respondent in both sites who explain the importance of interaction with the neighbours for all the residents' age categories. They stated that once the children are kept in to play at home even if you provide them with good toys and an attractive play place, they still need to go out to play and share activities with other friends, as they need to discover and build relations with others who are of a similar age. This is very important for the formation of the children's characters, they should get plenty of time to share their ideas, activities, thoughts and creative exploration with their peers. Otherwise, a lack of such outdoor activity will negatively affect their lives. By sharing activities and ideas with others they will gain experience and improve their mentality and socialisation skills.

Along with a similar line, the decision-makers' perspective emphasises the link between the social interaction and the psychological comfort. Participant H B, from the decision-maker groups, pointed out that social satisfaction plays a fundamental role in improving the psychological comfort of the residents. He stated that this, therefore, improves the relationship between the people in the public realm of the neighbourhood which eventually enhances their feelings towards each other and increases the sense of empathy and unity for all the neighbourhood inhabitants.

A psychologist, L S, emphasises the importance of this aspect; she stated that,

'It is one of the most important functions of the Public Space that children find the appropriate place to spend their free time. This issue has more than one advantage; it has benefits in many aspects. The psychological comfort is one of these benefits, children need to play outside with their friends to get out of their own world and participate with others to grow up mentally and physically. Playing outside for children enables them to be more active, brave, and helpful and they will learn how to react to others. In contrast, when children stay at home for long hours they will become more argumentative and might have violent tendencies towards their family members'.

Most of the statements of the respondents, particularly the parents in the interviews from both sites highlighted that no matter how many games and toys children are provided with inside the home, they will not be satisfied. They have the best time when they play and communicate physically with the other children of their age outdoors. It is a psychological need actually; that the very good growing up process for them is to apply their skills and energy to other children. For instance, they need to show the other children how they react and they need to show their skills and potentials. Even if they have brothers and sisters, they are more interested to have their activities outside and practice with other children. Many parents stated that when children play outside for quite a long time, they sleep very well at home. Because they spend more energy when they play with other children, this makes them more relaxed and satisfied.

Another respondent, K S, from GN 9th July neighbourhood pointed out that meeting with the neighbours in the public space area near their houses and drinking tea or coffee, exchanging ideas, chatting, discussing life's challenges and offering advice to each other is a significant need in their society. He stated that these features are very important for the community's social satisfaction and the psychological comfort which ultimately increases the quality of life. Along the same line, other residents also highlighted similar statements that social activities and residents' interactions are very important aspects - they are more than crucial. The public space of the neighbourhoods is very important to help the residents to get to know each other and interact; therefore, the level of empathy increases and the relationship between the residents become stronger which will lead to a high sense of community and psychological comfort.

7.3 Safety and Security

Safety and security are essential in the residential areas where people spend most of their time. The quality of the neighbourhoods is also related to the safety and security level, particularly in the public spaces around the houses. In general, research data indicate high levels of safety regarding the interview and the survey questionnaires. The following graphs suggest that most of the respondents feel safe and secure in the public space in both neighbourhoods the GN and the TN see Figures (7-10 and 7-11). As mentioned previously, participants who answered "neutral" means they are at the acceptable level, of being just satisfied with a score of 50%.

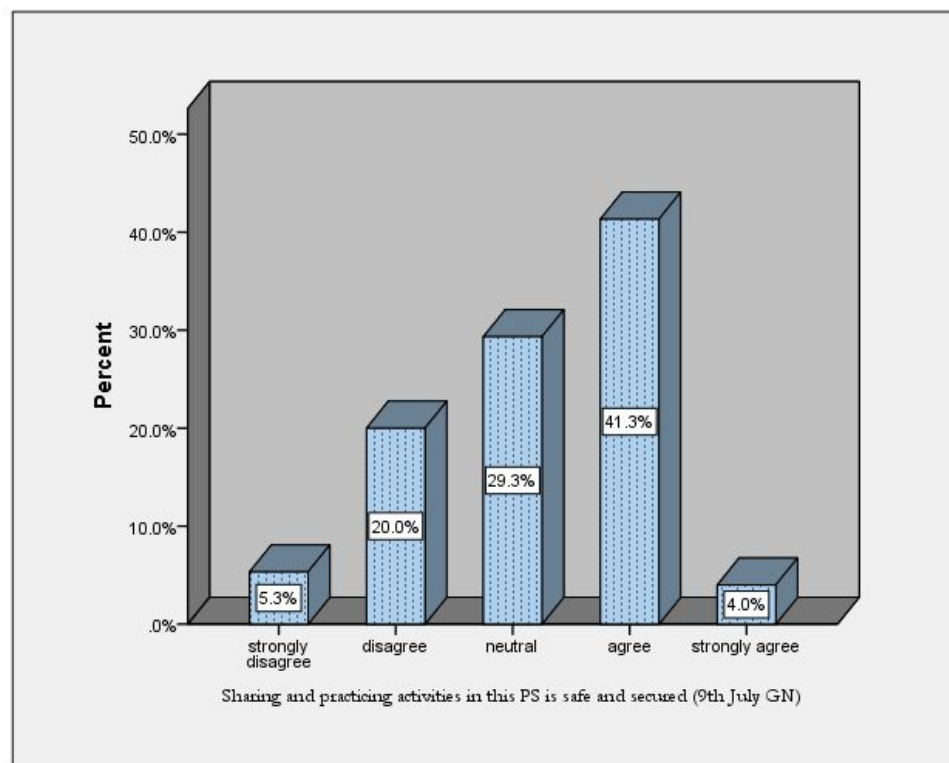


Figure 7-10: The respondents who feel secure and safe in the public spaces of the GN 9th July

With regard to a further illustration on this issue, data gathered from interviews show that most of the participants feel safe and secure, although residents need more improvement in terms of environmental quality in their neighbourhoods; for instance, the children's trips from their houses to the playground, and the possibility of using the paths that connect the houses to join the public spaces, Fences around the playground are also needed as many respondents stated that fences can add more confidence to the parents and let them enjoy being with other parents to chat and engage in adult activities while their children play. The

accessibility for the cars inside the neighbourhoods also should be limited. This can decrease the risk of accidents that can affect the children during their play time see Figure 7-12. Therefore, safety is one of the significant issues that need to be improved for better quality, particularly for the new projects.

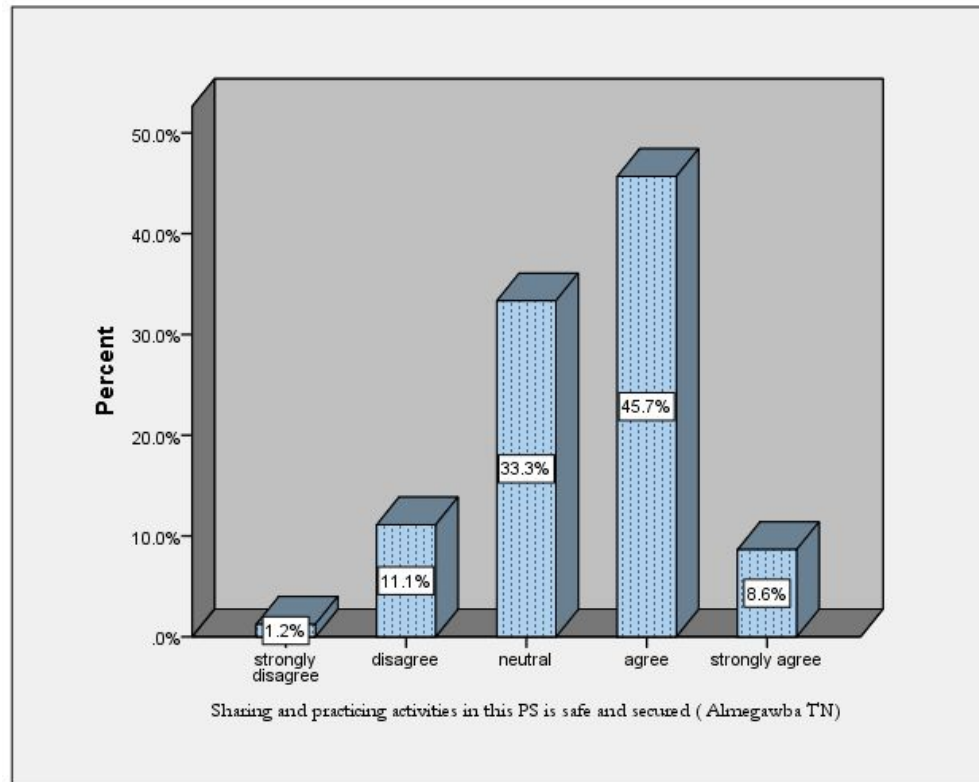


Figure 7-11: The respondents who feel secure and safe in the public spaces of the TN Almegawba



Figure 7-12: Children play football on streets, 9th of July neighbourhood, Misurata, picture by the author 12/08/2015.

From a different perspective, safety is very important for all the residents. The information from the interviews highlighted some issues regarding the safety and security of the residents, even though it might be that this is the first time this has been addressed in Libya. For instance, many residents in GNs are originally not from Misurata city, but some have already integrated with the neighbours and local society. Others preferred to be isolated from the neighbours and they spend their holidays and free time back in their original places. During the 2011 revolution, the first type was covered by the social environment and nobody argued with them. Because they were well integrated with the neighbours. As a result, they did not face any social problems. The opposite happened with the residents in the government neighbourhoods when the interaction with neighbours did not exist, so these people had to leave the city because their neighbours could not protect them as they did not know them very well and they were isolated from the rest of the local residents. Although this situation has only happened once, it is important to be considered in future developments in order to create more safe and secure communities.

7.3.1 Noise Issues

Noise levels are also another important element that affects the residents' satisfaction, particularly the elderly. Many respondents stated that playground for children and youth pitches should be located a reasonable distance from the houses due to the noise of their activities such as shouting in football matches. The decision maker, A Z from MUP, stated that all the pitches which can produce noise to the surrounded houses must be in a separated area away from houses. Usually, there is an area for the youth and adults which are further away than the children's area which should be very close to the houses. From this perspective, it appears that understanding the mentality of the local residents is very important to ensure that the final solution reflects the real situation and is going to work successfully for all groups within the community.

On the other hand, the interview data show a massive desire among the youth groups to have more areas for the sports activities and more open space in the neighbourhood. This is due to the difficulty for the children between ages 12 and 18 to have appropriate sports facilities unless they travel a long distance to other parts of the city. Parents also suggested that having enough sports facilities within the neighbourhood makes them more satisfied as they can feel secure that their children are safer as they are close to their families. Also, it can save them money

and time in not having to deliver the children to relatively far places to practice their activities in different sports centres.

7.3.2 Privacy

Privacy in the local community is one of the critical elements that might be not easy to examine. In many communities around the world, privacy means less disturbance from others. However, in the local Libyan community, it may mean something slightly different. More privacy may be understood as a rejection of communicating with other neighbours. The balance between privacy and social isolation may vary from region to region depending on the social characteristics of each individual place. For example, in Libya, according to the in-depth interview, several participants such as (M L, I I, K S and S E) have identified the privacy as follows:

'To have a private life that nobody enters your own property means the border of the house and the garden, however, neighbours need to ask each other at all times. If your neighbour pass you and did not greet you and ask about your health and children 'if you have' that understood as a rude action and strange to the community'.

The main idea of privacy for the local residents (culturally based) means no disturbance either physically such as entering your property without permission or morally like making noise or even ignoring you when you are present. More specific example, if there is unusual action happening in front of a neighbouring house such as many cars or crowd of people, it is a duty to run to their house and ask what is going on and see if you can help in some situation. This action, for example, is not considered as a disturbance or breaking the privacy, but it is a 'must' action and a duty of the neighbour towards the other neighbours. Another example, neighbours can share the space of their back or front houses on some occasions, in this case, both can use the house for a period of time till this occasion ends. These examples show that the need to have good relations with your neighbours is important because it helps to exchange favours and support one another many times during their living time. Therefore, there is a difference between (to be social and friendly with keeping a range of privacy) and (to be unsocial and isolated, because this manner is not considered as a privacy from a cultural view in the Libyan society).

The findings of this research show that most of the respondents from both neighbourhoods appreciate the high levels of interaction with the neighbours and wish there was more participation in the public realm of the neighbourhood and in

the social events. In addition, they consider that some new occupants of the neighbourhood are not very interested in engaging with other residents in social communication. This may be due to their desire to have an independent life or because of their lack of time to spend with others, or some other reasons.

According to the research data, it can be seen that around 80% of the respondents from GN agreed that they have a good level of privacy in their private space such as enclosed gardens and the semi-public space such as the spaces around the houses (Figure 7-13). In TN a similar percentage of around 85% is noticed for the same statement (Figure 7-14). More investigation in the interviews was conducted to find out more information about what privacy means to these residents, how they react with this element in terms of their social lives and the nature of their interaction within the neighbourhood spaces.

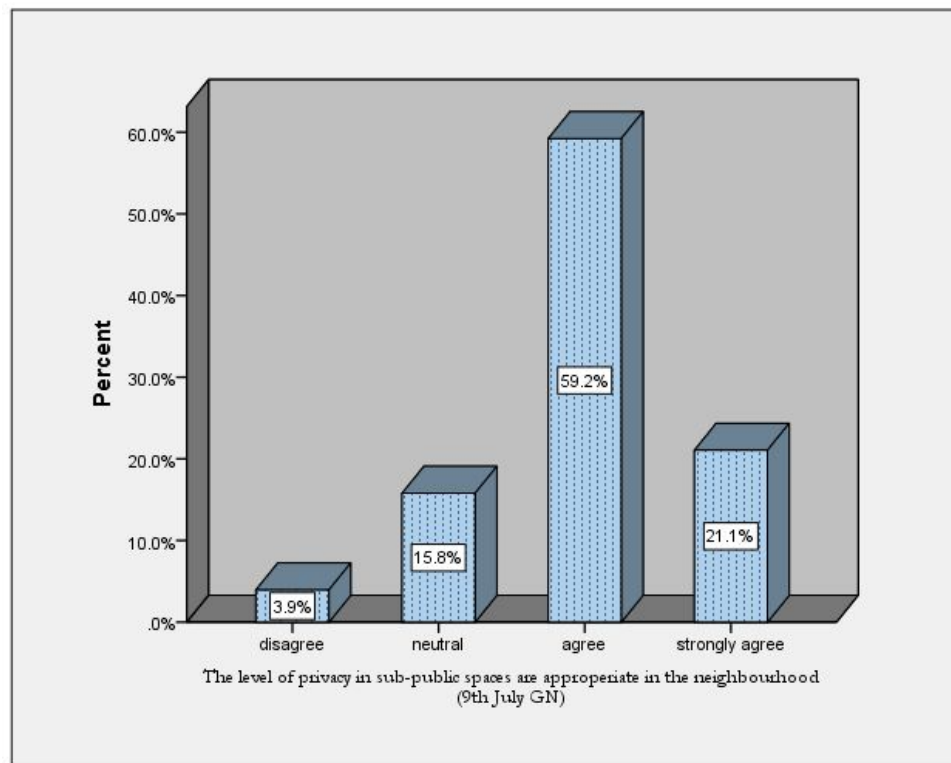


Figure 7-13: Responses to the statement 'you are satisfied with the level of privacy around your house', in GN 9th July

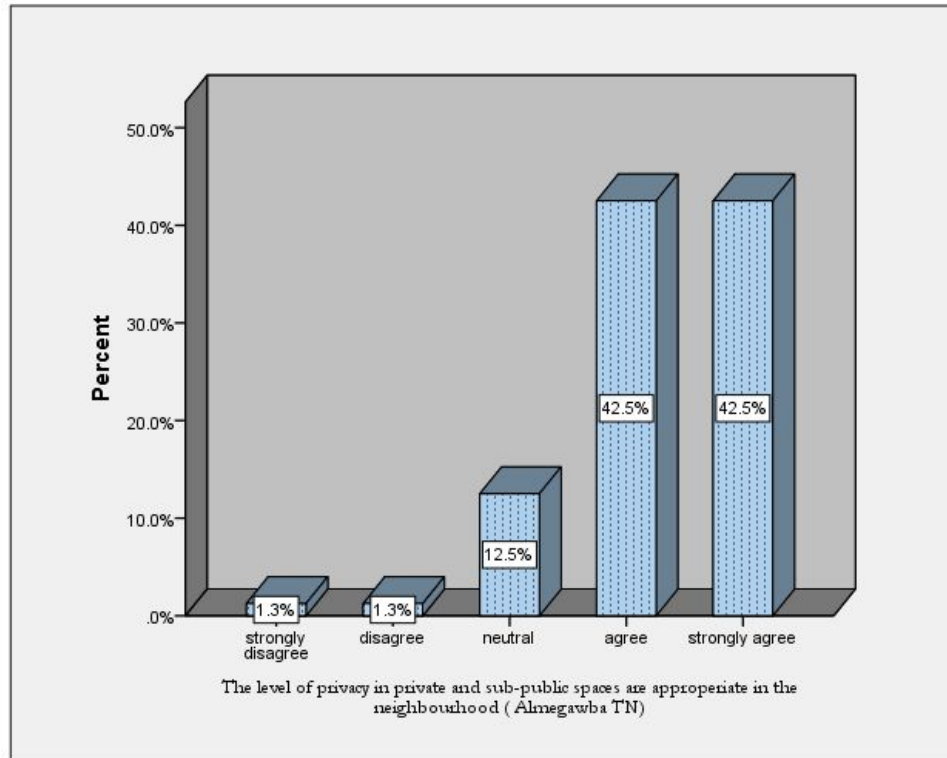


Figure 7-14: Responses to the statement 'you are satisfied with the level of privacy around your house', in TN Almegawba

In addition to the above two figures which clearly indicate the positive feeling of the residents from both sites, the research revealed some interesting information related to this element. In the qualitative part of the survey, the author asked the respondents in the next section to write down what would be the positive feature that they like most in their neighbourhood and which they are most satisfied with it. More participants stated privacy as the first choice in terms of the positive features in the GN while only a few participants selected privacy as the first priority in the TN – see Tables (7-4 and 7-5). Interestingly, this result does not match the expected hypothesis of the research; therefore, the more in-depth discussion was conducted to achieve a comprehensive understanding of this particular finding.

Positive features in 9 th July GN				
	Frequency	%	Valid %	Cumulative %
	Privacy	2	2.6	2.6
	Privacy and quietness	9	11.7	11.7
	The well-organised neighbourhood, high privacy and quiet	2	2.6	2.6
Table 7-4: The perceptions of the respondents about the positive features of their neighbourhood (GN 9 th July)				

Positive features in Almegawba TN				
	High privacy	1	1.2	1.2
	Privacy	1	1.2	1.2
Table 7-5: The perceptions of the respondents about the positive features of their neighbourhood, (TN Almegawba).				

A participant from the decision maker group, participant A G, stated that the residents in TNs have more privacy because they all know each other and when they participate and interact in the public spaces of their neighbourhood they feel more comfortable and satisfied. This accounts for the low percentage of the respondents in the questionnaire results because they already have good privacy so for them, it is not a priority. The respondents from TNs did not experience any other situation like disturbance from strangers to count 'privacy' as a positive feature. On the other hand, some of the participants from GNs as a mixed neighbourhood recognise the positive aspect of privacy in their expectations of living in a public governmental neighbourhood. To emphasise, a resident, S M, in TN Almegawba stated that,

'In terms of privacy, we have an acceptable level of privacy in this neighbourhood. However, we sometimes feel disturbed by children's noise or some activities during the rest time in the afternoon. Actually, in general, the level of privacy hierarchy in our community is very good'.

The research found out that most of the residents need to have privacy in their homes, gardens and at private events. For instance, on small family occasions such as the birth of a new child, respondents stated that they prefer to be exclusive only to the close relatives. In other aspects, for example in the front or rear garden of their houses, strangers are not welcomed. However, in an open public space of the neighbourhood, respondents emphasised that the connections are desired and the

more interaction between the residents the more preferred the neighbourhood is. From local, social, traditional and cultural perspectives, privacy also means responsibility; for instance, when neighbours gather in front of your house is an obligation of the householder to provide them with a drink and welcome them, and not leave until they have decided to leave. Therefore, there is much more freedom when people gather in a public space located away from their homes so everyone is free to leave or stay at any time without obligation, which is more flexible and preferred by the residents.

Another participant, (I I) who currently lives in a TN after she had lived most of her life in a GN pointed out that, 'We are very comfortable in our house and private garden, but we do not feel about people around us. I think the TN is extremely private and does not support the integration of the neighbours'. This statement emphasises that the residents of traditional neighbourhoods may feel that there is more privacy but is that really what the most residents need from their community? Another TN resident, L S, stated that traditional neighbourhoods are more independent so the residents have more privacy in their activities. She highlighted that the TNs are characterised by more privacy, cooperation, and strong relationships between the residents who usually knew each other for a long time. These factors make the TN more integrated and preferred by the people. Some other residents of TN stated that some of the advantages in TN are quietness, more privacy, more room or space within the housing unit, strong relationships with the neighbours, all the residents know each other very well, and there is plenty of open and public space for social activities.

7.3.3 Disturbance and Negative Appearance

Disturbance in the neighbourhood spaces can be categorised into several forms such as noise, entering a private space of the house, traffic, and strangers. Regarding the research data, findings show different samples of unacceptable actions inside the neighbourhood especially in the private spaces of their houses. In Table 7-6 several examples of negative attitudes, physical and moral, can be seen which are related to the actions and reactions of the residents towards each other and towards their community.

Elements	Frequency	%
Missing data	1	1.3
Lack of green areas and children's playground	13	16.9
Neglected areas, lack of physical settings	8	10.4
Lack of green areas and entertainment facilities	4	5.2
Lack of prepared parks, weak relationships between the neighbours	4	5.2
Lack of sense of community and no interaction between the residents	4	5.2
Lack of lights and there is some rubbish around	3	3.9
None	3	3.9
Lack of interaction, lack of communication, especially among males	3	3.9
Lack of cleaning work and collecting rubbish from city council	3	3.9
Lack of green areas and children's playground means that residents go out of the neighbourhood to find these	3	2.6
Lack of children's area, green areas and facilities	2	2.6
Lack of cleaning work by the city council services, frequent change of neighbours	2	2.6
Lack of communication between neighbours, no cooperation or sharing activities	2	2.6
The negative attitude towards the PS of the neighbourhood	2	2.6
Not prepared, lack of green areas and lights	2	2.6
There are some rubbish and neglected spaces	2	2.6
Not enough attention to the cleaning work	2	2.6
There are some rubbish and neglected spaces and low interaction with neighbours	2	2.6
Not enough attention to the PS	1	1.3
No appropriate place for children's activities	1	1.3
Residents care about their houses, not the PS	1	1.3
Rubbish not in the correct place	1	1.3
Shops centre is not working	1	1.3
The small size of PS and not prepared	1	1.3
The PS is not prepared well to use for children's activities	1	1.3
There is no sense of coherence or interaction between neighbours	1	1.3
Traffic	1	1.3
We don't interact unless at social events	1	1.3
Total	77	100.0

Table 7-6: The negative features that pointed out by the residents of the TN Almegawba

According to the points stated in Table 7-6, it can be clearly seen that most of the negative features pointed out by the respondents are related to the quality of the neighbourhood spaces. Some of these disturbances come under the responsibility of the government services such as clearing works, collecting the bins and other similar tasks. Other features are related to the mentality of the residents in how they should act to each other and how they should integrate themselves to engage in joint social activities; however, they feel the lack of communication between themselves. Overall, findings from these qualitative data are that, in GN, most of the negatives are related to physical arrangements which should be mainly done by the responsible organisations.

Elements	Frequency	%
Missing data	1	1.2
Bad organisation	1	1.2
High density, randomness	5	6.1
Disturbance and high density	1	1.2
Loud noise, traffic	1	1.2
Lack of attention from residents	1	1.2
Lack of children's playground	2	2.4
Lack of cleaning works	3	3.7
Lack of communication between the neighbours	1	1.2
Lack of green and soft areas	6	7.4
Lack of green, public, soft areas and for disabled people	1	1.2
Lack of help between neighbours	1	1.2
Lack of interest in the open public space like operating and cleaning, etc.	1	1.2
Lack of interest in the place	2	2.4
Lack of lights	4	4.9
Lack of lights at night and lack of children's playground	1	1.2
Lack of public areas and their physical settings	3	3.6
Lack of safety	1	1.2
Lack of street furniture like public bins	1	1.2
Lack of trees and other greens	1	1.2
Light and lack of cleaning services	1	1.2
Narrow streets and crowded	3	3.7
Neglected open areas	2	2.5
No place to put litters	1	1.2
No public space for sitting with residents	1	1.2
No space for female	1	1.2
Noise, neglected open space	10	12.3
None	6	7.4
Not enough area for the public spaces and a lack of physical seating in the public spaces	1	1.2
Not enough car parks	1	1.2
Not enough care of the central garden	1	1.2
Not enough co-operation	1	1.2
Not enough support for the public space, limited play equipment for children	1	1.2
Not well landscaped and lack of cleaning work	2	2.5
Nothing	2	2.5
Open roads from all sides	1	1.2
Place for the youth to practice their activities	1	1.2
PS here is not friendly to the disabled, lack of public seats.	1	1.2
Safety, relations, no disturbance	1	1.2
Some slight arguments	1	1.2
Teen behaviour (disturbance)	1	1.2
The car park near the houses (block the way)	1	1.2
There are a lack of prepared parks	1	1.2
Empty areas	1	1.2
Total	81	100

In the TN, by looking at the qualitative data collected from the participants from TN Almegawba (Table 7-7), it can be clearly seen that the most negative features are related to the noise, traffic and high density of the neighbourhood. By looking at the map of the neighbourhood in Figures (4-21 and 4-23) it appears that the streets of the community are connected directly to the main roads around the neighbourhood. This type of street pattern which was used in this TN causes traffic results by the vehicles passing and crossing this community as a daily routine to go from home to work and/or to other places of the city. This situation makes the

neighbourhood accessible to everyone as they are public streets instead of a closed road system which minimises the public traffic inside the neighbourhood.

In the GN neighbourhood 9th July which is a newly designed pattern of the neighbourhood, the residents have not experienced such a situation so this was not mentioned as a negative feature in their neighbourhood. In Table 7-7 it can be seen that many of the respondents stated high levels of noise in the neighbourhood; this is due to the high traffic, high population density and also because of the main open space where sports usually take place (Figure 7-15). The participant SM of the TN indicated that location of the sports activities for the youth age group should be a sufficient distance from houses because loud noise during the games might disturb the neighbours, particularly in the afternoon when residents need to rest after returning from their work. This issue was also discussed by other residents who suggest that only the playground for the younger children should be between the houses but the youth activities which generate more noise should be further from the houses.



Figure 7-15: The youth sports activities within the neighbourhood public spaces; this might create loud noise for the nearby houses, photos: online source from local social and sports centre, Misurata (18/03/2017)

For instance, L S pointed out that,

'The best location for the public space like gardens and children's playground is to be as close as possible to the aimed houses so they can be reached by walking, but not so close that it might affect the quietness and the privacy of residents of these houses'.

Therefore, there should be a balance in the design of the neighbourhood spaces to be located carefully to provide the best services for the residents and also to avoid disturbing them by locating them too close. That is why in most of the successful neighbourhood they use a wide green area between the house clusters and the main facilities of the public spaces such as playground and sports facilities (Islam et al., 2016).

7.4 Length of Stay

Length of stay in the public spaces is an appropriate measurement tool which indicates the enjoyment of the users in that place. In other words, the more enjoyable the place is the more time people spend their activities in it, usually in activities such as sitting, walking, chatting and other similar activities as Gehl and Gemzoe (1996, p. 67) state that, 'The high quality public open space can make people stay longer with a wider range of activities. The quality relates to the usability of some criteria depends on peoples' needs and perceptions'. Therefore, the successful public space that can encourage the users to enjoy the place and thus stay longer is a matter of creation and combination between their needs and the quality of the place.

In this research, findings show that residents may stay or leave the public spaces for many reasons. Also, participants pointed out some significant indicators which may make a particular category of the resident stay longer or less than others. In Figure 7-16, it can be seen that there are two main results: a) the percentage of the time length of each category from the participants, and b) the comparison between the males' and females' length of stay in the public spaces.

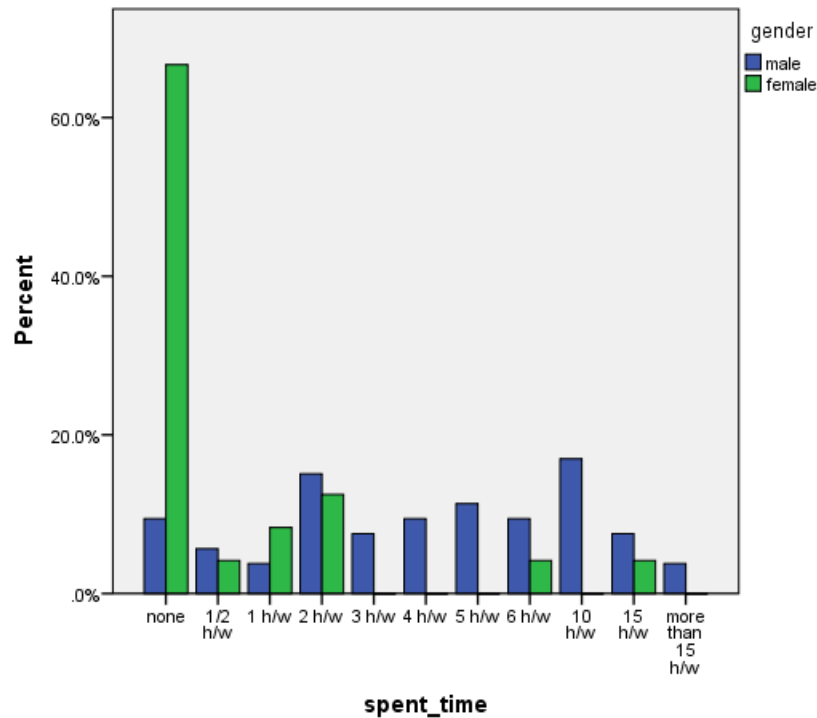


Figure 7-16: responses to the statement 'how much time do you spend in the PS' answers classified by residents' gender, in GN 9th July

In the GN 9th July, it appears from the first glance at Figure 7-16 that more than 20% of the participants who are female do not spend any time in the public space. It appears also that only around 10% of the respondents who are female are participating for a few hours per week. On the other hand, only about 7% of male does not participate in the public space activities while around 63% of the male participants are contributing actively in the public space in many several activities as shown in the following Figure 7-17.

Figure 7-17 shows that the most preferred activities by both females and males are taking care of their children during their play time as well as visiting, chatting and socialising with next door neighbours. The children aged from 7 to 12 years prefer to engage in the sports activities as their parents stated in most of the interview data. In general, most of the participants of the neighbourhood seem to enjoy spending time in the public space as appears in the overall result which shows that almost 75% of the respondents stated that they spend some time in the public space. However, the length of stay in the public space varies from half an hour to more than 15 hours per week. Moreover, most of the respondents who stay relatively less than others complain about the lack of facilities and the low level of the physical elements and the quality of the public spaces in terms of the playground, green areas, sports pitches and other similar elements.

In order to identify more details and further evidence of what motivates the residents to spend a long time in the public spaces of the neighbourhoods, in-depth interviews were conducted with different categories of the residents including different ages and genders in both sites. In GN 9th July, the data show some significant results which can be summarised in the following points:

- ❖ Most of the activities that take place every day in the public space of the neighbourhood are the children playing in many different forms such as biking, running, football and some other games and sports.
- ❖ The most recorded activities for the adults especially parents are looking after their children, sitting with next door neighbours, and gathering in groups with tea/coffee drinks.
- ❖ There are very limited activities in the female category, due to the local districts of the Libyan community regarding the cultural and religious reasons. The former reasons decrease the extent of female interaction and participation in the public spaces; instead, they use the indoor spaces in the form of house visits and social events in indoor halls nearby their neighbourhoods.
- ❖ Disabled residents also have difficulties of using the outdoor space because of the lack of their needs such as path/road ramps, appropriate seats and other disabled facilities.

It is clear that the lack of quality in these spaces is the main significant issue with regard to these results. The categories of users who need more well-facilitated spaces are the less active in these neighbourhoods such as female, elderly and disabled people. Those three categories need special preparation such as ramps, chairs with special standards and prepared landscape for the elderly and disabled residents. Also, the female regarding the local culture districts, they need private spaces which need to be separated from men either by landscaping work or providing other facilities only for females. However, the children can be more active in the spaces because they still can do several of activities even with low quality such as biking, playing football and other games, because they can be applied with themselves and they do not need special facilities for these basic activities.



Figure 7-17: The types of activities that take place in the public spaces of both males and females in GN 9th July

In the TN, the concerns are similar to the GN. However, there might be a slight difference in some issues. In Figure 7-18, it can be seen that the overall attendance in the public space is around 77% of the participant which is nearly the same as in the GN. Female contribution in TN is considerably higher than it is in GN which is

about 20% of the respondents, which is also higher in this site, although the factors of the type of activities and the length of stay are particularly different in this site which will be illustrated deeper through the interviews' results.

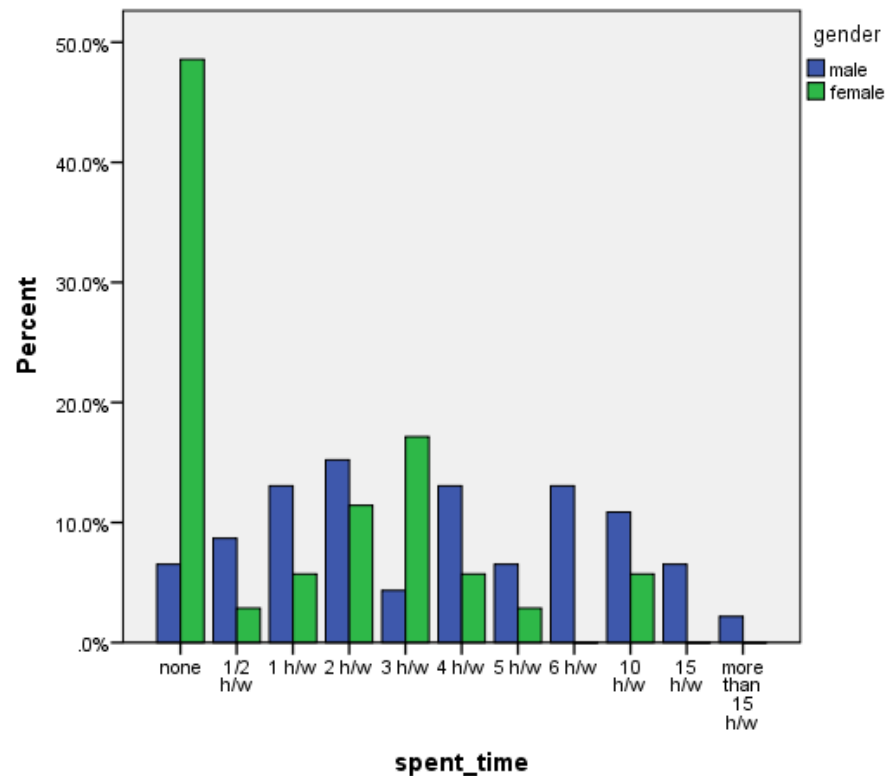


Figure 7-18: The respondents' percentages of their length of stay in the public space for both males and females

According to the interview findings, participants stated that using the public space is a daily practice; most mentioned that their length of stay in the public space depends on their time availability. The reason for seeing more activities applied by their children is due to the time limitations of the parents and the worker adults. Interestingly, participant, I B stated that 'In this community, as everyone knows their neighbours very well, the motivation of playing and spending time outdoors is much more enjoyable than elsewhere such as in a governmental neighbourhood'. The underlying reason is that this is actually because the parents are satisfied to let their children engage in outdoor activities. The adults also have a similar indication in getting engaged with their neighbours; they think that knowing who you are interacting with is the priority in their perceptions of the public activities.

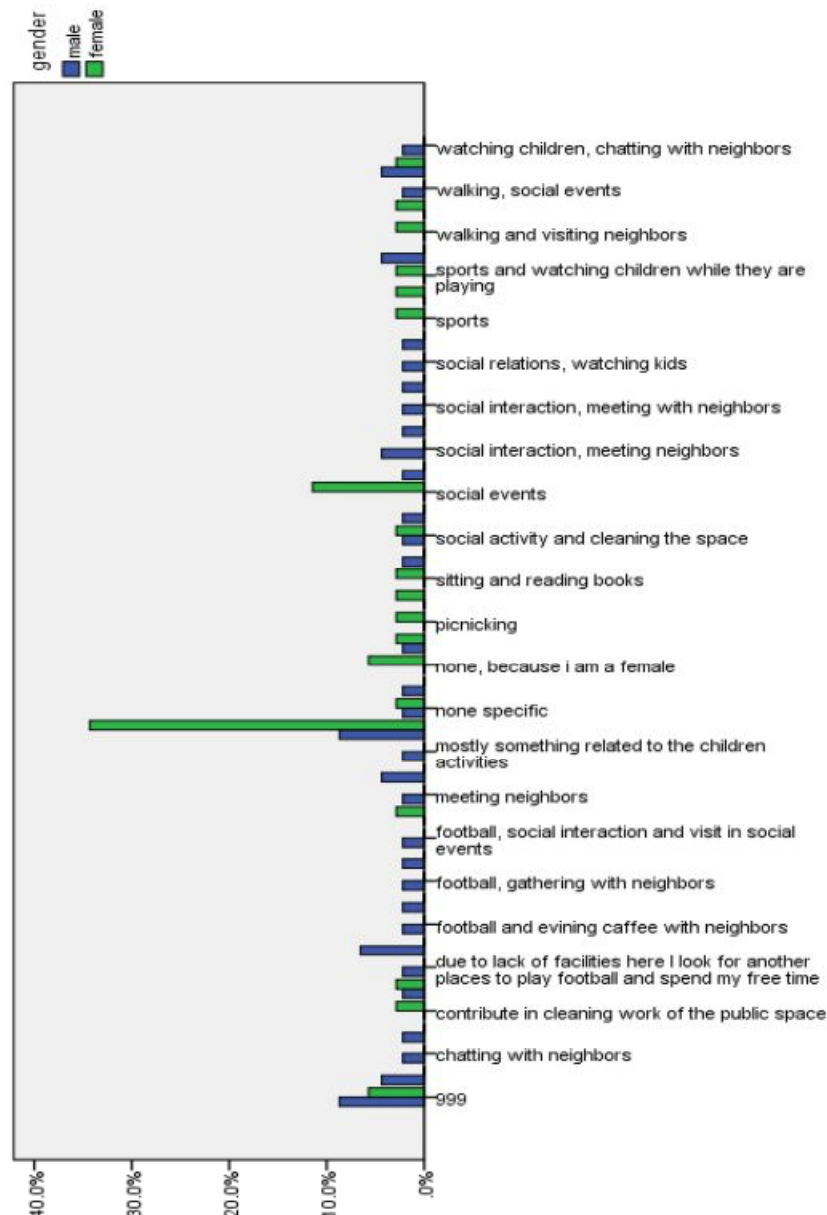


Figure 7-19: The types of activities that are taken place in the public spaces of both males and females in TN Almegawba

Figure 7-19 highlights a list of the common activities and their popularity by percentage of the total respondents. It can be seen that almost the same activities' types occurred in both sites with only a slight difference in the percentage of the users. The most popular activities that take place in this neighbourhood are the children's activities such as sports, games, biking and so on. The only distinct part that can be noticed in the TN is the contribution of the residents in social events which is higher than it is in the GN. This result is also due to the nature of integration between the residents which is more than is the case in the GN. The overall points in terms of the attraction of staying a long time in the public space are similar to the points that were mentioned in the last section of the GN.

Moreover, most of the respondents stated that they experience a low level of quality and lack of facilities, particularly for entertainment, playgrounds and sports pitches.

7.5 Local Characteristics

7.5.1 The Initiatives and the Spirit of the Local Community

Local initiatives are one of the fundamental factors that have been measured in this research in terms of residents' relationships and community cooperation. One of the research tasks is to find out the attitude of the residents – whether they have a sense of initiation to contribute positively to the neighbourhood development or not, and if not, why? The key issue in this element seems to be about trust and dependency (Whyte, 1943, Jacobs, 1961, p. 82) Carr (1998 cited in (Sampson and Raudenbush, 1999b, p. 612) interestingly states that,

'At the neighbourhood level, the shared willingness of local residents to intervene for the common good depends, in addition, on conditions of cohesion and mutual trust among neighbours. One is unlikely to take action in a neighbourhood context where the rules are unclear and people mistrust one another. Personal ties and friendship are not sufficient; the private world of strong kinship ties may actually interfere with public trust and the expectation of collective responsibility for getting things done'.

The initiatives and positive actions to change or improve the quality of private property usually depends on an individual's decisions which are related to their own abilities and desire for change rather than the matter of responsibility and trust among others. On the scale of a neighbourhood, the perceptions of the people are completely different, and the feelings about and motivation for the change can be particularly low. In order to take action, there is a need for cooperation and unity among the residents. Are these features available in each neighbourhood, particularly the governmental ones where almost everyone considers them as a government responsibility to look after everything in the neighbourhood? Middleton et al. (2005, p. 1720) clearly highlight that, 'If the residents of the same neighbourhood do not think they are part of the same physical space, they may be less likely to act as a coherent community'. Therefore, the unity and sense of cooperation is an essential aspect to achieve positive actions from the residents, which seems the main significant issue in this matter. In addition, the coherent community can gain better advantages as their residents trust each other and work

to improve their neighbourhood as one aspect which again needs a sense of cooperation and a good level of relationship.

First, regarding the data collected from the quantitative questionnaires, it seems that there are a few actions of cooperation taken by some groups of residents. In Figures (7-18 and 7-19), it can be seen that a few respondents stated that they do some cleaning and gardening works in the areas around to their houses. Furthermore, the residents allocate some of their time to carry out such works on a weekly basis which indicate some positive attitude by some of the residents. This result seems more noticeable in the GN than in the TN due to a lack of attention by the government organisation and because of the average level of the residents' financial status.

In the 9th July GN the (participant F I) stated that initially everyone liked the idea of cooperation and contributing to developing the neighbourhood, but typically they cannot afford it and also they want fewer responsibilities. For instance, they would rather go to spend some time in another place and pay some money based on what they can afford but are more unlikely to contribute with a particular amount of money that can be allocated for the neighbourhood development. In essence, the residents of the GN assume that it is the government's responsibility to undertake all the development, maintenance, management, provision of facilities, watering the grass and trees, and all relevant services. In this sense, it can be recognised that only limited action is taken, usually by a small group of neighbours who have a very close friendship or because they are relatives so they moved and chose their houses to be next door to each other.

Second, according to the interview data, it is clear that there are a few actions of cooperation and initiatives among the residents to improve their atmosphere inside their neighbourhoods. In the GN 9th July, the findings showed that there is a sense of cooperation between a few groups of families such as the close houses which usually involve families. They decide to carry out several tasks such as cleaning the surrounding public spaces, planting more trees, watering the existing grass and providing some equipment for the children to have a small playground. These initiatives have been spotted in about three groups in different areas of the neighbourhood. Figure 7-20 presents the location of these groups within the neighbourhood. In the interview stage, the researcher was keen to understand why this mechanism of cooperation works for only small groups of families and how they have partly succeeded in making such changes in the area around their houses and

flats. What are the lessons that can be disseminated throughout the whole neighbourhood that might also help in creating a new development strategy for future projects?

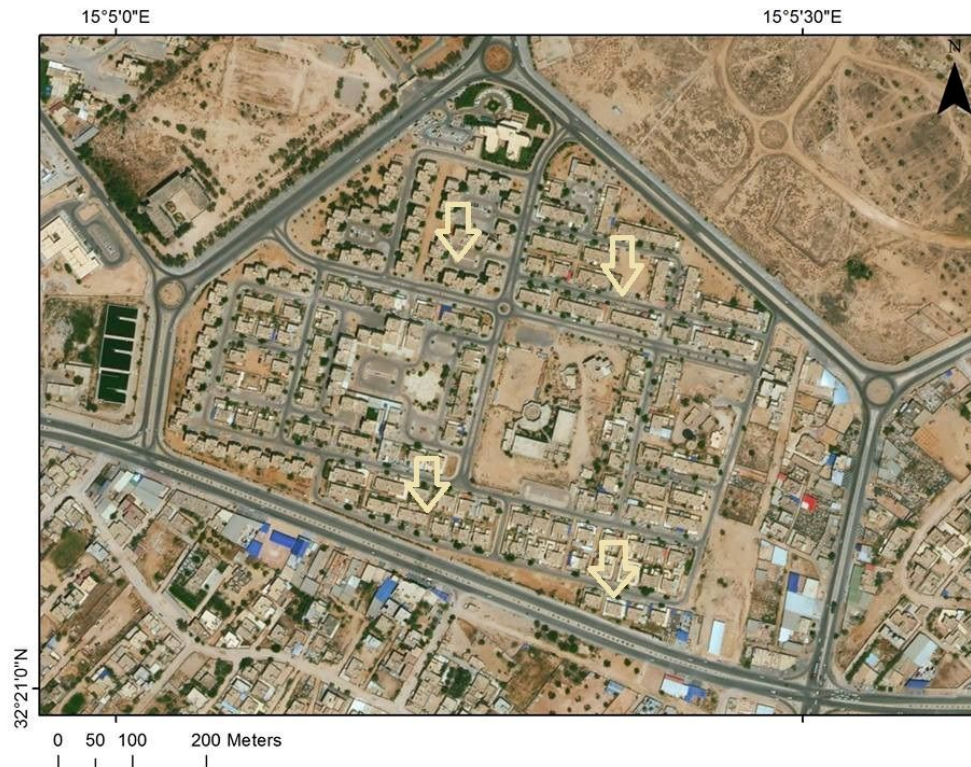


Figure 7-20: A few numbers of next-door families become a small group who are involved in initiatives and cooperation with each other, 9th July GN

Many of the participants indicated in the interview that residents are not motivated to contribute positively to improve the public space of the neighbourhood. They always expect the government to build and provide all the facilities. One of the respondents F I stated that 'I think the initiative actions from residents are unlikely to happen at least in the near future because it is related to the background and the mentality of the residents'. Furthermore, from another point of view, some residents are ready to support and create a strategy to develop the public space of the neighbourhood but they usually fail when it involves other neighbours who do not believe in teamwork, cooperation and voluntary support. Although their attitude towards the idea is good, most of the residents do not act positively on this matter. They would rather choose individual solutions such as going to the beach in the summer or going to public gardens in the city centre rather than contributing financially and in other ways to carry out permanent work on the open public space of the neighbourhood. They usually rely on the government to do this type of work.

The results show that these small groups of families have similar interests, financial status and mentality. The interviews include a small sample of these families; however, an informal chat was engaged in during the filling out of the questionnaire when these ideas were pointed out by many of these participants.

- To summarise, according to the answers and information from the in-depth interviews, the following points are the most significant to the issue of initiatives and spirit of the community. The research has found out that initiatives and cooperation between the residents can take place in some cases including the following:
- When these families (neighbours) have the same interests in the public space such as creating a good place for their children to play and spending time outdoors near their houses. They know each other before they move here to this GN or if they are work colleagues.
- When their financial statuses are similar and most of them can afford to spend money on things other than on their private house and garden; however in some cases when a few have lower incomes than others, they still can offer their time and hands instead of money.
- When their mentality is productive, for example, the government has failed to support these GNs at the current time for whatever reasons. These residents decided to act and do what they can themselves rather than just waiting for the government action which might not happen in the near future in terms of economic and management factors.

For example, in this housing cluster, residents made a very great work to create a small playground for their children by themselves as shown in Figure 7-21. Children seem very happy and they using this area as a centre of their activities. These are very good examples of initiatives. This research will attempt to enhance this type of action by including a form of future practical proposals in the concluding chapter. This example could be a row model for some other location either in TN or GN to be followed in order to act upon to provide some residents need and being positive to the community instead of waiting for the solution from the government which might take a long time due to the nature of complicit reasons related to issues such as funding, management and other political and economic factors.



Figure 7-21: Pictures show an example of a self-organised initiative by some residents to create a small children playground, pictures by the author, 23/102016, GN 9th July

However, the readiness for people to act and show their initiatives depends on many factors; these factors often related to the cultural background and the local behaviour and the pattern of life of these people. They are also related to what local people expect from the government and the level of trust between them. From the information of this research most of the participants of the GNs stated that the key negative attitude about this type of neighbourhood is that residents always rely on the government to provide all the physical settings and to find solutions for all the residents' needs rather than acting by themselves to try to improve their existing situation and the current environment. For instance, participant (I I) highlighted that,

'People of this neighbourhood GN should not rely on the government to do everything; they should try to take the initiative to start a small step in developing and improving the quality of the public space of the neighbourhoods'.

Along the same line, regarding the perceptions of the residents and their expectations towards each other, another participant K S pointed out that,

'The idea is very good but most of the residents are not going to support it, they will choose individual solutions such as going to the beach in the summer or visiting the central public gardens of the city centre rather than contributing financially to a permanent work to develop the open public space of the neighbourhood; they only will rely on the government to do so'.

Furthermore, some other respondents think that the initiatives and cooperation towards the development of the public space are too difficult to be applied at least in the near future. They claim that this is because of the mentality of the majority of the residents as they act individually and they are not open-minded to an advanced initiative like this. Another respondent M G from the same GN 9th July stated that 'I think the initiative actions from residents are unlikely to happen at least in the near future because it is related to the background and the mentality of the residents'. From another point of view, research data show some other opinions from a few participants who are very excited and keen to create a positive action to improve and support the private attention to develop the public space at least with basic initiatives and try to establish a committee responsible for and involved in this issue. For instance, the participant H B who is the head of the GSC said that single initiatives come from residents in a few neighbourhoods to create a part of the open space to make it as a place for playgrounds, green areas, sports activities and social public events. He illustrated that,

'There are some individual suggestions from a group of residents within several neighbourhoods to try to develop the public space or to provide playgrounds but we are still studying this proposal in terms of how to fund it'.

This reflects the need for these facilities and also shows the residents' interest in the public space, which actually supports the aim of this research to assess the existing situation and finally to give clear suggestions and recommendations to the future development of the public spaces of the neighbourhoods - whether GN or TN. To summarise, in the TN, the sense of cooperation and initiatives is much stronger

regarding the points illustrated above. In the GN, there are also some initiatives which might be developed as these residents engage in more interactions and develop relationships between each other which are likely to happen over time as opportunities arise for more integration of the residents. Although the government's responsibilities are less than expected, some decision makers stated that they are trying to support any initiatives that come from the residents such as giving land for the project and using their machines and transportation to help build these new places that residents need. Finally, the local behaviour and mentality towards the necessity of developing the public space vary from one category of people to another. This might be one of the limitations that affect the level of cooperation to act equally in the neighbourhood development and the desire to increase the quality of the neighbourhood.

7.5.2 The Extent of Help and Support among the Residents

After looking at the expectation from the government towards the residents and the nature of the cooperation between the residents and their thoughts concerning the responsibilities, either towards the government or their own neighbourhood, it is important to investigate the extent of help and support that residents expect from each other. First, by looking at the initial results from the questionnaires, it can be clearly seen that the majority of the respondents in both sites agreed with the statement, 'residents should share activities, exchange favours and ask for help towards each other'. This interest and desire to help and support each other can illustrate the readiness for these people to improve their relationships between each other even though the existing situations of these neighbourhoods are not reasonably accepted in terms of quality and facilities.

Relevantly, by looking back to the figures (6-1 and 6-2) to comparing the two value of responses in the TN and GN. It can be noticed that in the TN the percentage is slightly higher which is probably due to the composition of this type of neighbourhood. Nevertheless, the response was positive in the two neighbourhoods which may highlight the need for more intervention in both types to be considered in future proposals and redevelopment. In addition, the qualitative data discovered more relevant information to this aspect. The helpfulness and support elements are very important, particularly in the local community. Many of the participants emphasised the meaning of unity and support in the community. For instance, participant K S stated that 'Here in our local society, the feeling of others and exchange of favours by one to another is more important than anything else. However, this might not be the logical priority in other cultures and region'. What is

understood from this, is that the elements such as empathy, care for others and supporting each other in social aspects are priorities in this local community in the case study region?

Along the same line, one of the respondents M G from GN stated that,

'In a social evaluation, according to my beliefs, the human beings are a box of emotions, so if there is no feed to these emotions from people who are around you not only your family you need your neighbours as well, I think that life becomes boring and therefore we will not feel ... we are here in this GN missing the social support value ... and the social empathy'.

On the other hand, in the TNs, this aspect may seem more developed as it can be clearly seen that the respondents are more integrated and united. The main reasons behind that are because most of them have lived in the same neighbourhood since birth, and many of them are relatives. This form of the relationship seems to be the most preferred one by the local inhabitants as the respondents stated. For example, respondent F I from TN illustrated that the social exchange and support as the essential need in the local mentality which people must have as the basis of being one of the local citizens. In all types of local neighbourhoods, the features of strong communications and mutual understanding among the residents are fundamentally crucial; in TN these features exist naturally as a result of the composition of this type of neighbourhood.

Therefore, the concern of losing these values in the GNs has emerged. Thus, there should be real attention to the way and the content of the new development to fulfil the social aspects and conserve the local values, particularly those are related to the people's satisfaction and comfort.

7.6 Summary

To conclude, this chapter has pointed out that the level of social satisfaction towards the quality of public spaces is low, particularly in the GNs. Residents of both sites believe that good-quality public spaces enhance their desire to interact with and share more with other neighbours. One of the important indicators in this chapter is the attachment to the neighbourhood. The GN residents show a low level of community attachment because they consider this neighbourhood as a temporary residence and they will move back to their original residence, TN, in a

few years. This makes them less motivated to contribute to the local initiatives and less likely to use the public space as much as the other residents do.

In this essence, it appears that residents of TN feel more satisfied towards their quality of life than those living in GNs, particularly in terms of social aspects, although the GNs are often better than TNs in their design, infrastructure and physical settings. These results lead to the statement which has been highlighted by many scholars such as (Woolley, 2003, Gehl, 2013) that, in some regions, the residents' satisfaction depends on social values more than on the physical elements.

Moreover, findings have shown that the level of psychological comfort can be improved by providing high-quality public spaces which bring neighbours together in an area where they can get engaged and enjoy sharing some interesting activities. Actually, the results illustrate a good level of privacy within both sites, even though there is some evidence of a few disturbing actions which are not acceptable to some of the residents. Nevertheless, the most dominant result shows a high level of feelings of safety and security in both sites. The only concern about safety was shown about the children's playground areas which need more consideration by either being relocated, or provided with a surrounding fence.

Finally, based on the research results, it can be suggested that social satisfaction and sense of community are fundamental elements that should be a focus of future projects. As Woolley (2003, p. 21) states, 'sense of community can be provided by open spaces of different types of different people and communities. These opportunities include small and large events and both organised and informal gatherings'. In addition, the TN clearly have advanced social advantages which can be modified to be included in the new governmental neighbourhoods. The local initiatives of the neighbourhoods need more attention from the responsible firms so it can be more effective and practical to benefit the whole neighbourhood. A combination of the advantages of each type of neighbourhood can establish a new framework for future projects which at the end satisfies more residents and improves the social and physical features of new housing projects.

PART 3: (Chapters 8 and 9) THE COMPARISON BETWEEN GNS AND TNS, AND THE RESEARCH FINAL CONCLUSIONS

Introduction to part 3

This part presents three aspects, first, the comparison between the two case studies. This comparison focuses mainly on the social value and the impact of the PS on people's daily life. Additionally, there will be a brief of the main physical differences through a direct evaluation of their design including not only the POS but also the relevant in-door space which may have linked relation of the people movement and activities. Second, this part also presents a bunch of practical recommendations and proposals for similar projects in the future. Moreover, it summarises the key findings, original contributions and the possible area of future research. Based on that, this part summarises the research outcomes in order to draw a clearer and detailed assessment of the current situation of the PS, and identify a practical framework for future urban policies in the city of Misurata development which could be valid for other similar cities in the country.

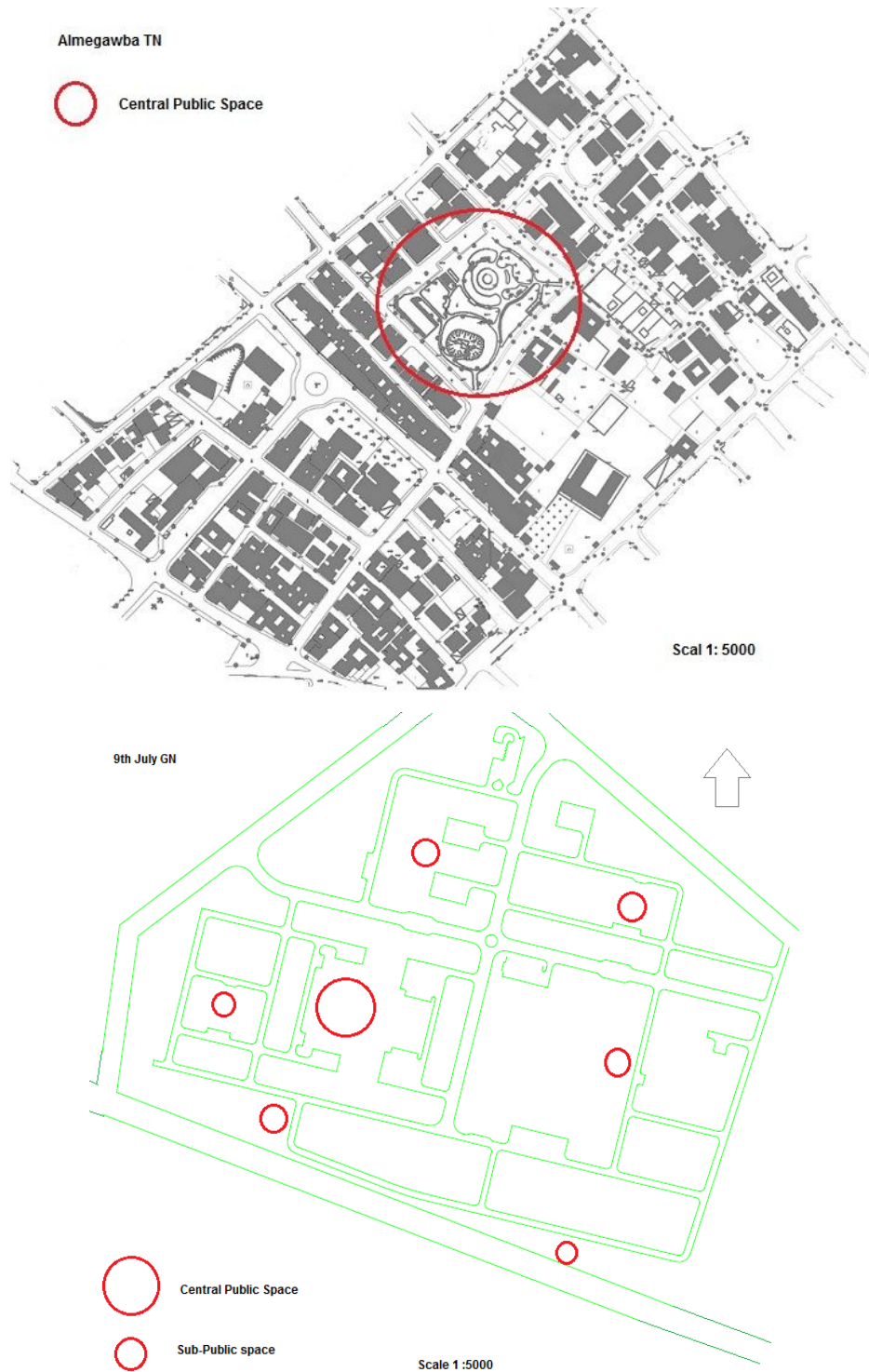
CHAPTER EIGHT: THE COMPARISON BETWEEN GN AND TN

This chapter enumerates the significant differences between the TNs and the GNs referring to the research findings, and it explains the positives and negatives of both types of the neighbourhood in terms of the focused themes of the research.

8.1 Comparison between 9th GN July and TN Almegawba

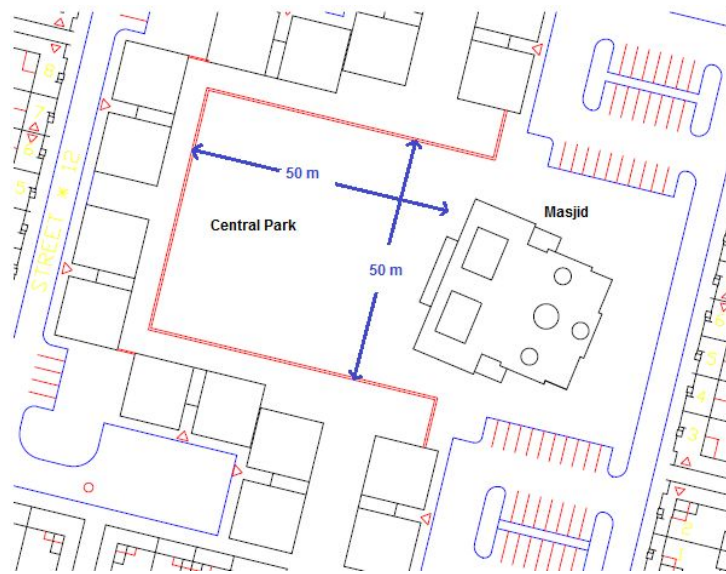
With regard to the comprehensive analysis in the last three chapters, it can be concluded that each of the two neighbourhoods has a positive side which to some extent satisfies the users. Nevertheless, none of them has delivered the required fulfilment for the residents. The following points present the main and significant distinctions between the two types of neighbourhoods through the most important elements that have been covered in the research. These points concluded from the research results were addressed in several places in the discussion chapters as well as supported by the work experience of the author during his involvement in the housing projects for the city council projects office and the HIB from 2001 to 2010. All these references are attached to this thesis either in the references list or in the attached appendices. Before entering the comparison discussion about the social

aspects of the two case studies, the following Maps 8-1, 8-2, 8-3 and 8-4 summaries the main differences between the TN and GN functionally and physically through a scaled presentation of their designs and plans including the housing design of each one.



Map 8-1: The size and location of the PS and Sub-PS in comparison between TN and GN

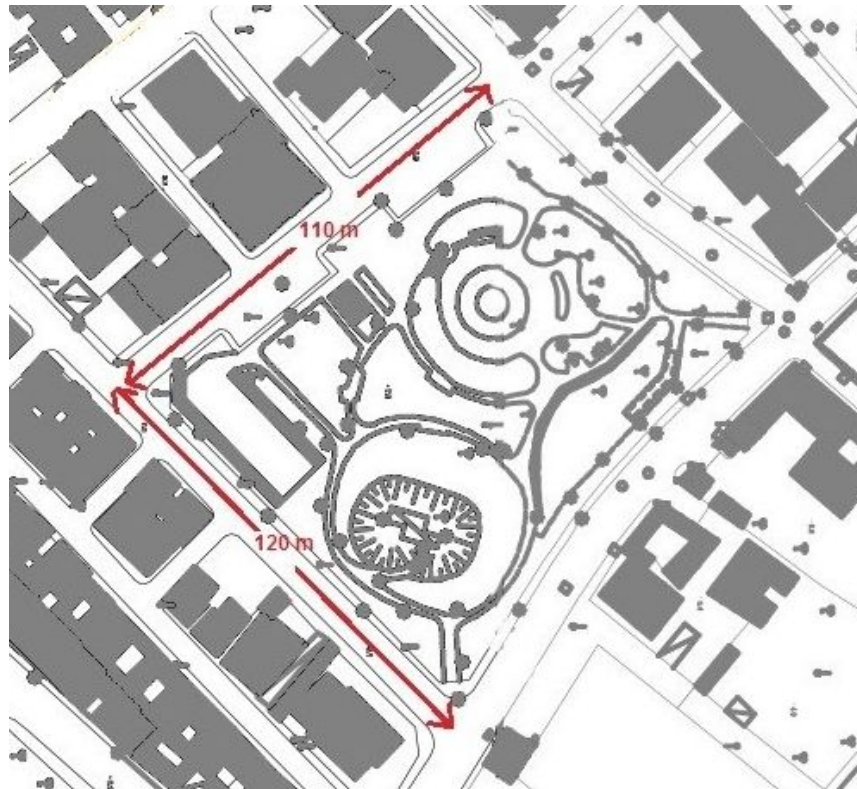
Central park in the main public realm of the 9th July neighbourhood GN



Scale 1 :1000

Area of CPS is 250 m²

Central park in the main public realm of Almegawba neighbourhood TN

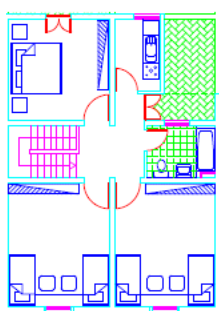


Scale 1 :1000

Area of CPS is over 1000 m²

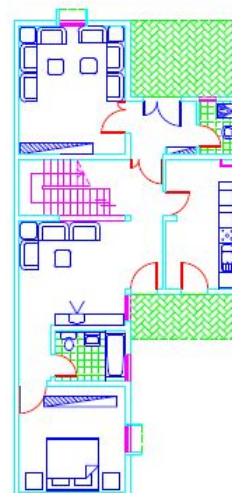
Map 8-2:Show dimensions and the total area of the central PS of the both sites, TN and GN

Terraced: Second floor



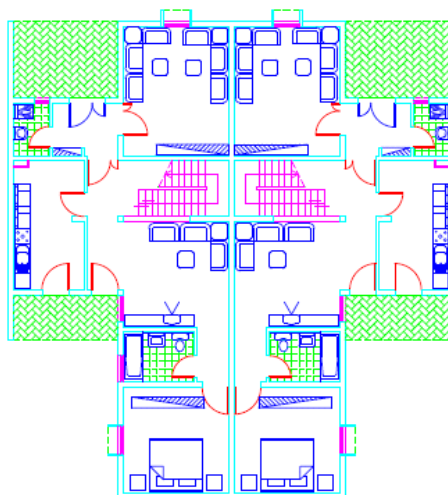
Scale 1: 100 Area = 80 m²

Terraced A: First floor



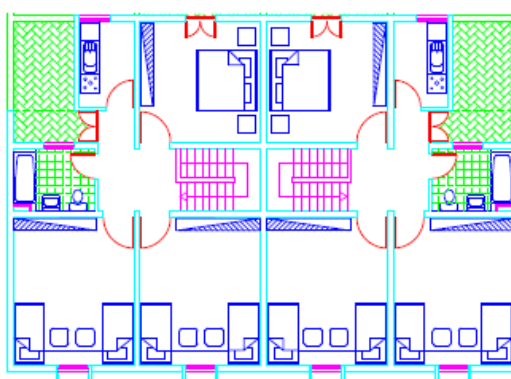
Scale 1: 100 Area = 100 m²

Two housing units: first floor



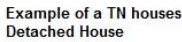
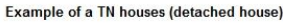
Scale 1: 100

Two housing units: second floor



Scale 1: 100

Map 8-3: The design and area of an example of one housing unit in 9th July neighbourhood GN, HIB Digital Archive



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Referring to the Maps 8-1, 8-2, 8-3 and 8-4, it can be summarised that, the main key difference that impact on the PS distribution and quality within these types of neighborhoods are as per Table 8-1.

- ❖ In TN, residents have more indoor spaces which allow them to welcome the guests inside their houses while in GN people use outdoor space more due to lack of reception space inside the house. Therefore, more outdoor gathering can be seen in the PS of GN than in TN.
- ❖ The house land area in TN larger than in GN which explain that density in GN higher than in TN. This high of density can allow more residents in GN with same area, thus, they need more facilities and PS for their activities. This is one of the key points that make the need of the PS more in the GN.
- ❖ In TN, residents have their own private space such as rear gardens, this can allow them to be use for small children play ground. Moreover, because in TN people mostly know each other and have strong relationships, so they allow their children to join other children in their neighbours' houses. This can also make a significant different between the two neighborhoods.

No.	Element of Comparison	TN	GN
1	Number of the main PS area: 'central-park'	Mostly one	Mostly one
2	Number of the main PS area: 'sub-public spaces'	Few	Many
3	The type of housing units	Mostly (detached and semi-detached)	Mostly (flats and terraced)
4	Average of the land area of each housing unit	1000 – 3000 m ²	200- 300 m ²
5	Average covered area of the housing unit	200 – 500 m ²	100 – 180 m ²
Table 8-1: The key differences between TN and GN in terms of area/dimensions of the PS and the housing units			

Furthermore, several differences between the two neighborhoods can be addressed from the Maps 8-1, 8-2, 8-3 and 8-4 and the Table 8-1 in terms of physical settings and design elements. More distinguishes including intangible and social aspects will be presented in the following section.

8.1.1 The physical aspects

8.1.1.1 Design

First, the GNs: The design of GNs often is higher quality than the TNs because the GNs are usually constructed through an organised system.

➤ **The Positives**

- ❖ The designs are delivered by qualified institutions either locally for the small neighbourhoods or internationally for the bigger neighbourhoods.
- ❖ The construction is usually carried out by other qualified companies with very high standards of supervision.
- ❖ All the projects' designs including the open area distribution and the percentage of the open and covered area are approved by the MUP or similar authority.
- ❖ The handing-over stage of the projects must pass through the final inspection by a professional team from an independent organisation to ensure the accuracy of delivering the project according to the requirements.

➤ **The Negatives**

- ❖ The management of housing projects is not stable; in many cases, the construction of these projects is divided to stages: first, the construction of the infrastructure and the housing units, and second, landscaping and greenery work. In most of the cases, the second part is not delivered, due to the massive need for the houses. The government focuses on delivering the houses, and once the residents move into their houses, the open spaces and public areas are usually left incomplete.
- ❖ The operation and maintenance: the existing neighbourhoods that have a complete landscape and public spaces construction, they have just been neglected. For example, after a few years, the green area was not watered, and the playground has not been maintained or replaced, according to the representative from GSC, participant H B.

Second, the TNs: the TNs are a traditional 'spontaneous' prevalence of houses, usually constructed by private individual builders.

➤ **The Positives**

The residents can choose their own design/style in a private way such as paying an architect or a specialist company to construct a new house. As it is their land and

private property, it is more flexible to have their choices and design for the house rather than having it ready to live in with no control of its design. The open and public spaces are landscaped and located in good places because these already exist in the master plan of the city. In this case, the people follow the comprehensive detailed plan of the area and also can have more say about their property and its design.

➤ **The Negatives**

The TNs are often constructed privately, funded by the householders themselves and constructed by individual workers. Therefore, the overall open and public spaces are limited because most of the land is owned by the people. In this case, locating enough space for the public use can be very difficult. In some old TNs, there were already a central park and some open public spaces which are owned by the government; this enabled a good range of space that can be used for social and entertainment activities. In the new spread areas of the TNs which are not included in the official master plan of the city, there is a real threat due to a lack of open and public spaces.

8.1.1.2 Facilities

The provision of facilities is similar in both sites: there is a lack of facilities in both types of neighbourhoods (the GNs and TNs). However, some TNs which are inside the 4th ring road of the Misurata Master-plan has some facilities such as street furniture, public seats, good landscape and some good attractions such as fountains, statues and parasols. These neighbourhoods are limited – there are only a few in the entire city and the quality of these facilities is not as good as before due to the lack of maintenance. In the new TN or GN neighbourhood, there is a massive need for street furniture and physical equipment as enumerated above. Therefore, the final assessment in this term is that both sites are poorly facilitated which point out that most of the neighbourhoods of the city need re-provision of the physical facilities and redevelopment scheme for the operation and maintenance works.

8.1.1.3 Environment and weather conditions

Both types of neighbourhoods are facing serious concerns in terms of environmental protection. Although the average weather conditions in Libya are within the comfortable average most of the year, there are essential procedures that should be delivered to the open and public spaces of these neighbourhoods to improve their quality. For instance, more green areas are required, and more trees

to provide shade in the summer season are needed. The material that is used in the sites can be replaced with other local and environmentally friendly material such as wood and stones instead of concrete and steel.

8.1.2 The intangible aspects

8.1.2.1 Residents' relationships and social interaction

First, the TNs: The relationships between the residents in TNs are much stronger than in GNs. This result is according to the findings of the research and can be summarised in the following points.

- The residents of TNs have a long time living together since birth because this is the permanent stay for life to them, their parents and grandparents are from the same place, and they grow up together as a big family. This makes the social relationship very strong, as all age groups of the neighbourhood have their memories and shared activities through all stages of their lives.
- The origins of these families who live in TNs are often from the same tribe or relatives. This feature means that they have a very similar cultural background which enables them to share and interact with each other smoothly and actively.
- In the public space of the TNs, it can be seen that residents are friendlier to each other, as they exchange advice and work socially together as one team. This feature is very clear when the social events take place; it can be recognised that there is a strong cohesion in the community.
- The residents usually share the open space fairly the same. For instance, the public space between the houses can be used by all the families around that space in the social events. Even though this space is owned by one family, they still offer it to any of the residents when they need to hold their event in that place. Therefore, the sense of cooperation with and support for each other is highly noted in TNs.

In this regard, we would like to quote a very useful and effective expression from a participant of a professional's group describing the reason behind the success of the TNs in the social dimensions. The participant A M stated that,

'We know that the TNs formed through the history, they have been developed and expanded since several decades ago. The people who live

in this type of community have created their own spaces and places to meet their social needs; over time they have been developing the open and public space of the neighbourhood to fulfil their social activities'.

Second, the GNs: In this type of neighbourhood, the above features are very limited. The findings have shown that most of the time, the residents of the GNs are less cohesive as a community and there is a lack of social interaction. The following points illustrate some significant features of the GNs which suggest the lower quality of this type in terms of social relationships and community cohesion.

- For instance, the public space of the GNs can be a place where rubbish is dumped, or in some cases, it can be used by one of the residents for private purposes such as an extension to their garden. Nobody argues with other residents about the illegal use of the public space because this land is owned by the government so nobody has a feeling of belonging and defending this kind of action in the public realm.
- The residents of GNs are from different parts of the country, so they are a mix of cultural backgrounds and origins. According to the research results, this feature can be improved only in one way, which is over time. If the residents of GNs live in the same neighbourhood for a long time such as 10 years or more, they are more likely to build up their trust and confidence with each other. The significant findings are that usually, the residents in the GNs live in this neighbourhood only for a few years and then they move back to their original neighbourhoods. Because they build their own house in the original place, therefore, most of them do not stay in the GNs a long time, which reduces the chance of creating a strong relationship with the neighbours in the GNs.
- The parents have a concern about letting their children interact with the neighbours because they do not know them, particularly for the first few years. That is why in the research result, there is an acknowledgement from parents that they prefer to provide their children with indoor games and play toys to prevent them from going out and participating in the public space of the neighbourhood.
- The lifestyle seems to impact on the GNs more than on TNs because the type of families who live in GNs comprise a higher percentage of younger parents-families – 'new marriage families' – which usually means that both parents are

working. In this case, the times for sharing and participating in the public space for these families are very limited.

8.1.2.2 Equity

This particular element is significant in both the TNs and GNs. The feeling of equity, or 'social justices', is very important to create a quality neighbourhood where all the residents have the same chance to use and share the open spaces around their houses. Although the research results have shown a slightly higher level of equity in TNs, more attention still needs to be given to this side of social life. In terms of age group, gender and physical ability of the residents, there is lack of social fulfilment towards the previous categories. Female residents have less chance to use the outdoor realm due to the lack of the places which can be appropriate to their special requirements. There should be a private 'separated' place in the semi-public and public spaces of the neighbourhood. The disabled and elderly residents are also facing a challenge to use the public space because of the inefficiency of the pathways, and lack of special seats and ramps to be able to freely access these places.

8.1.3 The satisfaction of the residents in TN and GN

Measuring the satisfaction of the users, or 'residents', of these neighbourhoods is the most fundamental part of this research. It has been measured in each individual neighbourhood in terms of both physical and intangible elements. The final findings can be seen in the following Table 8-2. It presents the clearest indicators as a summary of all the significant findings in order to gain the final assessment of the efficiency of the two neighbourhoods. The key factors of this assessment are based on the three main focus of the study, which are physical and intangible quality of the neighbourhood public spaces, social credit/value of the neighbourhood, and the users' satisfaction.

The following assessment grades show the level of quality in each aspect of the three former elements: from %0 to %100 = the level of the quality, PE = physical elements, IE = intangible elements and RS = residents' satisfaction. These percentages presented in Table 8-2 is the concluded outcomes from the answers that provided by the residents through the research questionnaires.

No.	Element	'9 th July' GN %	'Almegawba' TN %	Overall satisfaction %
1	Size of the public space	50	50	50
2	Appropriateness of its location	40	50	45
3	Central Park	20	70	45
4	Accessibility	40	50	45
5	Facilities	20	50	35
6	Operation	20	20	20
7	Maintenance	20	20	20
8	Weather protection	20	20	20
9	Green areas	10	40	25
10	Outdoor space	20	40	30
Physical elements PE		26	41	33.5
1	Social relationship	30	70	50
2	Participation forms	40	60	50
3	Children's involvement	60	40	50
4	Cultural background	40	80	60
5	Residents' behaviour	40	60	50
6	Social events	50	80	65
7	Period of living	30	70	50
8	Residents' social needs	50	60	55
9	Feeling of equity	30	20	25
10	Impact of life style	40	60	50
Intangible elements IE		41	60	45.5
1	Sense of community	40	80	60
2	Neighbourhood attachment	30	70	50
3	Psychological comfort	40	70	55
4	Safety and security	50	60	55
5	Privacy	60	50	55
6	Disturbance	60	60	60
7	Length of stay	50	60	55
8	Local initiatives	40	60	50
9	Cooperation 'helpfulness'	40	70	60
Social satisfaction RS		41	56	50
Total results of the three elements %		36%	52.3%	43%
Table 8-2: The overall results of the quality of public space in neighbourhoods regarding the significant factors of both sites and the social satisfaction of their residents, created by the author regarding the quantitative data of the research				

8.1.4 The residents' urgent needs: 'how to improve the public spaces of the neighbourhood'

Based on the research data, and referring to appendixes 12 and 13 which are presenting the opinions of the residents' towards the most needed elements to be included in the POS improvement. In the last column of each table, the author has added the theoretical interpretation of the type of each single need, to match the theme that has been discussed in this research. These answers were collected from the qualitative data included in the questionnaire forms to the question 'what is the most needed action that you think it helps improve the quality of the public spaces in your neighbourhood'.

With referencing to the appendix 12, it can be seen that there are many components and elements that residents believe that they are important to be provided in the public spaces of their neighbourhoods, some of them are about physical elements, facilities, green areas and creating special spaces for a specific category of the users. Another requirement is about organising the spaces, landscaping and operating the public spaces. It is also very clear that the most needed area of improvement is to provide children and teenagers facilities such as playground and sports facilities.

In general, the appendix 13 shows that similar requirements are needed referring to the respondent's requirements in TN Almegawba with a slight difference in the priority and order comparing to the order of these needs in GN 9th July as per appendix 12. This results can ensure the lack of public spaces quality in both types of the neighbourhoods and they still need improvement especially in the physical aspects.

8.2 Suggestions to improve the POS based on responses' needs

The research results and findings have revealed critical issues of the current public and open public spaces of the neighbourhood. These issues have been identified in this research and ranked in order of priority according to the extent of need stated by the residents, as shown in details in appendixes 12 and 13. These results can be surmised for each type of neighbourhoods individually as follows:

8.2.1 First, the GNs 9th July as a Case Study:

Figure 8-2 shows clearly the most needed elements from the users' perspectives. It can be seen that in this neighbourhood, GN, the children's facilities and green area

provision rank as the first important needs, while the design, safety and aesthetics rank last from the list. Therefore, this can emphasise the discussion of the advantages and disadvantages of the GNs as explained in the last chapter.

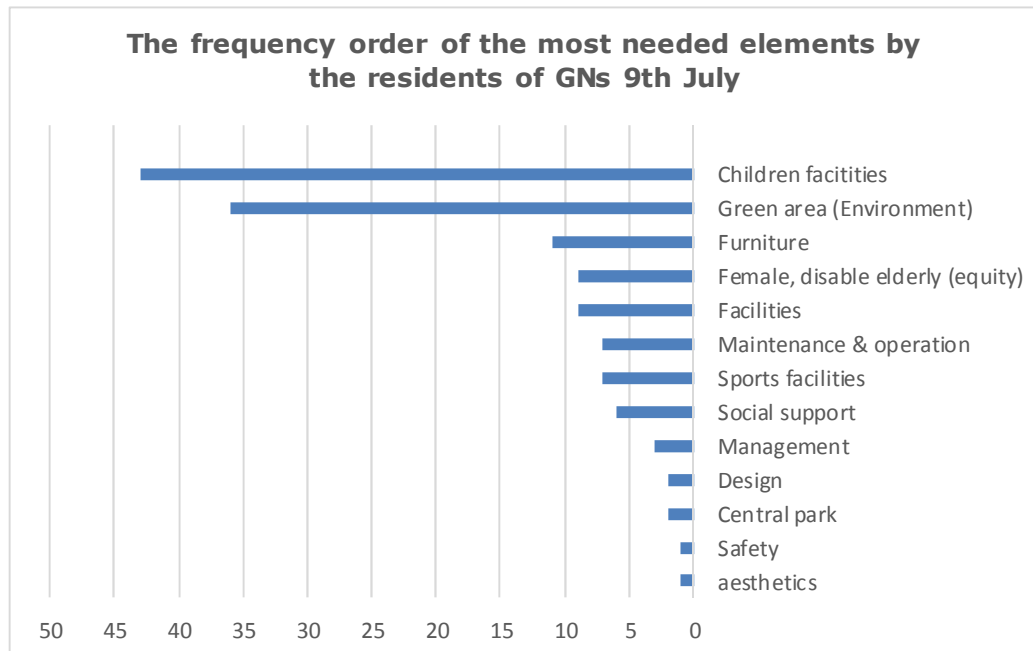


Figure 8-1: The list of the most needed elements in the GN 9th July ranked in order of priority according to the residents' requirements

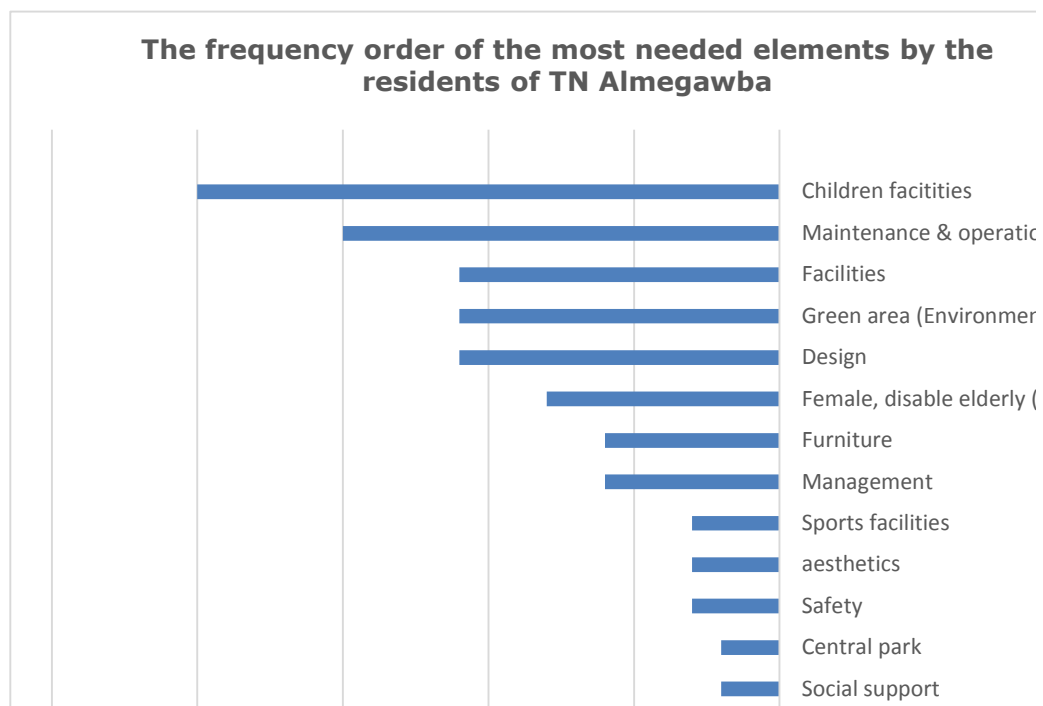


Figure 8-2: The list of the most needed elements in the TN Almegawba ranked in order of priority according to the residents' requirements

In this Figure 8-1, it can be clearly seen that the children's facilities come ranks in the first place and the greenery attractions rank second regarding the residents' requirements and needs. The figure shows many other elements which are pointed out as necessary needs; thus, the difference in the extent of need clearly varies. The female and disabled support also come in fourth place which indicates its importance and the need for it to be included in future development.

8.2.2 Second, the TNs, Almegawba as a Case Study:

In the TNs, the priorities of the residents' needs are slightly different in some elements. It can be seen in Figure 8-2 that the children's facilities rank first, as is the case with the GNs. On the other hand, the maintenance and operation rank second, which indicate the lacks of these elements in the TNs which need these services more than GNs do because the TNs are older in construction period and the maintenance is needed more than the GNs because they are new projects. The other important point is that the greenery attraction is less required in the TNs as they already have plenty of trees and green spaces that have established over a long period of time while in the GNs which are recently built, they need more provision of greenery elements such as trees and grass for the open spaces.

8.3 The required actions by the residents in the TN and GN

Figures 8-3 and 8-4, illustrate significant differences that have appeared in terms of the extent of the residents' needs and also of the most needed elements as a first requirement for the residents. It can be seen from the chart that GN residents requiring more focus on children facilities and green area which indicate the lack of these two elements in the existing quality. In TN residents requiring more care in maintenance works which show that POS of this residential neighbourhood has not received the right level of maintenance quality. It shows also that they have a reasonable level of facilities provided as is illustrated in the case study Chapters.

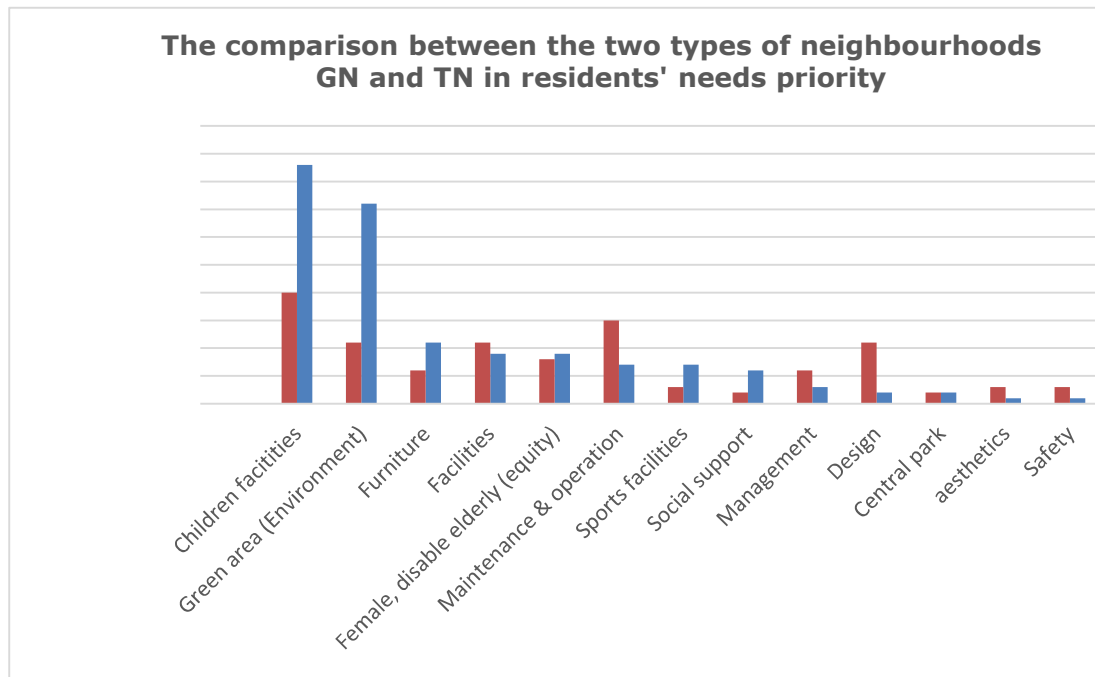


Figure 8-3: The comparison between TN and GN in the frequency of the most needed elements in the public spaces of the neighbourhoods

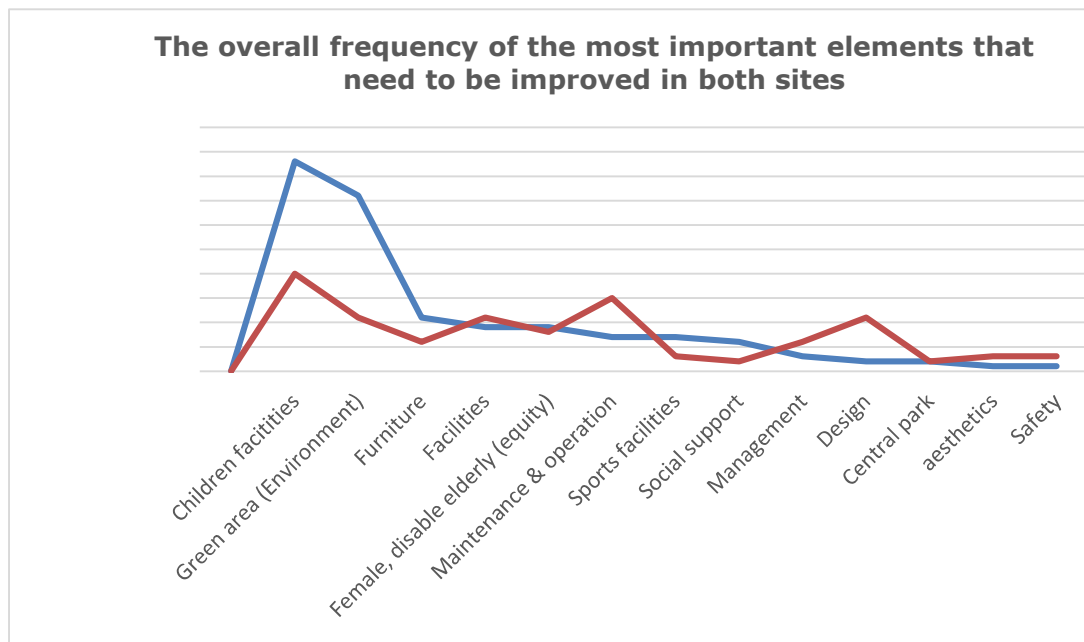


Figure 8-4: The overall frequency of the most needed elements in the public spaces of the neighbourhoods in both sites, TN and GN

8.4 Summary

To sum up, regarding the previous maps that presented the key differences between the two sites in design, layout, housing typology and spaces' size, location and so on. At the same time, probably not all of these differences are present in all the neighbourhoods of the city. However, they might be less or more, in general these are the main aspects that can vary from one neighbourhood to another either a TN or a GN. In this regard, it can be summarised that GN has better design concept as a layout and infrastructure provision. On the other hand, the TN may have better integration and cohesion in terms of its fabric to the nature of the region. Most importantly, TN has better sense of community between the residents, although both of the cases show that many improvement need to be done in both social and physical qualities. This can shed the light to the main concern of this research which how to improve the quality of life of these residents and provide them with better spaces those meet their needs socially and physically.

Finally, it has been fairly clear that both neighbourhoods failed to completely satisfy the residents in terms of public space enjoyment and social interaction. Nevertheless, the results in both sites are slightly similar; there is a lack of provision and quality level of each individual type of neighbourhood which needs to be improved in a different way to the other. In the TNs, the most needed element which can be considered as a critical issue is the facilities and provision of separate spaces for females. In GNs, there is good-quality neighbourhood infrastructure while the public spaces are too small in their size. Residents need more support and incentives to become more involved in social activities. Hence, it can be concluded that, in terms of intangible elements, the TNs are more successful while the GNs are better in terms of physical elements. Next chapter will be using this data to identify the specific lack of quality in each type of neighbourhood in greater depth. It also attempts to suggest a revised list of the possible recommendations for future projects that based on the research findings.

CHAPTER NINE: CONCLUSIONS, RECOMMENDATIONS AND AREAS FOR FURTHER RESEARCH

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This chapter summarizes the key findings of the research, including answering the research questions. In addition, the recommendations, practical proposal, research contributions, suggestions for future development and research area deliberated.

9.1 The key findings

The research has investigated the most important elements of the public space in the most common types of neighbourhoods which are the GNs and the TNs in the city of Misurata, Libya. This research work involved the assessment of the current quality of the public spaces, the comparison between the two types of neighbourhoods in both social and technical perspectives as well as identifying the intangible and the physical elements. This research is projected to enrich the understanding of the urban redevelopment in the city of Misurata and by extension similar cases in Libya. To emphasise the importance of this issue, there has been similar research conducted in many regions such as the Middle East (Tawil et al., 2016) and Western Asia (Islam et al., 2016, Norouzian-Maleki et al., 2015) with similar concerns of degrading social values in the neighbourhood public spaces. For instance, in China, Zhang and Lu (2016, p. 35) state that "there is an urgent need to explore a better way of urban redevelopment to benefit residents, both from physical and social perspectives".

Moreover, the findings of this research have shown that neighbourhoods can be successful with regard to the residents' reactions and the level of interaction between them particularly in the public spaces of the neighbourhoods. From this perspective, it is essential that the design and development work should be based on the local environmental context, including the residents' behaviour and their perceptions towards the understanding of the community cohesion. This concept has been perfectly emphasised by Carr (1992, p. 87) in which it is stated that 'in order to have effective design and management of public spaces it is essential to understand the role that those places play in people's lives, and why spaces are used or ignored'. Therefore, it is crucial that when creating the design of

neighbourhoods and urban development, this should be based on the residents' social needs to achieve the right results according to the sense of community and social comfort, which means considering both physical and intangible elements at the same time.

From the overall results, almost all the participants have confirmed that engaging in public spaces of the neighbourhood is the most preferred feature in their daily life. Hence, this indicates that the residents are more connected and integrated with each other and to the place itself through social activities. At the same time, there is an advantage of transferring the social values and experiences due to the interaction between the old and new generations of the neighbourhood. This interaction may be reflected positively on their quality of life and provide a sustainable cultural community. As Carmona et al. (2008, p. 39) importantly stated, the form and function of the public space 'should not divorce the users from their history'. There is a real threat in the modern urban trend of creating new forms of urban development which might not absorb the locals' social values and culture. Therefore, the new design of the neighbourhoods should include the specification of the plan and the space that can ensure applying all the necessary needs that support keeping the quality and integration of the neighbourhood to create a new design with respect to its past value.

In addition, most of the participants have expressed their preference for living near their relatives and the people who they have known for a long time, which supports the TN from a social perspective. This illustrates how attached people are to the social features and how much this community needs to be designed and based on social considerations in most of the projects. Furthermore, residents need high-quality public spaces and a central area which includes the facilities for children such as the playgrounds and other outdoor play areas. For instance, sports pitches and green areas for walking and some other activities make the residents of the neighbourhood interact more and feel closer to each other, leading to a stronger relationship among the residents all around the neighbourhood. The results have indicated that in the current situation, the public spaces are not used properly due to lack of the main elements, both physical and intangible. Therefore, the interaction and the relationships between the neighbours are not strong enough to support the concept of community cohesion.

Finally, the research suggests a comprehensive package of recommendations to be considered in future urban development. The suggestions deduced from the

research findings are highly important to be included in the new projects, to create the sustainable, valuable and practical development which should fully satisfy the residents and respond to their social and physical needs. It is clear that the public space is a crucial indicator of the urban quality and the well-being of the residents in the neighbourhoods' development. Public spaces play an essential role not only in urban development but also in promoting and enhancing the social interaction and the residents' satisfaction in their neighbourhoods. Therefore, creating successful neighbourhoods which support and fulfil the social needs of the people is a fundamental need. It is a new future task to find out how all these communities can be linked together and to create schemes that can improve the relationship among the neighbourhoods of the city to enhance the social cohesion in the entire country.

9.2 Answering the Research Questions

9.2.1 Research questions

Q1). To what extent is the public space of existing neighbourhoods successful in terms of fulfilling the social characteristics such as interaction, community cohesion, sense of community and social satisfaction to all the residents of the neighbourhood?

➤ Answer

The research has interpreted that the existing neighbourhoods are not completely successful and there is overall lack of PS quality. The main purpose of increasing the quality of the public spaces and neighbourhoods is to make residents satisfied and improve their quality of life. However, both neighbourhood types have some positive aspects as stated in the case studies sections, though these do not completely meet the resident's needs and desires. Particularly, in terms of creation of the space that support the social value and community cohesion. The TNs such as Almegawba has a good level of quality in the social features because of its composition which is different from those in the GNs, although they are less efficient in terms of physical elements which are similar to the GNs. In other words, both the TNs and the GNs do not possess the required level of support for the quality physical elements. The research clearly found that it is urgently necessary to provide facilities and improve the design of the public and sub-public areas. Also, the size and location of the current space are not sufficient and not in the best position to satisfy the residents.

Q2). Are residents' relationships and the levels of social interaction in the public spaces of governmental neighbourhoods (GN) different from those in the traditional ones (TN)? How does this public space influence the residents in their communities with regard to the social dimensions?

➤ **Answer**

The research has explored how the residents of the TNs such as Almegawba are more integrated, with residents usually having very strong social relationships that reflect positively on their comfort within their neighbourhoods. This is due to reasons. Firstly, these residents are more settled and have sustainable lives since they live in their own houses. Secondly, they do not think of moving from this area to another, so they build the relationship with neighbours as permanent residents. Lastly, they have more spaces in their houses such as the back gardens and the indoor spaces which help them to feel more satisfied. Additionally, the level of interaction is also higher which is as a result of the close relationships that are transferred to one another during times of visits, communications and integrated social events. On the other hand, it can be concluded that all the social intangible features explained previously are less influenced by the GNs. The level of interaction and social relationship is not very high; this can be clearly noted from the differences in the GNs' residents. To summarise, it is highly recommended that the new neighbourhoods and housing projects need to be planned through a clear understanding of the local values and by considering the physical and intangible needs of the residents, such that the moderate balance maintained between the traditional values and the modern developments. This new framework is probably the most appropriate solution to provide good and practical neighbourhoods that can satisfy the residents in terms of the social and the physical aspects.

9.3 Recommendations for Similar Future Development

1. There should be a harmony and cooperation in management between all the related firms that undertake these projects, and the current management systems of various authorities involved in the development of the neighbourhood such that they work as a team. For instance, there should be a clear scope of the work that each organisation is responsible for and it should be made clear which part of the project belongs to a specific firm. Moreover, the private sector should be involved to contribute to the housing projects and public space development such as in the operation and maintenance. This can promote the quality and suitability of the residents and decrease the reliance

burden from the government since it would no longer be responsible for building and managing everything.

2. Design of the public space in neighbourhoods should address the social needs of the residents accommodating the local activities of the residents in the design process, by apportioning an appropriate size that can cover the overall and balanced requirements of the residents. This means providing spaces for each category of the residents within the neighbourhood to undertake a specific type of activity that is appropriate to it, particularly regarding the daily and social events; for example, space for females, children, elderly, and other categories should be allocated. Public spaces of the neighbourhoods need more attention in terms of creating separated spaces according to the gender and the age groups. The percentage of female residents that participates in most daily and special event activities is usually very low. Therefore, it is required to provide special places for them to use which are separate from other activity venues, such as a cultural centre, sitting and walking spaces, quiet rooms, etc.
3. Location of the public spaces needs more consideration. There should be a hierarchy system that starts from the small space within the houses' clusters as a 'sub-public space' to be used by the residents of that specific cluster. The other space is the main central space in the middle of the neighbourhood which includes more public spaces that can be used by all residents of the neighbourhood. The infrastructure of the path-ways, zebra crossings, public seats and other facilities need to be designed in a way that considers the elderly and the disabled residents. This should be considered as a fundamental issue in future projects.
4. The quality of public space in the neighbourhoods is connected directly with the residents' satisfaction and the social value levels. To improve the quality of lives of the residents, there is need to provide them with the facilities inside the neighbourhood; for instance, landscaping of a suitable area for walking, sitting, children's playground and sports facilities. The provision of these facilities within the neighbourhood is a mandatory issue to improve quality of the space for social interaction and community integration.
5. The accessibility and connectivity within the public spaces of the neighbourhood and among other neighbourhoods is one of the most important issues that need to be improved. A comprehensive plan of the city is crucial, in which the

residents need to be well-connected to the surrounding areas for different reasons. For instance, youth need to walk to the nearest sports pitches and adults might communicate with other residents in the immediate and far neighbourhood. Therefore, the link through and between the clusters of the neighbourhood is very important to create a social network and integrated communities.

6. Identifying the residents who want to live in the new neighbourhoods is important. In the research data, the participants indicated that the families with relatives who are familiar with each other should be located in the same group of houses so that they can interact immediately and improve the social network in the new neighbourhoods. Decision-makers pointed out that the new proposals for the housing projects can contain a combination of the two types. The government should locate families according to their selection as groups in the neighbourhood so that these groups can interact easily with each other. This proposal can create a more social and connected community which finally reflects positively on the residents' quality of life.
7. Creating an integrated neighbourhood is one of the key research suggestions. The government should propose a new scheme which allows the inhabitants to select their prospective neighbours. This proposal, which has been mentioned by some of the planners from the professional group, recommends that after designing the whole site and the division of the housing lands, the residents should be allowed to select their preferred location and neighbours. Afterwards, they can be given a single loan from the government to build their own homes through the private sector. In this proposal, the project would gain the advantage of the government financial support and the chance of creating a group of families who want to live next to each other on a TN basis. Hence, the resulting neighbourhood provides a traditional concept in a qualified modern form which is more appropriate for the residents' satisfaction.

9.4 Practical proposals for future lines based on the research outcomes and residents' needs

Based on of the discussed previous outcomes of the research, recommendations and suggestions, the research creates a new proposed design for the future development of the PS in general. Particularly, the POS is the most dominant

element in residential areas in the local context. This proposal\framework includes several forms that can be presented as follows:

9.4.1 Design of the public space in the future development.

Figure 9-1 shows the proposed design and the distribution of the public spaces inside the neighbourhoods. The contents of the public spaces and each part of the neighbourhood can be seen in the following section. This proposal is based on the findings of this research and includes all the fundamental needs that were highlighted by the respondents. It is also in line with the MUP standards because it provides the appropriate location, size and function of the public spaces.

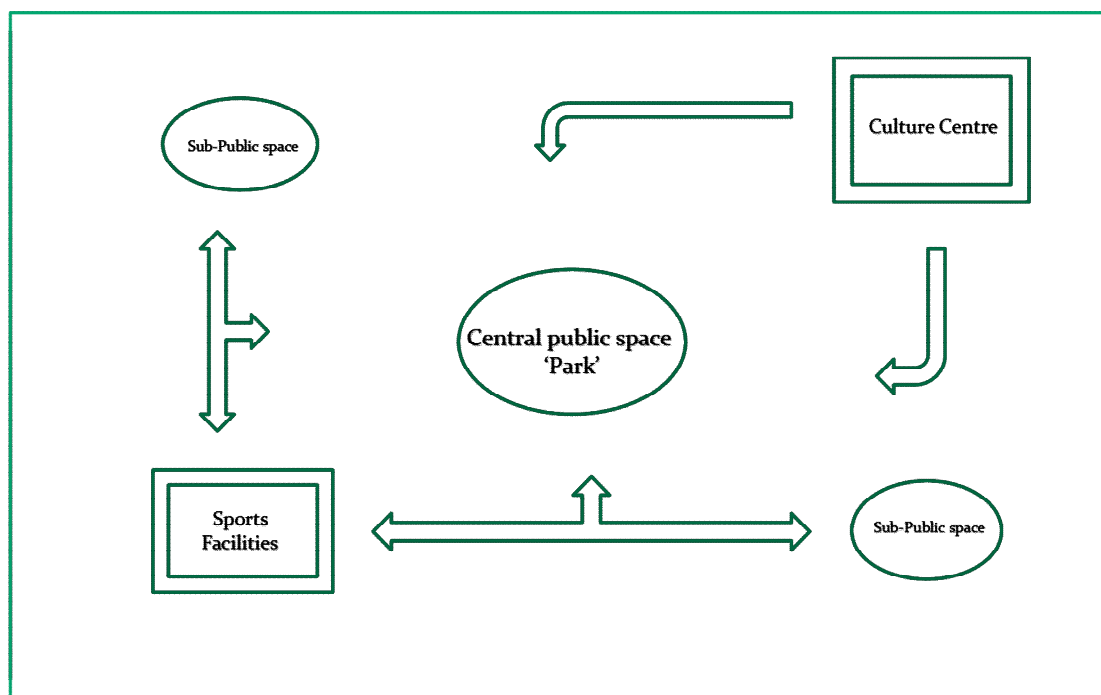


Figure 9-1: The proposed design of a POS based on the research findings and residents' local and social needs.

Before presenting the content and the design criteria of this proposal, there is an essential guidelines which should be included in the design package. These guidelines are according to the MUP and are described as follow:

- The area of the POS of the residential area should be from 25% to 40% of the total covered area of the site which varies from area to another based on the population density and the type of housing for instance: detached, semi-detached, terraced, courtyard houses and multi-story houses (apartments).

- The sidewalks, pavements and car-park access should be disabled friendly.
- All the space zones in POS should allocate a separate area for the female users.
- The standards indicated in Table 5-2 and 5-3 in Chapter 5 should also be adhered to.

[Source: Misurata Masterplan–2000 final report, Tripoli region-development plans, Polservice, Consulting Office. Warsaw, Poland.].

9.4.2 The physical provision of the required facilities:

a) Main Public Space 'Central Park':

- 1- An appropriate sitting area that is supported with weather protection such as shades, shelters ...etc. should be provided.
- 2- Provision of amenities such as water fountain, statues and designed landscape.
- 3- Zones that allow different users categories' to find their preferred place to enjoy should be allocated, for example, designed ramps help disabled users to access the POS while separated zones are necessary for female gatherings.
- 4- Provision of physical facilities such as seats and bins.
- 5- Provision of greenery such as trees, green areas and flowers.

b) Sub-public spaces:

- 1- Children playgrounds of appropriate sizes, green areas and basic seats should be provided.
- 2- Safety facilities in terms of controlled accessibility should be paid more attention for the safety of the residents for example, using fenced area with small gates allow parents control their children and ensure their safety.

c) Culture Centre:

- 1- Provision of indoor hall that can create a protected place for the residents to sit, gather and chat during the not-preferred weather.
- 2- There should be support and organisation of some local activities such as drawing, music lessons ...etc.
- 3- Provide space for special needs categories who can not participate in the POS such as elderly people.

d) Sports Facilities:

The designated courts/pitches should be prepared for the juniors from 8 to 15 years of age who need spaces with more advanced facilities for practising

sports activities. Traditional games and popular sports can happen in either out-doors or in-doors.

e) Space between the buildings:

This space includes all the POS which occurs in between the housing blocks such as car-parks, streets and pavements. In the local context of the case study, based on the findings of this research, the residents stated that these spaces can be used for various activities such as:

- 1- The car-park can be used as a venue for the wedding by erecting the tents within the car park space when not in use. Such space is usually preferred to be near the house that the facilities in the house can be easily accessed and used either in-door or out-door during the wedding occasions.
- 2- The pavement, used as a place of gathering especially when it is wide and located in front of the building where most of the residents of that block can reach easily. The neighbours can enjoy in the evening time when they often meet and have a social drink together. It is considered as a suitable space rather than gathering in one of the resident's house which might have limited inside the house. In addition, the residents may enjoy the outdoor fresh-air with the flexibility of joining and leaving at any time with ease.
- 3- Streets are not the typical/common space to be used, however, it can be one of the alternatives for the children to use for cycling and football activities, particularly, in the closed roads with fewer automobile traffic.

9.4.3 Self-organised public space initiatives

Based on the qualitative answers in the questionnaires and the in-depth interviews. It is noted that there is a clear evidence that some groups of the residents are adamant to produce some development by themselves but they believe that the responsibility of development is for the governmental. This mentality causes delays in the development of the neighbourhoods which is not helpful. They show a sense of intention (self-acting work) to produce some development in the empty and left public spaces around their houses. For instance, in one of the site visit to the Almegawba GN, the participant M G stated that 'I and my immediate neighbours would like to act towards this development of our area, we have children and we need to have at least some playground and good facilitated space for them to find

where to play and spend some leisure time near our houses'. The participant explained that there are few neighbours sharing the same thoughts and ready to spend their own money to improve the PS near their houses. For example, they did some community work such as planting more trees to provide shades on hot days and, cleaning the neglected POS to be used during social events such as weddings. Therefore, such initiatives can be developed and formulated in a practical way to help the residents to overcome the existing challenges and increase the quality of the PS in their neighbourhoods.

To sum up, based on the findings of this research, some suggestions as practical plans may contribute to the future development and management of the POS in the residential neighbourhood. These recommendations are as follows:

- ❖ Firstly, the possibility of creating residents' committee might have a positive impact on producing a practical system to provide some basic\simple facilities such as children playgrounds.
- ❖ Secondly, the residents committee has a potential to be considered by the local authorities and perhaps to put a pressure on the decision-makers to respond on their needs and receive some support such as a nearby piece of land or an appropriate fund to for some development.
- ❖ Finally, some of the local charities\private organisation can be contacted to try to make a practical program that can benefit both parties through mutual cooperation, for example, building facilities inside these areas as an investment through the contributions from each family gradually according to the residents' financial status. This might be a practical plan that can be expanded in future to include more tasks and spaces based on the level of its success.

9.5 The Research Contribution

- The research has contributed to the local urban knowledge, particularly to the city of Misurata which can also be extended into many similar Libyan cities. It identifies the POS in the local context by emphasizing its use, form and practices. This creates a new perspective that focuses on the social value of the residential neighbourhoods and how the quality of their public spaces can be assessed and improved. The research has used a multitude of approaches that provide valuable information to support the research arguments and statements. For instance, in many cases, the results from the quantitative

support the qualitative data whereas in some cases either the results are emphasised or disproved which enriches the research outcomes by providing more than one perspective. On the other hand, where the differences in the results occurs between the qualitative and quantitative research, this forms a good basis for other correlations and findings which can also support the future research.

- The research contributes to the field of knowledge as it investigates the combined of the quality of public space and the residents' satisfaction. The literature revealed that most of the previous research explored only a single aspect, either the quality of public spaces (physically) or quality of life in public spaces (socially). Moreover, this research has undertaken the analysis of two different types of neighbourhoods, which represents a new approach in this field of study because in literature there are some studies compares some urban aspects in several related neighbourhoods which is are different from the present work. This current approach has greater ability to provide valuable information by comparing the two different sites and investigating both the physical and the intangible elements in each one. This method helps to identify the cause of the research problems and sheds light on more useful details for future research and urban development.

9.6 Suggestions for future development

Residents of the neighbourhood with similar interests share the public space as well as spending their free time undertaking several types of activities together. The public space is an important indicator of the level of success of the neighbourhoods, particularly from the social perspective. In terms of intangible elements, the scholars in this field indicate that the public open spaces play a fundamental role to encourage the residents to interact socially and support the community cohesion, thereby, promoting and enhancing the quality of their lives (Nasar and Julian, 1995).

According to the research discussion and the most significant findings, there has not been a very clear framework for future urban development by the professionals' group or the decision makers. However, they have pointed out some interesting suggestions such as:

- a) The government should provide a facilitated-land with the provision of the main infrastructure, public buildings, main services and the road networks. After that, the people who have the same background should take the responsibility of building their own houses which allows them to move as groups from a TN to a GN. This will make them feel positive towards each other (social and mentally) as well as helping them to preserve cultural features to remain stable and integrated.
- b) The government should extend the loans to the people for setting up the residential house so they can construct their own houses in the neighbourhood based on their choice rather than locating them randomly which might break the social cohesion of the communities.
- c) All the public areas around the houses and in the central part of the neighbourhoods should be owned, managed and operated by the government so that it can be more controlled in terms of physical quality and maintenance as well as preventing the random and private monopoly use of these spaces. However, the private sector can be involved but should be under the control and monitoring of the local government authorities to ensure that the appropriate requirements, guidelines and regulations are adhered to.
- d) The private sectors should be involved in the urban development. Private sector involvement can enhance the development of the local environment and encourage the investment of the local projects. This can decrease the load from the government and provide more opportunity for the local community to contribute positively to the improvement of the quality of the city in a competitive way that the private sector creates.
- e) A new neighbourhood should be created outside the city as a sub-central place to attract people to move to new areas around the city. This policy can reduce the urban congestion and distribute the development around the city as well as creating more attraction by utilizing a larger pieces of lands, besides reducing the city development budget as the land is cheaper outside the city area.

From the above points, it can be observed that there are several alternative policies that can be very useful in terms of creating a more comprehensive framework for

the urban development and future enhancement. Based on all the presented evidence and discussion, this research suggests a new framework which can be more effective solution for the future development of neighbourhoods. This framework is a combination of the two types of neighbourhoods. The researcher would call this a 'combined neighbourhood'; framework which can be applied to the new neighbourhood design create a balanced combination of the TNs and the GNs. The proposed combined neighbourhood is set out below:

1. The government should be mandated to design the layout of the site including land size, roads, infrastructure works, water supply, public space areas, pathways, landscaping and all related services. The next step is to distribute the lands to the groups of residents which share the same interests and would like to live together as neighbours. Subsequently, the government can provide the general guidance for the external style/shape of the houses to ensure that the architectural standards are met.
2. The management and operation of these projects including the public spaces and parks should have the option to run by a private sector, though it can be supervised by the government management team to ensure the quality of these places. In addition, the residents should be engaged more with the practical development in the site, as discussed in self-organised suggestions. Residents can be more contributable and effective to help and support improving the quality of their neighbourhoods. Finally, a policy of payment to the operation and maintenance carried out by contacted companies should be determined either by the government or the residents; thus, the services can be smoothly continued in these sites to maintain the level of quality at all times.

This proposal gives a flexible solution for the government policy and involves the private sector as well as engaging the residents to take some responsibility towards their areas of residence. This combination of more than one method is probably the most effective and practical initiative for the future urban development of the residents' neighbourhoods in the city. This proposal was arrived at based on the evidence that has been explained and discussed in all the stages of this research.

9.7 Suggestions for further research

- ❖ Due to limited research in this area of study and in this specific country, it has been very exciting and useful to conduct this research. The massive efforts have

been exerted and time spent on data collection and analysing the gathered evidence, documents and information. It was also very useful to conduct a small sample of the research tool as a pilot study. Several questions and methods were amended accordingly, though, more can be done in this regard. For example, if the research had been done by a team of researchers including a female that could allow more involvement of the female participants. This is because of the social and cultural background of the local community in which the females are restricted on some occasions and some places. In this research, 30% of the participants' were of female gender which is a good percentage, although, a higher percentage could have given better understanding of their needs and experiences.

- ❖ In terms of informational system, there is a crucial need for mapping, digitalising and archiving systems. One of the exhaustive work in this research was the collection of simple information such as the number of families in a site, distances between locations, number of family members, population data and so on. Much more effort was put on contacting several authorities for many visits to gather some of required information. At some point in time, there was nothing to be gained in terms of quality and accuracy at the end of some meetings. Therefore, building a database for the civic, geography, population and for the recordings data is essential so that the focus is diverted more on the mechanism of solving issues and doing the right estimations based on the accurate data. In this research, the mixed method approach allowed benefiting from several tools to gather evidence and information, although, it might take less time if the database was available.
- ❖ Possible further research is worthwhile to explore the extent and impact of weather conditions on the quality POS. Since the main focus of this research is on the social dimension, this issue has been mentioned in broad but not deeply. Therefore, expanding this area of research could explore more alternatives and contribute to the development of the future projects. In the local context, there are numerous of efforts to prevent the non-preferred weather strikes. However, there is still room for developing this issue to reflect positively on this region and many other similar places.
- ❖ There is need to analyse the gender restrictions and how they influence other aspects such as the decision-makers, parents, community and responsible authorities. A gender contribution to the public realm is one of the key concerns

in the Arabic/Muslim countries. This may allow a great opportunity to undertake a focused study specifically in this scope which could result into useful contributions. In the same line, the investigations on the relationship between the gender and the cultural background are relevant. These issues are probably related to the use of the space and can help to arrange these spaces to be more successful in future.

In the end, it is hoped that this research presented a deep discussion regarding the value of public spaces in the residential neighbourhoods of the cities and its role in the social life of the residents of these neighbourhoods mainly, in the case studies of Misurata, Libya and local context. The results and analysis provide an important source for the future studies with regard to the urban development. It is also hoped that the research has provided a new approach in terms of dealing with both aspects of physical and social development that contemporary urban are facing in general, especially in the regions where the cultural and the social aspects are playing an essential role in the people's daily activities and their quality of life within their communities.

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Appendixes from 1 – 14

N.	Appendix
1	The Ethical Approval (1) of the Research
2	The Ethical Approval (2) of the Research
3	Consent form in English
4	Consent form in Arabic
5	Questionnaires form in English
6	Questionnaires form in Arabic
7	The interview questions: 1- Professionals
8	The interview questions: 2 - Residents
9	The interview questions: 3 – Decision-makers
10	The in-depth interviews transcript from Arabic to English for 16 participants in CD1
11	The signed consent forms in Arabic, 158 form in CD1
12	Table present the improvement actions required by the residents of TN
13	Table present the improvement actions required by the residents of GN
14	Map of the typical GN in Misurata city and their locations within the city layout

Appendix 1

2014-15 academic year only

Ethics Committee Reviewer Decision

This form must be completed by each reviewer. Each application will be reviewed by two members of the ethics committee. Reviews may be completed electronically and sent to the Faculty ethics administrator (Jo Deeley) from a University of Nottingham email address, or may be completed in paper form and delivered to the Faculty of Engineering Research Office.

Applicant full name ABAID.....

Reviewed by:

Name D Golightly.....

Signature (paper based only)

Date 23/7/15

- ☒ Approval awarded - no changes required
- ☐ Approval awarded - subject to required changes (see comments below)
- ☐ Approval pending - further information & resubmission required (see comments)
- ☐ Approval declined – reasons given below

Comments:

Please note:

1. The approval only covers the participants and trials specified on the form and further approval must be requested for any repetition or extension to the investigation.
2. The approval covers the ethical requirements for the techniques and procedures described in the protocol but does not replace a safety or risk assessment.
3. Approval is not intended to convey any judgement on the quality of the research, experimental design or techniques.
4. Normally, all queries raised by reviewers should be addressed. In the case of conflicting or incomplete views, the ethics committee chair will review the comments and relay these to the applicant via email. All email correspondence related to the application must be copied to the Faculty research ethics administrator.

Any problems which arise during the course of the investigation must be reported to the Faculty Research Ethics Committee

Appendix 2

2014-15 academic year only

Ethics Committee Reviewer Decision

This form must be completed by each reviewer. Each application will be reviewed by two members of the ethics committee. Reviews may be completed electronically and sent to the Faculty ethics administrator (Jo Deeley) from a University of Nottingham email address, or may be completed in paper form and delivered to the Faculty of Engineering Research Office.

Applicant full name ABAID.....

Reviewed by:

Name ROBERT HOUGHTON.....

Signature (paper based only) RJH BY EMAIL.....

Date 20/7/15

- ☒ Approval awarded - no changes required
- ☐ Approval awarded - subject to required changes (see comments below)
- ☐ Approval pending - further information & resubmission required (see comments)
- ☐ Approval declined – reasons given below

Comments:

This is fine but I just want to suggest if approaching people in public places it may be necessary to get the permission from some authority (e.g., some apparently public spaces are actually private spaces – in the UK at least a shopping centre would be an example of this). Rules may also vary with regard to approaching people and public photography in terms of what is considered ok and what is harassment. I have no idea about the situation in Misurata city but if you haven't already it would be well worth checking locally just for your own sake.

Please note:

1. The approval only covers the participants and trials specified on the form and further approval must be requested for any repetition or extension to the investigation.
2. The approval covers the ethical requirements for the techniques and procedures described in the protocol but does not replace a safety or risk assessment.
3. Approval is not intended to convey any judgement on the quality of the research, experimental design or techniques.
4. Normally, all queries raised by reviewers should be addressed. In the case of conflicting or incomplete views, the ethics committee chair will review the comments and relay these to the applicant via email. All email correspondence related to the application must be copied to the Faculty research ethics administrator.

Any problems which arise during the course of the investigation must be reported to the Faculty Research Ethics Committee

Appendix 3

Research Participant Consent



Title of the Study: **The Role of Public Space to Enhance the Social Interaction and Residents' Satisfaction about Their Communities: a Case Study of Misurata City, Libya**

Name of the Researcher: **Ibrahim Emhemed Abaid**

Please tick the boxes as appropriate

1. I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason. ☐
3. I could take a break at any time during the interview. ☐
4. I understand that I have the right not to answer particular questions if I consider them to be sensitive. ☐
5. I give my consent for the interview to be audio-recorded as described in the information sheet ☐
6. I give my consent for my data to be used as it has been explained in the information sheet. ☐
7. I agree to allow my interview statements to be published and to be attributed to my organization (University of Nottingham).
I also agree to being identified by position (please choose): ☐ Yes ☐ No ☐
8. I understand that the research findings, including the comments / data I provide in the interview, may be published as a PhD thesis, academic conference papers, journal articles and other academic publication / dissemination channels. ☐
9. I understand if the academic findings are to be published in other places, for example media articles, no specific references to individual interviewees will be made. ☐
10. I agree to take part in the above study. ☐

Name of the Participant

Date

Signature

Researcher

Date

Signature

- Copy for participant
- Copy for Researcher

Appendix 4

..... (نموذج موافقة)

عنوان الدراسة: دور الأماكن العامة من تعزيز التفاعل الاجتماعي ورضا سكان "عن المجتمعات ومنها: دراسة حالة مدينة مصراتة، ليبيا

اسم الباحث: ابراهيم امحمد عبيد

يرجى وضع علامة في مربعات حسب الاقتضاء

1. أؤكد أنني قد قرأت وفهمت ورقة المعلومات للدراسة المذكورة أعلاه. وقد أتيت لي الفرصة للنظر في المعلومات، وطرح الأسئلة، وكان هذه الإجابة بصورة مرضية. ☐
2. أنا أفهم أن مشاركتي طوعية وأنتي حر في الانسحاب في أي وقت، دون إبداء أي سبب. ☐
3. أتمكن من أخذ قسط من الراحة في أي وقت خلال المقابلة. ☐
4. أنا أفهم أن لدي الحق في عدم الإجابة على أسئلة معينة إذا أنا أعتبر أنها تكون حساسة. ☐
5. أعطي موافقتي للمقابلة أن يكون الصوت المسجل كما هو موضح في ورقة المعلومات. ☐
6. أعطي موافقتي ليتم استخدام البيانات كما سبق بيانه في ورقة المعلومات. ☐
7. أنا وافقت على السماح بنشر البيانات التي اخذت في المقابلة ويجب ان ينسب الى منظمتي (جامعة نوتنجهام). ☐
- وأنا أوافق أيضا على ذكر اسم موقعي (الرجاء اختيار): نعم ☐ لا ☐
8. أنا أفهم أن نتائج البحوث، بما في ذلك التعليقات / البيانات التي أقدمها في المقابلة، يمكن نشرها في أطروحة دكتوراه، أوراق المؤتمرات الأكاديمية والمقالات الصحفية وغيرها من قنوات النشر الأكاديمية. ☐
9. أنا أفهم إذا كانت النتائج الأكاديمية وسينشر في أماكن أخرى، للمواد الإعلامية سبيل المثال، سيتم إجراء أي إشارات محددة إلى المقابلات الفردية. ☐
10. أنا أوافق على المشاركة في الدراسة المذكورة أعلاه. ☐

اسم المشارك تاريخ التوقيع

.....


التسجيل الباحث التوقيع

.....

• نسخ للمشارك

• نسخ للباحث

Appendix 5

Questionnaire form	 The University of Nottingham <small>UNITED KINGDOM • CHINA • MALAYSIA</small> Department of Architecture and Built Environment
No: Date: Location:	

Project title: The Role of Public Space to Enhance the Social Interaction and Residents' Satisfaction about Their Communities: a Case Study of Misurata City, Libya

This research aims to find out the role of public space of the neighbourhoods in terms of social value and sense of community. It focuses on the social satisfaction and psychological comfort levels within the communities, using a case study in Misurata city-Libya.

Please answer the following questions.

Section 1: personal details

Personal Information: (please circle/underline the appropriate)	
1	Gender: Male Female
2	Age group: ≤18 Years 18-35 Years 36-55 Years ≥55 years
3	Status: Married: (have children) Married: (have no children) single: (one person)
4	Work type: full time part time unemployed other:
5	How long have you been living in this neighbourhood: 0-10 Years 11-20 Years +20 Years
6	Where did you live before this accommodation : 1-Out of the city 2-A private constructed neighbourhood (spontaneous) 3-A public constructed neighbourhood (governmental)

Section 2: multi-choice questions

No.	Use the following scale to indicate to what extent you agree with these statements	1	2	3	4	5
		Strongly disagree	disagree	neutral	agree	Strongly agree
A. Existing situation:						
7	The design of the public space is the most important element of this neighbourhood.					
8	The physical settings of the public space are the most important to me.					
9	The most effective characteristics of the public space are its size and location within the community.					
10	Public space is the best place to spend leisure time.					
11	Public space is the only place that residents can share activities in.					
12	Is the area of public spaces for children (i.e. playground, green area and sports facilities) appropriate in this neighbourhood?					
13	Public space of the neighbourhoods provides psychological comfort to the residents.					
14	The size of the public space of this neighbourhood is enough for the residents to practice their daily activities.					
15	I feel satisfied and comfortable with the public space of this neighbourhood.					
B. Social perspectives:						
16	The public space is very effective method to improve the quality of the community environment.					
17	Sharing activities in the public space of the community promotes the relation and intensity among the residents.					
18	Residents should often participate in the community events, exchange favours and ask for an advice to/with neighbours.					
19	Residents should spend time to participate with others in the public space of the neighbourhood to be more attached to their community.					

C. Level of satisfaction:					
20	This public space is appropriate to all the residents' ages, gender, status ... etc.				
21	Sharing and participating in the public space of the community is safe and comfortable.				
22	I have experienced a high sense of community in this neighbourhood.				
23	Open public space and green areas play a fundamental role in providing high level of well-being and social value.				
24	Children have good access to the public space such as the soft areas, playground and open green space.				

Section 3: direct questions

Please answer the below questions supported with brief explanation.		
Q25	What kind of activity do you often do in the public space of your community?	
A25	..... .....
Q26	How much time do you usually spend in the public space of this neighbourhood?	
A26	..... .....
Q27	What is the most positive feature of the public space in your neighbourhood?	
A27	..... .....
Q28	What do you think is negative feature of the public space in your neighbourhood?	
A28	.....

	
Q29	If you are in a position to improve this space, what would be the most urgent need to this community?	
A29	..... .....


Note: Please indicate below if you are agree to be interviewed for further information required, if so, could you provide your contact details and preferred time.

Acceptance: Preferred time and date:

Contact details (Telephone No/E-mail):

.....

Appendix 6

نموذج الاستبيان	 The University of Nottingham UNITED KINGDOM • CHINA • MALAYSIA قسم العمارة و البيئة المبنية
رقم :	
تاريخ :	
الموقع :	

معلومات البحث

يهدف هذا البحث إلى معرفة كيف يساهم الفضاء العام للمناطق السكنية في قيمة المجتمع، وخاصة من حيث الخصائص الاجتماعية. ويركز التقرير على قياس مستوى الارتياح الاجتماعي ومستويات الراحة النفسية للمجتمع، وذلك باستخدام حالة دراسية في ليبيا و هي مدينة مصراتة

قسم A : البيانات الشخصية

البيانات الشخصية: ضع خط أو دائرة على الاجابة المناسبة				
الجنس :	ذكر	أنثى		
الفئة العمرية :	≥ 55	36-55	18-35	≤ 18
الحالة الاجتماعية:	أحد أفراد الأسرة	المعيل لأسرة	منفرد \ اعزب	
نوع العمل:	دوام كامل	دوام جزئي	عاطل عن العمل	اخرى:
مدة الإقامة هنا:	+20 Years	16-20	11-15	6-10
أين كنت تعيش قبل هذا السكن 1- بعيدا من المدينة 2- حي سكني خاص تقليدي 3- حي سكني شعبي حكومي				

قسم B: اجابات متعددة الخيارات

رقم	استخدم المقياس التالي للإشارة إلى أي مدى تتفق مع هذه البيانات	لا أوافق بشدة	أوافق	عادي	أوافق بشدة
2. الوضع الحالي					
1	التصميم هو أهم عناصر الفضاء العام في الأحياء السكنية				

2	العناصر المادية من الفضاء العام هي الأكثر أهمية لسكان المجتمع				
3	الخصائص الأكثر فعالية في الفضاء العام هو: حجمها وموقعها داخل المجتمع				
4	يساهم الفضاء العام للمجتمع بحيث يكون هناك مكان لفضاء أوقلت فراغهم ضمن أحيائهم السكنية				
5	الفضاء العام يزيد من فرصة التشارك في الأنشطة المتنوعة بين سكان الحي				
6	الأماكن العامة لأنشطة الأطفال مثل الملاعب المفتوحة والمناطق الخضراء وساحات الرياضة تعتبر نسبيا ملائمة في هذا الحي				
7	الفضاء العام لاحتياجات السكنية يوفر الراحة النفسية للسكان				
8	حجم الفضاء العام في هذا الحي السكني يكفي السكان إلى ممارسة أنشطتهم اليومية				
9	أحسن بالرضى والراحة اتجاه الفضاء العام في هذا الحي السكني				
3. الجوانب الاجتماعية					
1	تطوير الفضاء العام هو طريقة فعالة جدا في تحسين نوعية البيئة المجتمعية				
2	المشاركة في أنشطة الفضاء العام من المجتمع يعزز العلاقة بين كافة السكان				
3	كثيرا ما ينبغي أن يشارك السكان في المجتمع، تبادل المساعدات و طلب المشورة/ مع الجيران				
4	يفترض على السكان قضاء بعض الوقت في المشاركة مع الآخرين في الفضاء العام من الحي و أن يكونوا لهم انتماء لمجتمعهم				
4. مستوى الرضى					
1	هذا الفضاء العام مناسب لجميع السكان الذين بمختلف أعمارهم و اجناسهم و وحالتهم الاجتماعية... الخ				
2	تقاسم والمشاركة في الفضاء العام للمجتمع امن ومريح				
3	من خاتل تجربتي ان مستوى الحس الاجتماعي مرتفع في هذا الحي				
4	الأماكن العامة المفتوحة والمساحات الخضراء تلعب دورا أساسيا في توفير مستوى عال من الرفاهية والقيمة الاجتماعية				
5	الأطفال لديهم سهولة الوصول إلى الأماكن العامة مثل المناطق الناعمة، والملاعب والمساحات الخضراء المفتوحة				

قسم C : اجابات مباشرة

الرجاء الإجابة على الأسئلة التالية معتمدة مع شرح مختصر	
Q1	ما نوع النشاط الذي تقوم به غالبا في الفضاء العام من مجتمعك؟
A1	..........

Q2	كم من الوقت تمضي عادة في الأماكن العامة للحي؟	
A2	..... .....
Q3	ما هي السمة الأكثر إيجابية في الحيز العام لمنطقتكم؟	
A3	..... .....
Q4	ما هي السمات السلبية في حيكم السكني برأيك؟	
A4	..... .....
Q5	إذا كنت في وضع يمكنك من تحسين هذه الفضاء العام ، ما هو العمل الأكثر إلحاحا الذي ستقوم به في هذا المجتمع؟	
A5	..... .....

ملاحظة: يرجى الإشارة أدناه إذا كنت توافق على إجراء مقابلة معك للحصول على مزيد من المعلومات المطلوبة، إذا كان الأمر كذلك، هل يمكن تقديم تفاصيل الاتصال الخاصة بك والوقت المفضل

..... : الوقت المفضل والتاريخ قبول:

..... :تفاصيل الاتصال: رقم الهاتف / البريد الإلكتروني

.....

Appendix 7

Interview questions	 The University of Nottingham <small>UNITED KINGDOM • CHINA • MALAYSIA</small> Department of Architecture and Built Environment
Group 2: professionals no: Date: Location:	

Project title: The Role of Public Space to Enhance the Social Interaction and Residents' Satisfaction about Their Communities: a Case Study of Misurata City, Libya

This research aims to find out the role of public space of the neighbourhoods in terms of social value and sense of community. It focuses on the social satisfaction and the psychological comfort levels within the communities, using a case study in Misurata city-Libya.

Please answer the following questions:

No.	Question
1	To what extent do you think public space of the neighbourhood impacts on the social life and residents relations?
2	How do you assess the existing situation of the public space in the local communities and how that eventually might affect the successfulness of the neighbourhood?
3	It is clear that in Libya generally and Misurata city as a case there are two main types of housing projects, can you differentiate them in terms of public space use?
4	In your opinion, how the public space of the neighbourhoods supports and strengthens the sense of community?
5	According to your experience, which more vitality the public space in the spontaneous natural neighbourhoods or governmental communities? And why?

6	To what extent do you think that the following features are very important in the neighbourhoods: sharing activities, sitting as groups, chatting, gathering together with neighbours and children playing?
7	From your experience in the field of architecture and urban planning, Could you provide the main design differences between the governmental and spontaneous neighbourhoods?
8	Are you agreeing to the context that public space is crucial with regard to quality of the community and residents' well-being and comfort? How?
9	What do you think are the essentials for the successful public space of any community in order to satisfy the residents from a social perspective?
10	In terms of weather condition and climate protection, what are the main principles that should be taken on account during the design of neighbourhoods?

Appendix 8

Interview questions	 The University of Nottingham <small>UNITED KINGDOM • CHINA • MALAYSIA</small> Department of Architecture and Built Environment
Group 1: residents no: Date: Location:	

Project title: The Role of Public Space to Enhance the Social Interaction and Residents' Satisfaction about Their Communities: a Case Study of Misurata City, Libya


This research aims to find out the role of public space of the neighbourhoods in terms of social value and sense of community. It focuses on the social satisfaction and the psychological comfort levels within the communities, using a case study in Misurata city-Libya.

Please answer the following questions:

No.	Question
1	How would you describe the quality of existing public space of your neighbourhood in terms of social interaction?
2	As a resident, what do you think about the level of the social relations among the residents?
3	What type of physical elements in the public space is the best for you and why?
4	What do you think is the role of public space In terms of social comfort?
5	Can you tell me about your activity in the public space?
6	Do you think children are happy with the range of playing activities in this neighbourhood?
7	How can you describe your idea about the privacy influence in this neighbourhood?

8	As one of the residents of this community, do you agree that public space play a core role to improve the sense of the community and enhance the social interaction? Explain why?
9	What is the best time of you to be present in the public space during the day and why?
10	To what extent do you agree that children prefer to play in the public space with other children of the community rather than playing in their private space of their home? Please explain why?

Appendix 9

Interview questions	 The University of Nottingham <small>UNITED KINGDOM • CHINA • MALAYSIA</small> Department of Architecture and Built Environment
Group 3: Decision Makers no: Date: Location:	

Project title: **The Role of Public Space to Enhance the Social Interaction and Residents' Satisfaction about Their Communities: a Case Study of Misurata City, Libya**

This research aims to find out the role of public space of the neighbourhoods in terms of social value and sense of community. It focuses on the social satisfaction and the psychological comfort levels within the communities, using a case study in Misurata city-Libya.

Please answer the following questions:

No.	Question
1	Could you tell us about the policy of the housing projects (neighbourhoods)? And how this policy deal with public space of the communities?
2	What are the criteria/standards that government apply to the neighbourhoods' projects in terms of the size, location, average of population and design features of the public space of the neighbourhoods? Could you provide a brief explanation about this issue?
3	What is the base of designing and managing the public space of the residential areas? Is there any future development to improve it? Please give details?

4	How do you think public space contributes to the social life of the communities?
5	To what extent that government projects are built according to the social aspects such as sense of community and providing the appropriate setting for the social activities? Please illustrate?
6	How can the design of the neighbourhood project achieve the residents' satisfaction?
7	What do you think about offering larger private space attached to the homes rather than providing central public space for all the residents of the community? Why?
8	How do you evaluate the public space of existing neighbourhoods in terms of resident's participating and interaction?
9	What are you planning for the current and future housing projects, please provide if there is a new or/and update policies?
10	Do you think this policy of governmental houses will continue or there are some other alternatives? Please indicate?

Appendix 10
The In-depth Interviews Transcript from Arabic to English for 16
Participants
(Attached in a CD1)

Appendix 11
The signed consent forms in Arabic, 158 forms
(Attached in a CD1)

Appendix 12

Improvement actions GN 9 th July				
		Frequency	%	The element
Valid	Build Masjid, cultural centre and playgrounds	1	1.3	Facilities
	Build spaces for children and provide public chairs for people to rest on	5	6.5	Children's facilities & furniture
	Create a scheme to support the children and the mothers to be positive and creative	1	1.3	Social support (intangible)
	Create activities for the children and youth	3	3.9	Children & youth
	Create committee of selected residents to follow up the maintenance and cleaning works of the PS	2	2.6	Maintenance & cleaning
	Create committee to improve the PS by providing good facilities	1	1.3	Facilities
	Create scheme to build up and strengthen the relationship between the residents	1	1.3	Social relation (intangible)
	Develop the lighting system and increase the level of cleaning	1	1.3	Lights & cleaning (maintenance)
	Increase lights, and attention to open spaces, and create green areas	3	3.9	Lights & green areas (maintenance)
	Increase the level of cleaning	2	2.6	Cleaning (operation)
	Increase the level of safety and well-being	1	1.3	Safety & well-being (safety)
	Involve the private sector to invest in the public spaces	1	1.3	Private sector involvement (management)
	Seek efforts by the residents to create green areas and playgrounds for children	3	3.9	Green areas & children's facilities
	More attention to cleaning work of the PS, create a place for children to communicate	2	2.6	Cleaning & children's facilities
	None	1	1.3	--
	Plant trees and green areas to gain better looking and view	3	3.9	Green areas & trees
	Provide a place for residents to sit and chat,	1	1.3	Lights & green areas & children's facilities

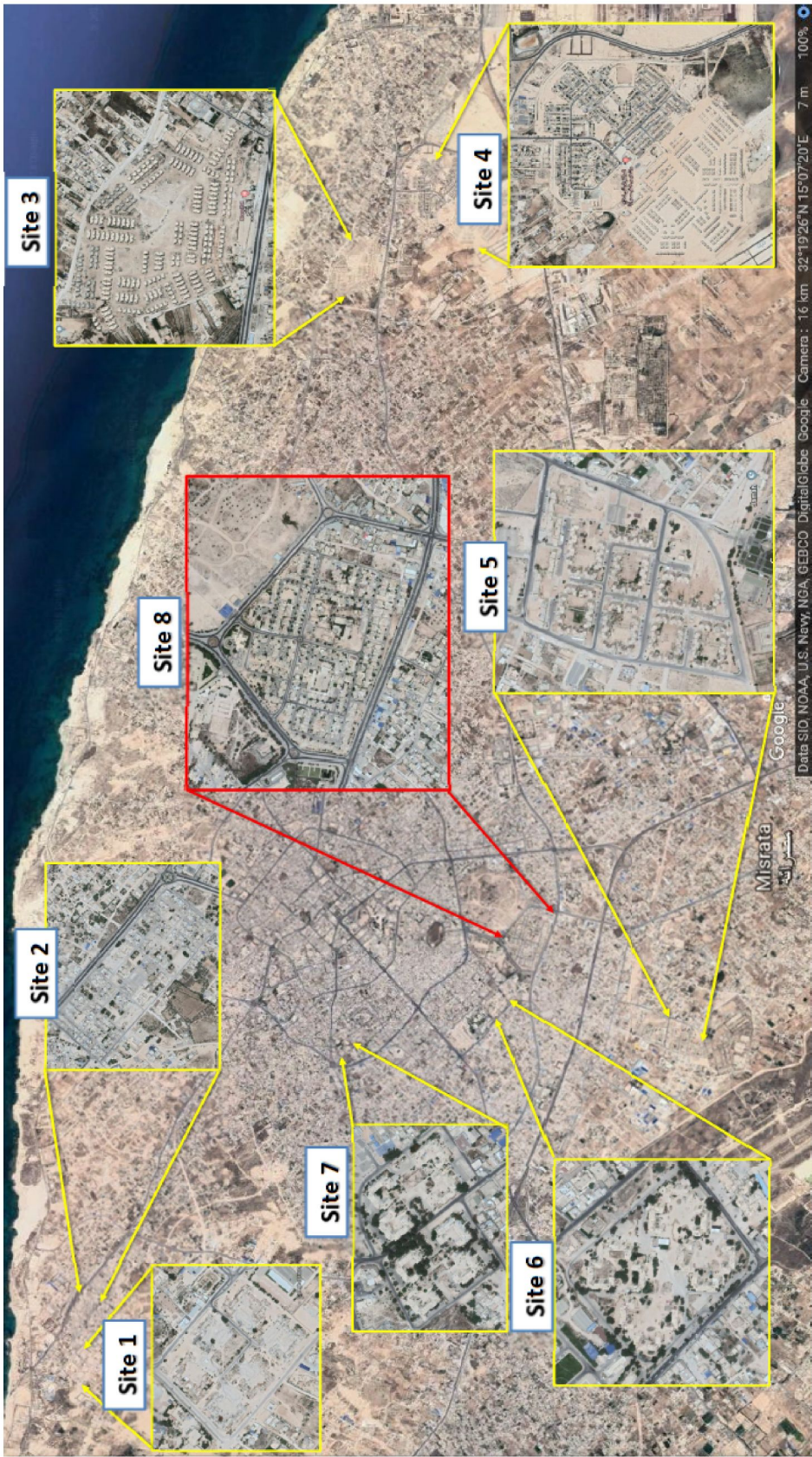
gardens and children's playground and increase lights			
Provide children's playground, green areas and increase the lights	1	1.3	Lights & green areas & children's facilities
Provide entertainment facilities which are appropriate for all ages and genders	3	3.9	Facilities
Provide facilities for the PS	1	1.3	Facilities
Provide gardens, children's playground and green area, attention to open spaces	1	1.3	Green areas & children's facilities
Provide gardens, playground and green area	17	22.1	Green areas & children's facilities
Provide gardens, playground and green area and plant trees, and pay attention to the general look of the PS	1	1.3	Green areas & children's facilities
Provide green area and important facilities for the PS	3	3.9	Green areas & facilities
Provide physical settings for children's play areas	3	3.9	Children's facilities
Provide physical settings for children's play areas and green areas	3	3.9	Green areas & children's facilities
Provide places for children and youth to practice their activities	3	3.9	Youth & children's facilities
Providing a cultural centre might encourage people to come and interact, and providing children's playgrounds	1	1.3	Social facilities (intangible)
Providing a special place for females to spend their free time	5	6.5	Female facilities (equity)
Providing playground, library and hand-making centre for women	1	1.3	Social & art centre (Intangible)
Work to increase the cooperation between the residents and encourage them to be more active	2	2.6	Cooperation (initiatives)
Total	77	100.0	

Appendix 13

Improvement actions TN Almegawba				
		Frequency	%	The element
Valid	Missed data	2	2.5	--
	Area for children, increase lights, public bins	1	1.2	Children's faculties & lights & furniture
	Children's soft play area	1	1.2	Children's facilities
	Create a committee to improve the neighbourhood	1	1.2	Social committee (intangible)
	Create a place for female activities and green areas	1	1.2	Female facilities (equity)
	Create ways to prepare and organise the public space to be what it was designed for	1	1.2	Management
	Develop the green areas	1	1.2	Green areas
	Develop the open spaces	1	1.2	Open space (operation)
	Develop the open spaces, provide physical settings and green area	1	1.2	Green areas & facilities
	Develop the public space	1	1.2	Public space (operation)
	Divide the space into two parts, for children and youth	1	1.2	Division to create separate places for children & youth (design)
	Divide the space into two parts, for male and female activities	1	1.2	Division to create separate places for females & males (design)
	Explain to the public the importance of PS, provide all the physical settings and other attractions such as waterfalls and so on	1	1.2	Attractions & awareness (intangible)
	First aid in the public space	1	1.2	Safety
	Green areas	1	1.2	Green areas
	Green areas, daily cleaning	1	1.2	Green areas & cleaning (operation)
	Improve the cleaning works	1	1.2	Cleaning (operation)
	Improve the cleanliness of the space of the neighbourhood	1	1.2	Cleaning (operation)
	Improve the communication in the PS of the community	1	1.2	Social aspects (intangible)
	Improve the landscaping	1	1.2	Landscape (design & operation)
	Improve the PS	2	2.5	Improve PS (operation)
	Improve the public space, green areas, create a children soft areas	1	1.2	Green areas & children's facilities
	Limit the road accessibility and add more playgrounds	1	1.2	Accessibility
	Maintenance	1	1.2	Maintenance
	Manage the place well and encourage the residents to interact with it	1	1.2	Management & social support

More attention to the central park of the neighbourhood	1	1.2	Central Park
More cleaning work needed	1	1.2	Cleaning (operation)
More development to the central area, providing cafe, children's playground	1	1.2	Central Park & facilities
More development to the public space needed	1	1.2	Improve PS (management)
More lights in the PS	1	1.2	Lights (maintenance)
None	2	2.5	Lights (maintenance)
Obligation of the urban plan of the city	1	1.2	Design
Organise the space and plant some trees to provide shade	1	1.2	Management & trees (shades)
Plant flowers	1	1.2	Flowers (aesthetics)
Plant trees	1	1.2	Trees (environment)
Playground and cafe in the park	2	2.5	Children's facilities & facilities
Prepare enough and well-designed parks	1	1.2	Design & size
Protection of public space, provide maintenance, provide children's soft play areas	1	1.2	Maintenance & children's facilities
Provide a cafe in the public central park	2	2.5	Central park & facilities
Provide facilities for disabled people to move around smoothly and provide road and park signs	1	1.2	Disabled facilities (equity)
Provide fence around the space	1	1.2	Safety & security
Provide more parks, places for sports activities for the youth	1	1.2	Sport places
Provide more services	1	1.2	Facilities
Provide more space	1	1.2	More space (size)
Provide parking and protect nature	1	1.2	Car park & (sustainability)
Provide plants and green areas	1	1.2	Green areas & plants
Provide play court for youth	1	1.2	Sports places
Provide playground for children and surround it with fence	1	1.2	Children's facilities & safety
Provide public big bins	1	1.2	Furniture
Provide public chairs	1	1.2	Furniture
Provide sitting places/chairs and playground for the sport activities	1	1.2	Furniture
Provide soft area for children; design should help disabled people to contribute to social events	1	1.2	Children's facilities & design & disabled
Provide space for families	1	1.2	Dividing space to use by families (design & equity)
Provide street furniture such as chairs and public bins	1	1.2	Furniture
Provide swimming pool	1	1.2	Facilities
Provide appropriate spaces with physical settings	1	1.2	Facilities

Provide children's play equipment	1	1.2	Children's facilities
Provide children's playground and play courts for youth	1	1.2	Children's facilities & Sports places
Provide enough numbers and areas of public spaces and they need to be ready to use	1	1.2	Size & facilities
Provide green areas and children's playground	1	1.2	Green areas & children's facilities
Provide green areas and plant flowers	1	1.2	Green areas & flowers (aesthetics)
Provide green areas, children's soft play areas, and places for the youth	1	1.2	Green areas & children's facilities
Providing green areas, plant flowers and playground	1	1.2	Green areas & flowers (aesthetics)
Providing internet café	2	2.5	Facilities
Provide physical settings like public bins and seats	1	1.2	Furniture
Provide play and green areas	1	1.2	Green areas & children's facilities
Provide playground for the children	6	7.4	Children's facilities
Redevelop the PS to meet the needs of all the users' ages	1	1.2	Age-group (equity)
Should meet all residents' categories	1	1.2	Equity
Work together to improve these spaces, try to apply successful practices from other countries	1	1.2	Improve PS (management)
Total	81	100	



Map 3-1: Examples of the typical GN in Misurata City and their location within the city layout