

ASSESSING MOTHERS' USE OF NEIGHBORHOOD OPEN SPACES

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
OF
MIDDLE EAST TECHNICAL UNIVERSITY

BY

ILGIN KURUM

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF SCIENCE
IN
URBAN DESIGN IN CITY AND REGIONAL PLANNING

SEPTEMBER 2019

Approval of the thesis:

ASSESSING MOTHERS' USE OF NEIGHBORHOOD OPEN SPACES

submitted by **ILGIN KURUM** in partial fulfillment of the requirements for the degree of **Master of Science in Urban Design in City and Regional Planning Department, Middle East Technical University** by,

Prof. Dr. Halil Kalıpçılar
Dean, Graduate School of **Natural and Applied Sciences**

Prof. Dr. Çağatay Keskinok
Head of Department, **City and Regional Planning**

Assist. Prof. Dr. Yücel Can Severcan
Supervisor, **City and Regional Planning, METU**

Examining Committee Members:

Prof. Dr. Serap Kayasü
City and Regional Planning, METU

Assist. Prof. Dr. Yücel Can Severcan
City and Regional Planning, METU

Assist. Prof. Dr. Deniz Altay Kaya
City and Regional Planning, Çankaya University

Date: 06.09.2019

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name, Surname: Ilgin Kurum

Signature:

ABSTRACT

ASSESSING MOTHERS' USE OF NEIGHBORHOOD OPEN SPACES

Kurum, Ilgın

Master of Science, Urban Design in City and Regional Planning

Supervisor: Assist. Prof. Dr. Yücel Can Severcan

September 2019, 115 pages

Studies in political, economic, social and planning disciplines which examine the relation between concepts of gender and space, emphasize that women who are identified with maternal roles are excluded from public spheres in many ways. In particular, women who are responsible for the care of their young children are disadvantaged in accessing urban areas and facilities, and neighborhoods are of considerable importance in their daily lives. This thesis, questions how mothers living in different neighborhood contexts use open spaces in their near home environments. It aims to examine the differences between place use of mothers in different neighborhood contexts and to find out how the physical aspects of these settings affect their place experiences regarding their needs and demands. Focusing on how different physical attributes affect mothers' place behavior may help urban designers and policy-makers to understand and create more inclusive neighborhood environments. The thesis starts with a review of the literature on gendered spaces. Next, based on this review, two neighborhoods were selected from Ankara, Turkey to answer the question posed by the thesis. The first one is the traditional neighborhood of Kutlu Neighborhood in Mamak District and the other one is Yapraklı TOKİ residences in Etimesgut District, which is a mass housing satellite neighborhood. With regards to the findings of the literature survey, semi-structured in-depth interview questions were designed and mothers living in selected neighborhoods were interviewed. The results of this research indicate that various physical environmental factors like land use diversity, climatic comfort, availability of public facilities like breastfeeding and baby care rooms, green space diversity and proximity, sufficiency illumination and seating, acoustic comfort and traffic safety affects mothers' use of neighborhood open spaces. Besides the physical factors, personal factors like sense of safety and social factors like domestic responsibilities are among the findings of this study. These results can provide input to the design of neighborhood open spaces which is responsive to the needs of women with children.

Keywords: Gender and Space, Mothers, Neighborhood Open Spaces, Place Use

ÖZ

ANNELERİN MAHALLE AÇIK ALANLARI KULLANIMLARININ DEĞERLENDİRİLMESİ

Kurum, Iğın
Yüksek Lisans, Kentsel Tasarım
Tez Danışmanı: Dr. Öğr. Üyesi Yücel Can Severcan

Eylül 2019, 115 sayfa

Toplumsal cinsiyet ve mekan kavramları arasındaki ilişkiyi irdeleyen siyasal, ekonomik, sosyal ve planlama disiplinlerinde yapılan çalışmalar, anne rolüyle özdeşleşmiş kadınların birçok şekilde kamusal alanlardan dışlandığını vurgulamaktadır. Özellikle yaşı küçük olan çocuğunun bakımıyla sorumlu kadınlar, kentsel alanlara ve olanaklara erişimde dezavantajlı konumdadır ve yaşadıkları mahalleler kadınların günlük hayatında azımsanmayacak derecede önem taşımaktadır. Bu tezde, farklı mahalle bağlamlarında yaşayan annelerin, evlerinin yakın çevresindeki açık alanları nasıl kullandıkları araştırılmıştır. Çalışma, farklı mahallelerde yaşayan annelerin yer kullanımları arasındaki farklılıkları incelemeyi ve bu mahalle çevrelerinin fiziksel özelliklerinin, annelerin ihtiyaç ve talepleri doğrultusunda, yer deneyimlerini nasıl etkilediğini ortaya çıkarmayı amaçlamaktadır. Farklı fiziksel özelliklerin annelerin mekan davranışlarını nasıl etkilediğine odaklanmak, kentsel tasarımcılara ve bu alandaki karar vericilere daha kapsayıcı mahalle çevrelerini anlama ve oluşturma konusunda yardımcı olabilir. Tez, cinsiyetlendirilmiş mekanlar üzerine yapılan literatür taraması ile başlamaktadır. Bu tarama doğrultusunda, tezin araştırma sorusunu cevaplamak amacıyla, Ankara, Türkiye’den iki mahalle seçilmiştir. İlki geleneksel bir mahalle olan Mamak İlçesi’nde bulunan Kutlu Mahallesi, diğeri ise toplu konut uydu mahallesi olan Etimesgut İlçesi’nde bulunan Yaprıcak TOKİ konutlarıdır. Literatür araştırması sonucunda elde edilen bulgular ile yarı yapılandırılmış derinlemesine görüşme soruları tasarlanmış olup seçilen mahallelerde yaşayan annelerle görüşülmüştür. Bu araştırmanın sonuçları, arazi kullanım çeşitliliği, hava koşullarına bağlı konfor, emzirme ve bebek bakım odaları gibi kamu tesislerinin varlığı, yeşil alan çeşitliliği ve yakınlığı, aydınlatma ve oturma elemanlarının yeterliliği, akustik konfor ve trafik güvenliği gibi çeşitli fiziksel çevresel faktörlerin annelerin mahalle açık alanları kullandıklarını etkilediğini göstermektedir. Fiziksel faktörlerin yanı sıra, annelerin alan kullandıklarını etkileyen güvenlik duygusu gibi kişisel faktörler ve ev içi sorumluluklar gibi sosyal faktörler bu çalışmanın sonuçlarındandır. Bu bulgular, mahalle açık alanlarının, çocuklu kadınların ihtiyaçlarına duyarlı bir şekilde tasarlanmasına girdi oluşturabilir.

Anahtar Kelimeler: Cinsiyet ve Mekan, Anneler, Mahalle Açık Alanları, Yer Kullanımı

To my family...

ACKNOWLEDGEMENTS

Firstly, I would like to express my deepest gratitude to my supervisor, Assist. Prof. Dr. Yücel Can Severcan for providing invaluable guidance and contributions throughout this research. His everlasting patience made this research possible in a short time. I also wish to express my thanks to the examining committee members; Prof. Dr. Serap Kayasü and Assist. Prof. Dr. Deniz Altay Kaya for their valuable suggestions and contributions.

I would also like to extend my appreciation to Res. Assist. Ecem Hoşgör for her generous help for this research and to all women who spared their valuable time to participate in my interviews. I would also like to offer my special thanks to my coworkers at Çankaya Municipality for their tolerances and encouragement throughout my thesis research. Also, to all of my friends who were by my side during the preparation process, I offer a special gratitude for always giving me motivation and sharing the difficulty with me.

Lastly but most importantly, my deepest gratitude is for my precious family: to my aunt Damla İmer for her endless support; my father Ekrem Kurum, for his lifetime support and guidance; to my mother Ayla Kurum for her endless love, invaluable support and eternal patience along my entire life and during my study.

TABLE OF CONTENTS

ABSTRACT	v
ÖZ	vii
ACKNOWLEDGEMENTS	x
TABLE OF CONTENTS	xi
LIST OF TABLES	xiii
LIST OF FIGURES	xiv
1. INTRODUCTION	1
1.1. Problem Definition	1
1.2. Aim of the Study and Main Research Questions	3
1.3. Configurations of the Study	4
2. THEORETICAL BACKGROUND.....	7
2.1. The Concept of Space and Place	7
2.1.1. Components of a Place	9
2.2. Defining Open Spaces and Their Utilization.....	12
2.2.1. Types of Open Spaces	12
2.2.2. Importance of Open Spaces	14
2.2.3. Types of Activities in Open Spaces.....	16
2.3. Gender and Space	18
2.3.1. The Concept of Gendered Spaces	20
2.3.2. A Theoretical Framework for Reading Gendered Spaces	23
2.4. Understanding the Importance of Neighborhood Open Spaces for Mothers ..	30
2.4.1. The Concept of ‘Neighborhood Open Space’	30

2.4.2. Importance of Neighborhood Open Spaces for Mothers.....	31
2.5. Factors Affecting Mothers’ Use of Neighborhood Open Spaces: A Social- Ecological Model	34
2.5.1. Personal Factors	35
2.5.2. Social Factors	38
2.5.3. Physical Environmental Factors	41
2.6. Concluding Remarks.....	49
3. METHOD.....	53
3.1.1. Site Selection.....	53
3.1.2. Selection of the Participants	62
3.1.3. Data Collection and Analysis	64
4. RESULTS.....	69
4.1. Findings of Mothers’ Use of Neighborhood Open Spaces	69
4.2. Findings of Factors Affecting Mothers’ Use of Open Spaces	74
4.2.1. Personal Factors	74
4.2.2. Social Factors	76
4.2.3. Physical Environmental Factors	84
4.3. Concluding Remarks.....	104
5. CONCLUSION	109
5.1. Evaluation of the Results	109
5.2. Implications for Urban Design.....	113
REFERENCES	117

LIST OF TABLES

TABLES

Table 3.1. Age Distributions of the Participants	63
Table 3.2. Educational Background of the Participants	63
Table 3.3. Job Status of the Participants	64
Table 3.4. Dates of Conducted Interviews	64
Table 3.5. Statements of Close-ended Questions	66
Table 4.1. Mothers' Activities in Yapracık TOKİ Residences	71
Table 4.2. Time that Mothers Spend in Open Spaces in Yapracık TOKİ Residences	71
Table 4.3. Mothers' Activities in Kutlu Neighborhood	73
Table 4.4. Time that Mothers Spend in Open Spaces in Kutlu Neighborhood.....	73
Table 4.5. Remarks About Other Users	82
Table 4.6. Remarks About Land Use from Yapracık TOKİ Residences	85
Table 4.7. Remarks About Diversity of Open Green Spaces from Kutlu Neighborhood	89
Table 4.8. Remarks About Climatic Comfort	100
Table 4.9. Comparison of Results Obtained from Study	107

LIST OF FIGURES

FIGURES

Figure 1.1. Configurations of the Study	6
Figure 2.1. Components of Sense of Place. Adapted from Carmona et al. (2010)....	10
Figure 2.2. Graphic representation of the relation degree of use and quality of urban spaces. Adapted from Gehl (1987)	18
Figure 2.3. The Female and The Male Principles. Adapted from Wajcman (2001, p.199).	26
Figure 2.4. Framework for Reading Gendered Places.....	29
Figure 2.5. Social-ecological Model for Understanding Factors Affecting Mothers' Use of Neighborhood Open Spaces.....	35
Figure 2.6. Concluding Remarks of the Literature Review.....	51
Figure 3.1. Locations of Selected Sites in Ankara.....	54
Figure 3.2. Land Use of Kutlu Neighborhood (red, brown, green and blue colors indicate mixed-use [commercial and residential], residential, parks and education areas respectively)	55
Figure 3.3. Land Use of Yapracık TOKİ Residences(red, brown, green and blue colors indicate mixed-use [commercial and residential] or commercial, residential, parks and education areas respectively).....	56
Figure 3.4. Green Spaces in Kutlu Neighborhood.....	57
Figure 3.5. Green Spaces in Yapracık TOKİ Residences.....	58
Figure 3.6. Representation of Built Form in Kutlu Neighborhood.....	59
Figure 3.7. Representation of Built Form in Yapracık TOKİ Residences.....	60
Figure 3.8. Exemplary Pedestrian Way and Vehicle Traffic Photos from Kutlu Neighborhood	61
Figure 3.9. Exemplary Pedestrian Way and Vehicle Traffic Photos from Yapracık TOKİ Residences.....	61

Figure 4.1. Places That Mothers Frequently Use in Yapracık TOKİ Residences.....	70
Figure 4.2. Places That Mothers Frequently Use in Kutlu Neighborhood.....	72
Figure 4.3. Evaluation of Safety of Neighborhoods	75
Figure 4.4. Assessment of Safety as a Factor Affecting Open Space Use.....	75
Figure 4.5. Availability of Other Caregivers	77
Figure 4.6. Evaluation of Pre-schools in Neighborhoods	77
Figure 4.7. Assessment of Pre-schools as a Factor Affecting Open Space Use	78
Figure 4.8. Evaluation of People/Places to Look After Children in Neighborhoods	78
Figure 4.9. Assessment of People/Places to Look After Children as a Factor Affecting Open Space Use	79
Figure 4.10. Some of the Participants from Kutlu Neighborhood Spending Time in Open Spaces	81
Figure 4.11. Evaluation of Socio-Cultural Pressure in Neighborhoods.....	83
Figure 4.12. Assessment of Socio-Cultural Pressure as a Factor Affecting Open Space Use	84
Figure 4.13. Evaluation of Places Attracting Both Mother and Child in Neighborhoods	86
Figure 4.14. Assessment of Places Attracting Mothers with Children as a Factor Affecting Open Space Use.....	86
Figure 4.15. Evaluation of Places Attracting Women in Neighborhoods.....	87
Figure 4.16. Assessment of Places Attracting Women as a Factor Affecting Open Space Use.....	87
Figure 4.17. Evaluation of Unbuilt Areas and Dilapidated Buildings in Neighborhoods	88
Figure 4.18. Exemplary Photos of Pedestrian Ways in Yapracık TOKİ	90
Figure 4.19. Exemplary Photos of Pedestrian Ways in Kutlu Neighborhood	90
Figure 4.20. Evaluation of Quality of Sidewalks in Neighborhoods	91
Figure 4.21. Assessment of Quality of Sidewalks as a Factor Affecting Open Space Use	91
Figure 4.22. Evaluation of Speed of Traffic Vehicles in Neighborhoods.....	92

Figure 4.23. Assessment of Speed of Traffic Vehicles as a Factor Affecting Open Space Use.....	92
Figure 4.24. Evaluation of Safety of Pedestrian Crossing in Neighborhoods	93
Figure 4.25. Assessment of Safety of Pedestrian Crossing as a Factor Affecting Open Space Use.....	93
Figure 4.26. Evaluation of Public Transportation in Neighborhoods.....	94
Figure 4.27. Assessment of Public Transportation as a Factor Affecting Open Space Use	94
Figure 4.28. Evaluation of Noise Level in Neighborhoods	95
Figure 4.29. Assessment of Noise Level as a Factor Affecting Open Space Use	95
Figure 4.30. Evaluation of Lighting in Neighborhoods.....	96
Figure 4.31. Assessment of Lighting as a Factor Affecting Open Space Use.....	97
Figure 4.32. Evaluation of Seating Elements in Neighborhoods.....	98
Figure 4.33. Assessment of Seating Elements as a Factor Affecting Open Space Use	98
Figure 4.34. Evaluation of Cleanliness and Maintenance of Neighborhoods	99
Figure 4.35. Evaluation of Climatic Comfort of Neighborhoods	101
Figure 4.36. Assessment of Climatic Comfort as a Factor Affecting Open Space Use	101
Figure 4.37. Assessment of Breastfeeding in Public Spaces as a Factor Affecting Open Space Use.....	102
Figure 4.38. Assessment of Baby Care and Breastfeeding Facilities as a Factor Affecting Open Space Use.....	103
Figure 4.39. Evaluation of Height of Buildings in Neighborhoods.....	104
Figure 4.40. Assessment of Height of Buildings as a Factor Affecting Open Space Use	104

CHAPTER 1

INTRODUCTION

1.1. Problem Definition

The main problem addressed in this study is the everyday barriers faced by mothers in their use of neighborhood open spaces in Turkey. Although women have gained many rights in terms of equality today, they are still being excluded from public sphere in many ways due to gender roles (Mcdowell, 1983; Massey, 1994; Fenster, 1999). In the Middle East, where the majority of the population is Muslim, women live in an environment of patriarchal cultural characteristics. The expectation of the society from female individuals is to take on domestic roles such as raising children, organizing household chores and caring for the elderly and patients. The role attributed to women is reflected as a hierarchical order based on gender division, from the family structure to social organization. Men's role of the authority figure and wage-earner in the family increases their activity in public spheres, while women are confined to domestic areas.

Visibility of women in the public sphere depends on many different rules, in Turkey. These rules, ranging from the activities of women to their appearance, are reinforced by the discourse of politicians and decision-makers, and reproduce themselves in daily life practices. For example, society finds it inappropriate for women to walk around the streets after dark, unless they are accompanied by a man (Tuncer, 2014). Also, women are subject to a number of rules after having children. Just a few years ago, one of the leading religious figures in Turkey declared in the state television it is not aesthetic and appropriate for pregnant women to walk around on the street. In addition, matter of breastfeeding in the public spaces, is in agenda of feminist activists all around the world and their standpoint is that women body is functional and breastfeeding is the basic need on infants.

Feminist geographers highlight that, the main obstacle for women to access to the wider possibilities of the city is the association of women and feminine activities with home or private spheres (Wekerle, Peterson, & Morley, 1980). Spaces are the product of social and cultural processes like gender, thus researches show that societies' heterosexual masculine and feminine role distinctions are also reflected in the production of spaces (Knopp, 1995). In this context, it is claimed that contemporary cities and concrete urban experiences are actually man-made because of the historically ossified mix of family policy, gender relations, public health and maternal state policy and cultural expectations (Jarvis, Kantor, & Cloke, 2009). Theorists emphasize that the decision-makers, designed public spaces with the idea that they belong to men and remain insensitive to women and their needs (Alkan, 1999). In other words, the physical aspects of built environment fails to ensure women's right to the city.

After giving birth, women undergo adaptation process to changes in both their bodies and their daily activities. Besides, because preschool children are completely dependent on their caregiver by means of mobility and fulfilling their needs, it is almost unavoidable that a woman having young children finds herself engaged in full-time or part-time childrearing. To this respect some studies examine, the impacts of the urban environment on particularly working mothers, who are coping with time constraints and complex responsibilities (Aitken, 2000; Mackenzie, 1989; Silbaugh, 2007) and the impacts of common areas of residential units and housing environments on mothers with babies who face social isolation (Racki, 1975). Also, studies show that women with young children reduces the time they have available for travelling to public spaces distant from their near home environment considering that they are more frequently engaged in housekeeping and childcare activities (Franck & Paxson, 1989; Lilius, 2017). With regards to previous researches, the importance of the near home environment for women with young children is clear.

As a subject of urban design, neighborhood open spaces play a major role in the life, form and experience of cities and they present opportunities for social, physical and mental health, environmental and economic benefits for all segments of the society (Kaplan & Kaplan, 1989; Marans, 2003; Chiesura, 2004). In this context, considering the importance of the near home environment for mothers, the design of neighborhood open spaces is of great importance. Urban design strategies, which are insensitive to the needs of mothers, can limit these groups' access to open spaces, and prevent them from benefiting the opportunities provided by these settings. Understanding the role of the physical environment on mothers' use and perception of neighborhood open spaces may guide urban designers in their efforts to create communities, which promote mothers' physical activity and place use.

1.2. Aim of the Study and Main Research Questions

After giving birth to infants who are completely dependent on caregiver in meeting their needs, women go through the adaptation process to their changing habits. The "transition to parenthood is a turning point in one's life and may be accompanied with emotional and financial stress" (Turney & Harknett, 2010, p.1). Also new mothers are facing with various limitations in their daily life, most of which are associated with time and mobility constraints (Day, 2000) and social isolation (Racki, 1975).

There are many studies dedicated to women and how they experience urban environment (Franck & Paxson, 1989; Valentine, 1990; Spain, 1993; Tuncer, 2014). However, particularly mothers' perception and use of neighborhood environments is under-researched in urban studies. The author argues that mothers' place perception and use may vary from one neighborhood to another depending on a number of factors including their physical environmental characteristics. Focusing on how different physical attributes affect mothers' place behavior may help urban designers and policy-makers to understand and create more inclusive neighborhood environments.

This study aims to examine how mothers' perception and use of neighborhood open spaces vary from one neighborhood having particular urban form characteristics to another. It is also aimed to analyze how the utilization of open spaces changes with different personal and social characteristics. Thus, the main and sub-questions of the research are listed below:

1. How do mothers living in different neighborhood contexts use open spaces in their near home environment?

-Do women having young children in different neighborhood context use urban environments differently and why?

2. What are the factors affecting mothers' use of neighborhood open spaces?

-Does use of neighborhood open spaces change as individual and social variables change?

-What is the role of the physical environment in mothers' use of neighborhood open spaces?

The main aim of this thesis is to identify challenges mothers are facing, their specific requirements and how these obstacles and needs relate with individual, social and physical environmental attributes. Although urban planning and design discipline may not solve all these obstacles, understanding the spatial dimensions influencing mothers' place behavior and highlighting gaps in research regarding this topic can play a critical role within urban agenda.

1.3. Configurations of the Study

This thesis consists of four chapters. In the second chapter, the thesis provides a literature review to familiarize the reader about key concepts related to the subject including the concept of space, place, open space and gendered spaces. It aims to define what constitutes the boundaries of a neighborhood or how can we define this

setting, and proposes a model for reading urban landscapes from a gendered space perspective. Furthermore, in order to understand the factors affecting the open space use of mothers, based on the original work of Bronfenbrenner's (1989) social-ecological model, a specific model is developed for this study. Identifying influences on behavior as a series of layers, where each layer has a resulting impact on the next level; individual, social and environmental factors are examined. Chapter 3 explains the methodology of the analyses in the framework of indicators derived from theoretical background that examined in the second chapter. It provides brief information about two neighborhoods selected for case studies and then the rationale behind the in-depth interview questions are explained. The fourth chapter consists of results of the cases. Lastly the conclusion chapter summarizes and interprets the assessments of both cases. It also discusses the urban design implications of the findings. Figure 1.1 illustrates the scope of the thesis.

Preliminary Stage

Research Problems, Aims and Configurations of the Study

Theoretical Background

Space and Place
Components of Place

- Physical Setting
- Activities
- Meaning

Open Spaces and Their Utilization

Types	Importance	Activities
-------	------------	------------

Gender and Space

Concept of Gendered Spaces	Reading Gendered Spaces
----------------------------	-------------------------

Mothers' Use of Neighborhood Open Spaces

Neighborhood Boundaries	Importance of Neighborhood Open Spaces for Mothers
-------------------------	--

Factors Affecting Mothers' Use of Open Spaces

Personal Factors	Social Factors	Physical Environmental Factors
------------------	----------------	--------------------------------

Method

Multi-Case Study Approach

Results

Yapracık TOKİ Residences	Mamak Kutlu Neighborhood
--------------------------	--------------------------

Conclusion

Evaluation of Results

Figure 1.1. Configurations of the Study

CHAPTER 2

THEORETICAL BACKGROUND

2.1. The Concept of Space and Place

Understanding concepts of space and place is important before examining open spaces. After 1970s, debates on the geometrical meaning of space shifted and theories of space gained scientific meaning within the concept of architecture, planning and geography. In his book, *The Meaning of Built Environment*, focusing on the meaning of environment, space and time Rapoport (1990, p. 36) notes that, “space is the three-dimensional extension of the world around us, the intervals, distances and relationships between people and people, people and things, things and things. Space organization is, then, the way in which these separations (and linkages) occur and is central in understanding, analyzing, and comparing built environments”.

In this sense, besides locational definition of space, its relationship with human beings is referred. Henri Lefebvre in his work *The Production of Space*, (1991, p. 1) explains the change of the conceptual framework of space into a social subject as follows:

“Not so many years ago, the word 'space' had a strictly geometrical meaning: the idea it evoked was simply that of an empty area. In scholarly use it was generally accompanied by some such epithet as 'Euclidean', 'isotropic', or 'infinite', and the general feeling was that the concept of space was ultimately a mathematical one to speak of 'social space', therefore, would have sounded strange.”

Lefebvre’s theory claims that space only exists in connection with the social relations. He has focused on the social production of the spaces and reclaim the spaces of everyday life. Lefebvre (1991) explained his idea of space in three different levels: perceived space, conceived space and lived space (Purcell, 2002). Perceived space is explained as concrete space that people can encounter in the location and sites in their

everyday environment. It is possible to study the perceived area as the mappable geography of the inhabited places as it is a material spatial form. Conceived space, therefore, refers to mental constructions and symbolic representations of space and it represents creative ideas about and abstract representations of space (Purcell, 2002). Lived spaces, in other words spaces of representations, are described as the complex combination of perceived and conceived space, the spaces of everyday experience (Purcell,2002). The lived space occupies the physical space and uses its objects symbolically. Space in this case is claimed to be mentally and socially constructed.

The relationship between space and space is often explained in a complementary manner. Many place theorists, such as Tuan (1979), Sack (1997) and Relph (1976) try to explain the concept of “place” by the help of the “space” concept and they accept the basic definition of place as a particular portion of space. According to Tuan (2001, p.6) "space" is more abstract than "place" and he defines their relationship as follows:

“What begins as undifferentiated space becomes place as we get to know it better and endow it with value. Architects talk about the spatial qualities of place; they can equally well speak of the locational (place) qualities of space. The ideas ‘space’ and ‘place’ require each other for definition. From the security and stability of place we are aware of the openness, freedom, and threat of space, and vice versa.”

Within this framework, places are parts of spaces, tied together through space by movement and spaces provide the resources and the frames of reference in which places are made (Agnew, 2011). Tuan (2001, p.6), also notes that while space allows movement to occur, place provides pause in movement which “makes it possible for location to be transformed into place”.

The conflict between meanings of space and place is longstanding. Madanipour (1996) claims that places are occupied by humans or things and are embedded with meaning. In other words, place is the sensual experience of space. Moreover, Sack (2003) claims that place is a limited area of physical territory with collectively understood meanings. The social, cultural, natural and political elements are components of place (Sack,

1997). Similar to Sack's theory, Trancik (1986) associates the concept of place with the social and cultural aspects and he claims that contextual and cultural characteristics make space, a unique place. He claims that those unique characteristics of places are vital for developing social lives of people (Trancik, 1986).

Similarly, Relph (1976) as a phenomenologist, states that what gives meaning to a space and makes it a place is the experiences of people, as individuals or as groups. He highlights that a place is a center of action and intention, while actions and intentions affect the place, place is also affected by them (Relph,1976). Likewise, Canter defined place as "...units of experience within which activities and physical form are amalgamated" (1997, p.1). Their models of place have strong similarities. Place, according to Canter (1977), is a combination of actions, conceptions and the physical environment. Canter (1977) notes that place is identified once it is experienced, and behavior of people is associated with physical aspects of that specific space.

Both Relph (1976) and Canter (1977) emphasized creating "sense of place" in their theories. Relph (1976) claims that there is not a clear definition of sense of place but one can explain the concept from their own point of view. In Altman and Low's (1992) theory, sense of place is a factor that converts the space into place and what plays a role in this formation are the ongoing activities inside and interaction between people and nature. Relph's (1976) description of sense of place suggests that it is a combination of physical setting, activity and meaning which are related to human experience (Relph, 1976). The next chapter, briefly examines the components that Relph suggests.

2.1.1. Components of a Place

Relph (1976) described that sense of place is an interaction of three components;(1) the place's physical setting; (2) its activities, situations, and events; and (3) the

individual and group meanings created through people’s experiences and intentions in regard to that place (See Figure 2.1.)

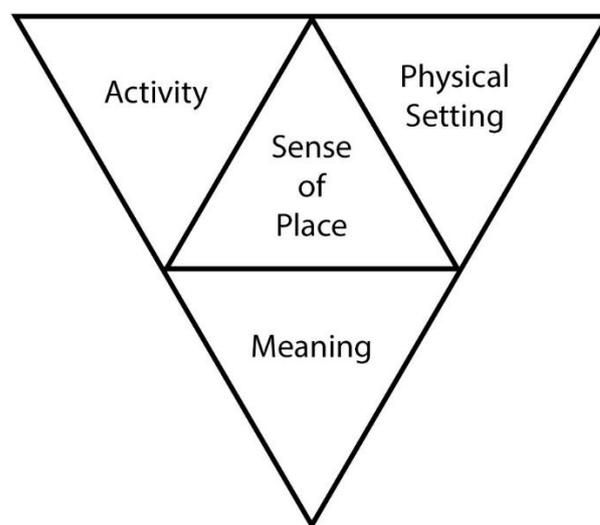


Figure 2.1. Components of Sense of Place. Adapted from Carmona et al. (2010)

Physical setting is one of the main elements of a place, which refers to the relationships between the objects that forms the place. The physical realm “deals with tangible, corporeal, material aspects of the built environment; dimensions with substance that are mutable and can be touched, altered, and shaped.” (Adams, 2014, p.254). According to the Stedman (2003) the physical environment features and its characteristics contribute to the construction of a sense of place and increases place satisfaction. Likewise, Shumaker and Taylor (1983) claims that outstanding physical features of place strengthen attachment to that place.

Mentioning the aspects of physical setting to create a sense of place, Steele (1981) defines significant parameters that stimulate senses of human beings; size and scale, distance, diversity, texture, visual variety, color, odor, noise and temperature. Arguing that the legibility of a place is an influential factor that makes people move around easily and quickly in the environment, Lynch (1960) mentions five categories of legible places. These categories are: (1) Paths as shared traveled corridors like streets, river ways etc; (2) Edges as limiting or enclosing features that tend to be linear but are

not functioning as paths (wall, seashore etc.); (3) Districts as medium to large sections of spaces, which are claimed to be recognizable due to having identifying physical characters; (4) Nodes as intersections of major paths or places and major points where behavior is focused; and (5) Landmarks as distinctive features that people use for reference points. Steadman (2003, p.674) asserts that physical attributes contribute to ascription of meaning to places: “Physical features do not produce sense of place directly, but influence the symbolic meanings of the landscape, which are in turn associated with evaluations such as attachment. For example, places of low population density will more likely take on the meaning of ‘wilderness’ than will places of high population density.”

Activity is the second component of place which is related to movement of people. Understanding how places function and what movements a public space contains are focus of an urban experience (Carmona et al., 2010). Norberg-Schulz (1976, p.277), points out that “different actions demand places with a different character. A dwelling has to be protective, an office practical a ballroom festive and a church solemn.”. Jacobs (1961) and Gehl (1987) emphasizes the significant role of activity in creating a sense of place and they both highlight that activity generates a vitality and diversity that attaches people to places.

Similarly, Montgomery’s (1998) conceptual model proposes that important principles for creating a sense of place are: generating pedestrian flows and vitality, developing a density of population and promoting street life and people-watching. Sense of place as Healey (2010, p.33-34) asserts, “can be understood as some kind of coming together of physical experiences (using bumping into, looking at, hearing, breathing) and imaginative constructions (giving meanings and values) produced through individual activity and socially formed appreciations.”.

Meaning is the last component of place as many place theorists mentioned. Stedman (2003) claims that with one's social bonds, feelings and emotions, a place turns into a space. Knox and Pinch (2000) argues that the social and emotional meanings attached

to, or evoked by the attributes of the urban environment are significant. Personal experience leads people to develop their own awareness and meaning of a place and what the environment represents is a function of their own subjective construction of it (Carmona et al. , 2010). Hence, for the same location, the sense of place may vary from one person to another and for the same person over time (Arjmand, 2017).

2.2. Defining Open Spaces and Their Utilization

2.2.1. Types of Open Spaces

Open spaces include sections of land that are not elaborated for industrial, institutional, commercial or residential use and it forms an important component of the neighborhood landscape (Gobster, 2001). Open spaces, may be protected or unprotected, public or private (Thompson, 2002). They include public parks, recreation grounds, squares, plazas, wastelands, playgrounds and playing fields (Lynch & Carr, 1981) neighboring spaces between buildings (Chermayeff & Alexander, 1963; Ford, 2000), and public urban spaces including retail bazaars, streets and pedestrian paths (Kayden, 2000).

Trancik (1986) categorized the urban space into two: “hard spaces” are limited to architectural walls and building forms and “soft spaces” are dominated by the natural environment, such as parks, gardens and linear greenways which have less enclosure or defined boundary and are dominated by the natural environment. Furthermore, Trancik (1986) defined open spaces in urban areas as urban voids and he classified them into five according to the role they play in the environment:

1. The entrance or foyer area which establishes a transition from personal domain to common territory (e.g. lobby, front yard, forecourt, niche, mews)
2. The inner block space consists of a semi-private area for entertainment or utility or a middle block shopping oasis for circulation or relaxation.

3. The streets and urban squares establish a systematic hierarchy of order corresponding to the dominant field of blocks.
4. Public parks and gardens which act as nodes for the preservation of nature, providing relief from the hard urban environment and opportunity for recreation.
5. Linear open space system consisting major water features such as rivers and water fronts which separate districts creating edges.

The meaning of different terms related to urban open spaces is often confused with other terminologies. Rofè et al. (2012, p. 179) categorized open spaces in to three basic categories; “green spaces, which are characterized as predominantly unpaved and permeable; civic spaces, which are paved open spaces used for civic and economical functions; grey spaces, including paved areas used for non-pedestrian movement, parking, infrastructure or previously developed areas that have been abandoned.”. Therefore, Woolley (2003) categorized open spaces according to their scale into three:

1. Domestic urban open spaces: also known as private urban open spaces are physically closest to home. “These include spaces that are integral within a housing area, private gardens, community gardens and allotments.” (Woolley, 2003, p.76). Yards or home gardens are closely related with the home because their physical setting is within the home in which it is placed. Community gardens are thus shared physically by a very limited number of households which may be related “with a small group of family houses, a small block of flats for professional people or a group of bungalows for the elderly.” (Woolley, 2003, p. 76).
2. Neighborhood urban open spaces: are physically further from home however they are still in a walking distance to residents. Although domestic open spaces are like an extension of the home, neighborhood open spaces address to more people so that user is likely to meet other people who live and work there. Such neighborhood spaces include; “parks, playgrounds, playing fields and sports grounds, school playgrounds, streets, city farms, incidental spaces and natural green space” (Woolley, 2003, p.88).

3. Civic urban open spaces: involves the biggest number of urban open spaces such as commercial urban spaces including squares, plazas, water features and office grounds, spaces relating to the transport system like railways and roads, also hospital grounds and university campuses. Woolley (2003) notes that physical difference between those spaces and other categories is that, they tend to be further from home unless one lives within the central business district. This means that to use civic urban open spaces one has to make a very specific decision to do so and spatial requirements of those spaces includes bus stops and car parks as people are not likely to walk to these spaces (Woolley, 2003). Social difference of civic urban open spaces is that provide the greatest opportunity for meeting a variety of people than other categories, although they might be completely strangers.

2.2.2. Importance of Open Spaces

Open spaces are one aspect of the urban environment that is of great importance in daily life for people living in urban areas. The importance of built and natural urban open spaces to our environment and quality of life is increasingly recognized by a growing number of researchers (Kaplan and Kaplan 1989; Woolley, 2003; Chiesura, 2004; Maruani and Amit-Cohen, 2007). The benefits and opportunities that open spaces provide commonly categorized into four titles as social, health, environmental and economic.

Social Benefits: Woolley (2003, p. 12) claims that most obvious benefits that open spaces provide for city living are social benefits – “opportunities for people to do things, take part in events and activities or just be”. Open spaces provide space for socializing, political discourse and cultural expression (Woolley, 2003). It creates opportunities for people to participate in close interaction with people with different ethnic and racial backgrounds, thus they contribute to social justice (Lofland, 1998). Mitchell (2003, p.35) argues that whether of oneself or of a group “representation both demands space and creates space” and in public spaces which provides places to meet,

gather and interact like street corners and parks, people can represent themselves to a larger population. Thus, public open spaces provide social benefits through ensuring places for people to represent themselves which public spheres doesn't allow.

Open spaces also, allow people to meet and interact to establish relationships and to develop social ties within local communities (Völker, Flap, & Lindenberg, 2007). They can provide opportunities for various social and recreational activities which can contribute to developing a sense of communal closeness (Arnberger, 2012). Thus, the lack and poor quality of open/green space in urban neighborhoods can be a serious restriction for the social wellbeing of the inhabitants (Mitchell & Popham, 2008).

Health Benefits: The positive effects of the presence of open spaces in urban spaces on both human health and the quality of urban environments are well recognized by many researchers (Kaplan & Kaplan, 1989; Chiesura, 2004). Woolley (2003, p.36) asserts that “Open spaces in urban areas have been considered to have benefits for both physical and mental health.”. There are studies suggesting that increased physical activity directly affects health positively (Mitchell, 2013), thus open spaces that provides area for physical activities can contribute to increase in quality of health. Studies show that open spaces that have vegetated surfaces, such as parks, may reduce stress in the user (Hartig, Mang, & Evans, 1991; Ulrich, 1981), and provide peace and tranquility (Kaplan, 1983). Moreover, neighborhood open spaces can provide recreational and aesthetic values to residents (Kaplan, Kaplan, & Ryan, 1998).

Environmental Benefits: Variety of researches show that natural open spaces that mankind has developed (like parks and yards), which substitute for the pre-existing landscape of a location, change both physical and chemical properties of the environment, affecting local climates (Woolley, 2003; Hough, 1995). Woolley (2003, p. 59) claims that, “All the environmental benefits are related to urban green spaces and the quality, quantity and proximity of these spaces to each other will impact upon the value of any one particular environmental benefit at any particular time of year”. The improved environment that can be provided by a well-planned, designed and

managed city can be of benefit to many individuals and groups within that conurbation.

Economic Benefits: Existence of open spaces in urban areas provides various benefits. Leisure and recreational opportunities are identified as quality of life factors and they have an impact on where people choose to live (Marans and Mohai, 1991). Writings about early urban park developments in several countries indicate that the value of land and or property was higher if park developments are in close proximity than land or property further away from the park (Woolley, 2003). In their study, Harnik and Welle (2009) found out that neighborhoods which lack urban open spaces, are poorly maintained, less attractive and dangerous reduces property values. Also employment opportunities, crop production and tourism all have some sort of role to play in the economy that urban open spaces provide (Woolley, 2003).

2.2.3. Types of Activities in Open Spaces

People use space in different ways. Jacobs (1961) described various activities occur in public spaces as ‘ballet’ indicating that each dancer have different parts. Carr et al. (1992) describe five core human needs that influence the appeal a certain public space has on us, which are: comfort, relaxation, passive engagement, active engagement and discovery. Comfort includes environmental factors such as relief from sun or wind and existence comfortable and sufficient seating to rest. Relaxation reflects our need to put our body and mind at ease. To this point, natural elements like “trees, greenery, water features - and separation from traffic help accentuate the contrast with the immediate surroundings and make it easier to be relaxed.” (Carmona et al., 2003, p.166). Passive engagement broadly refers to “the need for an encounter with the setting, albeit without becoming actively involved” like observing what other people do (Carr et al., 1992, p.103). Opportunities for passive engagement are also provided by fountains, views, public art performances, and so forth. Active engagement, on the other hand, involves a more direct experience with the space and with the people

within that particular space. It represents our need for encountering intellectual and physical challenges in a space. Finally, discovery, represents desire for new sights and pleasurable experiences, and it depends on the variety and change.

Open space has also been described from a user's point of view as being an arena that allows for different types of activities (Gehl, 1987):

Necessary activities are more or less compulsory activities in which people have to participate at different degrees despite their will, weather etc. It consists of daily work and recreation, for example, walking to school or work, shopping, waiting for a bus. As users have no other choice and because these activities are essential, the incidence is only slightly influenced by the physical setting.

Optional activities happen only if the people intend to do it. Time, location and weather can influence the functioning of optional activities. Taking a walk to breathe fresh air, standing and enjoying the surrounding views, stopping for a coffee in a street cafe sitting and having a sunbath can be examples of these activities. Optional activities rely particularly on outer physical conditions.

Social activities happen spontaneously and depend on the presence of other people in the same public space at the same time. They "include children playing, greetings and conversations, common activities, or the most widespread social activity of all: passive contact in the form of just watching and listening to other people." (Gehl & Svarre, 2013, p.17). Social activities depend on the necessary activities and optional activities because it occurs spontaneously while other activities are happening, thus if the conditions for other activities are improved, social activities are supported indirectly.

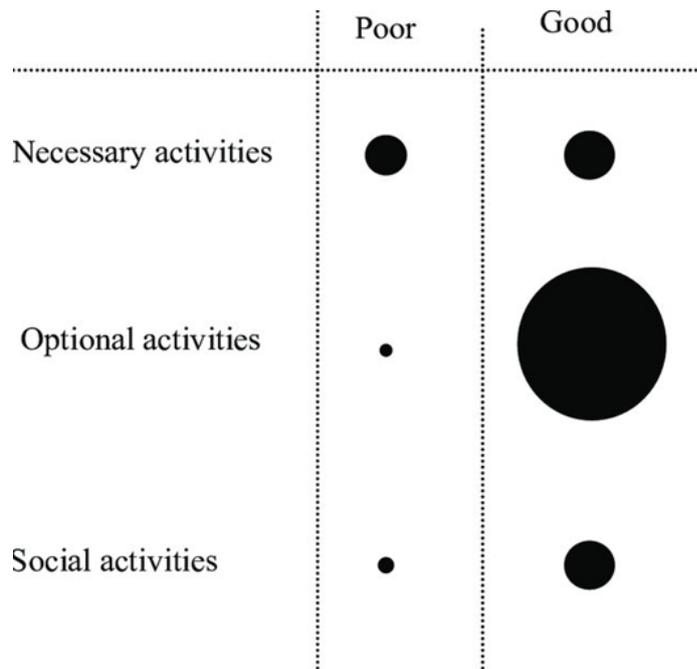


Figure 2.2. Graphic representation of the relation degree of use and quality of urban spaces. Adapted from Gehl (1987)

Although architecture is not solely enough for creating the social interactions, the design of public spaces will encourage it considering the variety of interests and requirements of different residents or users within given areas (Gehl, 1987) In poor quality public spaces, Gehl believes, only strictly necessary activities occur (See Figure 2.2.). In higher quality public spaces while necessary activities take place with approximately the same frequency, also a wide range of optional and social activities tend to occur. Hence lack of options or flexibility and only allowed people to carry out necessary activities, eventually creates limitation of activities to take place (Gehl, 1987).

2.3. Gender and Space

While numerous studies in a variety of disciplines examine the relationship between gender and space, urban studies, which emerged at the end of the 19th century, did not question the gendered space until the 1960s (Jarvis et al., 2009). With the introduction

of feminist thought in urban studies, gender was taken into the urban studies agenda (Bondi & Rose, 2003). Bondi and Rose (2003) state that, after the 1960s discussions on urban and social policy started to consider the experiences of women in urban life. They add that as the interaction of space and gender started to be taken into consideration, the impacts of time and space on the construction of gender identities has revealed.

Studies about gender and space basically includes differentiation between how men and women experience and practice spaces and how those spaces reflect gender identities (Saegert, 1980; Spain, 1993; Wekerle, 1985) and how spaces are formed by heterosexual norms that excludes homosexual movements (Valentine, 2002; Knopp, 1998). Moreover, gender and space studies focused on various research topics. These include the segregation between public and private spaces within the gender context (Hayden 1980; Holcomb, 1984; Alkan, 2005), mobility and transportation experiences of women (Monk & Hanson 1982, Uteng 2011), fear of crime and harassment and providing safer places for women (Wekerle & Whitzman, 1995; Koskela & Pain, 2000; Valentine, 1990) and impact of space on women who are stressed under their dual responsibilities of childcare and paid work (Silbaugh, 2007; Greed, 2014). Also there are many studies on women having different racial backgrounds, especially black and Latino women (Carby, 1992; Peake, 1993), pregnant women or women with children (Boyer & Spinney, 2015; Day, 2000; Mathews, 2018) and single mothers (Anderson-Khleif, 1981).

Place is a social product that encompasses the physical meaning as well as the movement and meanings imposed on it (See Chapter 2.1.). Valentine (2002) asserts that geographers study the connection between class, race, gender and space, considering that everyday spaces are created through social practices. Therefore, she argued that it is important to analyze the relations of various social groups with space, their experiences; their contributions and exclusion from space (Valentine, 2002). Starting from the 1980's space theorists began to investigate how spaces are gendered and how gender, sexual orientation and sexuality are spatialized.

2.3.1. The Concept of Gendered Spaces

Feminist theorist, McDowell (1983) asserts that the public and private segregation of space is constructed socially and it is gendered. According to McDowell (1983), the Marxist urban analysis of public space has placed women in private spaces, since home and childcare tasks associated with women do not produce surplus value. Thus, considering the conceptualizations of the private sphere and public sphere in the traditional line, attitudes such as sacrifice, sensuality and reconciliation are attributed to the private sphere and women, and manner of selfishness, rationality and warriorism are identified with the public sphere and men (Alkan, 1999). In this sense, public and private distinction corresponds to the gender division and excludes women from public spheres.

Wekerle et al. (1980) highlights that traditional association of women with the home is the main obstacle for women's access to the broader possibilities of the city. According to Brenner (1998) leaving domestic realm and entering public space is considered as threatening traditional understanding of women's femininity and motherly qualities which also threatens the masculinity of public realm. The term "gendered space" is used in literature to understanding gender asymmetries, which as Löw & Lawrence-Zúñiga (2001, p.7) defines "particular locales that cultures invest with gender meanings, sites in which differentiated-practice occur or settings that are used strategically to inform identity and produce and reproduce asymmetrical gender relations of power and authority".

Contemporary cities have been shaped by ossified gender division and male-centered planning and design cultures (Jarvis et al., 2009). Wekerle et al. (1980) asserts that this gender-segregated public-private opposition is at the core of modern capitalist societies and is reinforced by urban planning and design decisions. Hayden and Wright (1976) argues that community design implications reflect an image of the family where the woman is a full-time homemaker and caretaker of the home and the man is a full time wage earner. Thus, sexual division of labor reflected both in physical layout

of the dwellings and the location of housing in relation to work (Hayden,1980; Cuthbert,2006).

The reflection of gender roles in the urban space as the distinction between home and work place has associated low-density suburbanization with family formation. Planners argue that suburban built environments are being significantly disempowering for women (Hayden, 1980; Madanipour, 2003; Saegert, 1980). Aitken (2000) criticizes the suburban environment for separating domestic and waged labor and thus isolating women from the public sphere and making it difficult for them to join working life. Moreover, Mackenzie (1989) adds that the gendered design of houses and residential areas put pressure on women, especially those who are living independently and who has double-income or single-parent families.

Silbaugh (2007, p.1818), defines the attributes of suburban communities as, “lower density development, meaning the consumption of greater and greater amounts of land for the same uses that are effectuated with far less land in urban neighborhoods” and “single-use zoning, meaning residential areas are separated from retail areas, creating a nearly complete reliance on cars for commuting to work as well as for small local errands such as retail shopping, school drop-offs and social and civic activities”. In contrast, in traditional urban neighborhoods, proximity between uses, such as private dwellings, public parks, retail and workplaces, are closer, in this sense one can meet his/her needs without time or transportation investment (Silbaugh, 2007).

Silbaugh (2007) also mentions that work-aged adults in suburban communities are unavailable during the day and combining with the fact that those communities are highly car dependent, pedestrian activity is mostly eliminated. Therefore, the urban vitality, that Jane Jacobs argues in *The Death and Life of Great American Cities* (1961), is lacking. Moreover, in her study Racki (1975) notes that especially mothers who have young children face with isolation and seeks for opportunities to socialize. Hence, according to Cuthbert’s (2006) interpretation, suburbs means isolation from

social networks and urban facilities for women, on the contrary dense urban spaces have a liberation and empowering potential.

Before 1920's, socialized domestic work was the feminist strategy until suburban expansion and private vehicle ownership restrained the collective ideal (Cuthbert, 2006). Hayden (1980) in her article "What Would a Non-Sexist City Be Like?" criticizes concept of conventional home neglecting the complexity of domestic work whether in suburban or inner-city. She states that facilities such as day-care or laundry are removed from shared spaces of community and are part of the dwelling's spatial domain. Hayden and Wright (1976) claims that contemporary housing studies that have influenced social use are limited to the needs of mother and child and neither refers to designs which can provide division of domestic responsibilities. It is argued that child care and housework should be shared among residents, both men and women, in order to liberate women from their domestic responsibilities, therefore the design of the residential communities should involve communal or cooperative facilities (Hayden, 1980).

So far the gendered reflection of space is mentioned within the framework of residential zoning and physical layouts of dwellings. Another form of gender segregation reflected in space is that public spaces are designed for men by men, being insensitive to the requirements and needs of women (Jarvis et al., 2009). According to Massey (1994, p. 179) those masculine implications further reinforces the social construction of gender:

"From the symbolic meaning of spaces/places and the clearly gendered messages which they transmit, to straightforward exclusion by violence, spaces and places are not only themselves gendered but, in their being so, both reflect and affect the ways in which gender is constructed and understood."

In her study, Massey (1994) points to the experiences of women in urban public spaces in the city of Paris. She mentions that public spaces such as boulevards, cafes and bars are the consumption places of men. Valentine (1993), explains the timid use of these

spaces by women, and adds that parks, afforested roads and afforested areas are patriarchal reflections of space. Similarly, Alkan (2009) asserts that the male domination is reflected in public spaces where masculine hegemony is re-strengthened every day. The separation of masculine and feminine spaces that privatized is termed as “heterosexing of space” by Valentine (1993). While coffeehouses (kahvehane), sports bars and mosques are examples of masculine spaces, Turkish baths and shopping centers can be examples of feminine spaces. Generally, gendered spaces can lead to different spatial capabilities and phenomena between men and women, besides that even if both men and women have their own public spaces, women's publicity is limited (Bora, 1997).

It is not completely possible to clearly see the reflection of gender differences which have not been reduced to a single social class into space; however, this phenomenon can be explained by the meanings that women ascribed in places (Cuthbert, 2006). Feminist literature on women's relation with public space mostly focuses on fear (Pain, 2000; Valentine; 1990). Therefore, “The numerous geographic studies on gendered use of public space and fear of crime have been matched by gender-conscious planning studies on how urban public space can be made safer through better design and a more inclusive planning process...” (Whitzman, 2007, p.2722).

2.3.2. A Theoretical Framework for Reading Gendered Spaces

While describing the concepts of space and place, Relph (1976) mentions that subjectivity and experience transform space into place, and he argues that physical settings, activities, and meaning are the significant factors creating the sense of place. In order to understand how those spaces are gendered, first it is examined how physical and functional aspects of gendered spaces operates and what they mean to people.

Physical setting: Formal morphological approach to urban design, examines the relationship and integration between urban voids and solids that surrounds them (Krier, 1979; Trancik, 1986). However, these studies discuss the relationship between

space and people's experience by only taking their universal needs into account (Kallus, 2001). Besides, Lynch (1960) in his study that brought a subjective perspective to the reading of the physical environment, argues that perception of urban environment varies by class, age, gender and culture. In this context, as Cuthbert (2006) mentions, there is little research in the literature examining women's perception of urban spaces with their physical characteristics.

Knopp (1995) asserts that relationship between certain sexualities and class interests are reflected in the spatial structures as sexual coding of spaces and she argues that Western cities are dominantly coded as heterosexual. She adds, because it contradicts the traditional order, some sexual subcultures are separated from others and concentrated in certain places, where it can be better controlled such as; gay neighborhoods in San Francisco and red-light district in Amsterdam (Knopp, 1995).

Massey (1994) argues that time has been gendered as male and space as female; while male represents progress, vitality and so-called modernity, female represents reproduction, nostalgia, aesthetics and passivity. Thus she adds that modern city provides opportunities for men to enjoy freedom in where public life of modernity is performed such as, cafes, bars and streets (Massey, 1994).

Similarly, Bondi (1992, p.207) seeks to read femininity and masculinity of urban landscape and argues that "feminine coding operates principally through associations with nurturance, domesticity and so on, but again, beliefs about the distinctiveness of women's bodies are at work in the use of curves, and of nooks and crannies.". While public open spaces are mostly identified as men's property, women's use of space is associated with private, domestic spheres and suburbs (Mackenzie, 1989; Hayden, 1980). Feminine spaces, therefore, are identified with socially constructed roles of women as carers, and female body is thought of only in those spaces such as, kitchens, public restrooms, playgrounds, changing rooms for babies and female-oriented shopping areas (Nakhal, 2015).

In this sense shopping malls, where both artificial safety and product diversity is mostly provided, are identified with women and claimed to be highly feminine (Eeden, 2006). The identity of the woman as consumer, who does not produce surplus value in society, is consistent with her identification with the shopping centers (Eeden, 2006). Besides, Domosh (2005, p.479) adds that “The masculinity of a man found shopping in a department store on a midday afternoon was certainly suspect, because spaces of consumption have been culturally constructed as feminine.”.

Claiming that architecture is deeply gendered, Domosh (2005, p. 474) argues that “in most cultures and throughout much of human history, home has been associated with women and feminine identities” and that “the physical form of the house is gendered.” She notes that homes are built to accommodate the patriarchal, heterosexual family: while kitchens, living-rooms and bedrooms are considered as feminine spaces, outside yard, the basement and the garage are identified with masculinity (Domosh, 2005). Windows and balconies are argued to be architectural features that created to provide spaces for women to see outside activities (Cowan, 2012) Moreover Domosh (2005) adds that certain types of housing are for particular sexualities like while post war low-density suburban environment with single family houses is associated with traditional family, bachelor pads reflected hetero-masculinity. According to Wajcman (2001, p.199) feminist critiques of architectural practice “argue that whereas male subjectivity is expressed in tall phallic towers, female buildings are round, enclosing curving and low-rise.”. Architect Kennedy (1981, p.76) emphasizes that “there would be a significant difference between an environment shaped mainly by men and male values and an environment shaped mainly by women and female values.”. Therefore, she suggests principles in architecture as shown in the Figure 2.3.

The Femanle Principles		The Male Principles
more user oriented	<i>than</i>	designer oriented
more ergonomic	<i>than</i>	large scale/monumental
more functional	<i>than</i>	formal
more flexible	<i>than</i>	fixed
more organically ordered	<i>than</i>	abstractly systematized
more holistic/complex	<i>than</i>	specialized/one-dimensional
more social	<i>than</i>	profit-oriented
more slowly growing	<i>than</i>	quickly constructed

Figure 2.3. The Female and The Male Principles. Adapted from Wajcman (2001, p.199).

Hayden (1984) argues that some symbols that can be observed in the public spaces concretize sexist attitudes by signaling women that their public visibility is dangerous. The characteristics of the spaces serve as a symbolic warning to women not to enter, and abandoned buildings, construction sites, parks, certain streets and alleys often can be examples to those spaces (Klodawsky & Lundy, 1994). Hayden (1984) asserts that, isolated areas, poor lighting, limited visibility, absence of escape routes and sexist graffiti or posters in public spaces cue women about danger and reinforce the masculinity of those spaces. According to the research about women's public space perception conducted by Kallus (2001) in Israel, physical factors that influence avoidance of public spaces are listed as: poor street lighting, untrimmed vegetation that blocks the view, poor pavements and inadequate walking space. She adds that women's use of the public urban space is restricted than men's, mostly due to fear of crime.

In accordance with Kallus's study, women's fear of crime is mostly focused topic in literature that explains physical characteristics of open spaces through strategies of coping with fear and violence (Fisher and Nasar, 1992; Klodawsky and Lundy, 1994; Blöbaum & Hunecke, 2005). These studies have been proposed urban design interventions to improve safety putting emphasis on graffiti, dilapidated buildings, light, enclosures, hiding places, and disorderly areas.

Activity: The spatial and physical arrangements of environment provides a setting for activities, while some settings makes particular actions easy to carry out for particular people, it can also complicate or completely inhibit for others (Franck, 1985). Place theorists assert that successful urban environment is based on various forms of the activity that takes place in the public sphere, thus public spaces should be accessible to all in order to maintain vitality (Jacobs, 1961; Coleman,1985; Montgomery, 1998). However, the gendered division of activities reflect to environment as separation of spaces, which prevents women from certain actions (Franck, 1985).

Franck (1985) suggests that suburbs, where femininity is associated, are more favorable for men and children than women. She claims that children living in the suburbs have access to wider spatial range of activities than those living in cities (Franck, 1985). Moreover, according to their research conducted in New York, Seagert and Winkel (1980) argue men of the family find the relaxing and recreational aspects of suburb environment more satisfying, therefore they benefit more than women from suburban living. Also it is reported that women in the city had more friends within walking distance thus women in suburbs are relatively socially isolated (Seagert & Winkel, 1980). While open spaces like parks and gardens represents opportunities for physical exercise and leisure time activities, Cuthbert (2006) claims that those spaces are perceived as male dominated, thus women do not see these places with the same enthusiasm. Day (2000) notes that women needs to combine pleasure and their domestic life while using those spaces for leisure such as jogging while pushing a pram.

In her research conducted among women in a residential neighborhood of Israel which is closely connected to business and commercial activities, Kallus (2001) notes that women identified that they find certain places intimidating where masculine activities take place and where many strangers are present. For this reason, women in Israel indicated that they tend to use pathways, which are quite away from major street activity (Kallus, 2001). Although, it is indicated that most of the women fear of strangers, supporting the Jacobs (1961) notion of 'eyes on the street' some also

indicate that “the presence of people on the streets makes them feel secure” (Kallus, 2001, p. 145). According to Kallus’s (2001) interpretation, with regards to the literature that calls for mixed land-use patterns, study findings show that environment should be balanced providing diverse urban opportunities and the convenient accessibility of work and services but also safe residential environments. In this sense understanding how spaces function for women and in which ways women’s actions takes places in those spaces may influence development of more inclusive design strategies.

Meaning: As asserted by Carmona et al. (2010) personal experience leads people to develop their own awareness and meaning of a place. While physical realm is mainly associated with tangible factors, emotional realm deals with more ethereal aspects of urban spaces (Adams, 2014). Gender differences are claimed to be influencing meaning of place, thus men and women experience different emotions in similar places within the borders of the same city (Saygılıgil, 2013). While physical attributes and management of places can impact the given meanings of places, they are also influenced by personal demographics and experience. Moreover, since the meaning of the place is constructed socially, it differs from one time to another (Massey, 1994). As Massey (1994, p.186) argues, space “both reflects and has effects back on the ways in which gender is constructed and understood in the societies in which we live”. In this sense, socially and culturally given meanings to space as masculine and feminine, are influenced by everyday interactions of subjects and vice versa. Fenster (1999, p.228), argues that power relations within communities impacts these cultural norms projected on space, and “Identifying spaces as forbidden or permitted is actually a spatial emphasis of the patriarchal power of men over women, and the resultant limitations imposed on the mobility of women. These cultural meanings attributed to space include codes of 'honor', 'modesty', 'shame', 'disgrace', 'manhood', 'women as property', and 'men as women's owners'. These codes create and determine the spatial boundaries of the individual.”.

Therefore, understanding how women values urban spaces is important since the meanings attributed to spaces impacts the utilization and movement in them. Literature shows that women seek to enhance their comfort and feeling of security while occupying urban space (Altman, 1975; Fisher and Nasar, 1992; Day,2000). The socially structured meanings of masculinity given to open public spaces like streets and squares, signals women possibility of danger if they enter, and commonly evoked sense is fear among women (Bondi, 1992). Women’s lack of sense of safety in public spaces may depend on various reasons including gender, race and class, however “physically designed environment is also deterministic of psychological content as to which spaces are perceived as ‘safe, ‘dangerous’, ‘welcoming’, ‘threatening’, or other qualities.” (Cuthbert,2006, p. 145).

To sum up, according to the findings of literature on masculine and feminine places and their components of physical setting, activity and meaning, Figure 2.4. is formed.

	Physical Setting	Activity	Meaning
Feminine Spaces	<ul style="list-style-type: none"> Mono-functional Land-use Playgrounds Shopping Malls Residential Buildings Schools Qualified Pavements Round/Curved Buildings Short Buildings Balconies Presence of Escape Routes Adequate Lighting Higher Visibility 	<ul style="list-style-type: none"> Domestic Activities Passivity Presence of Familiar People 	<ul style="list-style-type: none"> Safe Welcoming Nostalgia Aesthetics
Masculine Spaces	<ul style="list-style-type: none"> Mixed Land-use Sexist Signs (e.g. Graffiti) Poor Lighting Isolated Ares & Dilapilated Buildings Poor Visibility (e.g. uncut bushes) Presence of Hiding Places High Buildings Sport Venues Phallic Towers Poor Qualified Pavements 	<ul style="list-style-type: none"> Physical Exercise Presence of Strangers Progress Vitality 	<ul style="list-style-type: none"> Dangerous Threatening Modern

Figure 2.4. Framework for Reading Gendered Places

2.4. Understanding the Importance of Neighborhood Open Spaces for Mothers

2.4.1. The Concept of ‘Neighborhood Open Space’

Studies that examine behavior of residents in open spaces vary enormously in terms of the scale of the environment being measured or the definitions of the neighborhood boundary. Ball et al. (2006) showed that although many studies about the effects of neighborhood environments on people have used administrative definitions of neighborhoods, administrative boundaries might not fit with where residents are actually spending their time in their near home environments (Ball, Timperio, & Crawford, 2006). Therefore, various definitions have been applied in studies such as; 1 km (Frank, Andresen, & Schmid, 2004), 10-15 minutes’ walk (Saelens, Sallis, & Frank, 2003) or 20 minutes’ drive from home (Addy, Wilson, Kirtland, Ainsworth, & Sharpe, 2004).

The choice of an appropriate distance to define a neighborhood depends on a number of considerations. The influence of distance may vary depending on the kind of behavior being studied, the destination to be accessed, the attractiveness of the destination to the user and the likelihood of this behavior occurring close to home (Giles-Corti et al., 2005). For example, if the behavior is walking for transport, the neighborhood attributes closer to a respondent’s home will be more important than those further away (Frank et al., 2005). Moreover, the scale of neighborhoods may be further extended through vehicle use, “access to vehicles or public transport may mean that people are able to, and may prefer to, access a larger geographic area than is determined a priori as being within their neighborhood boundaries.” (Timperio et al., 2010, p.3). For example, parents of young children having a private car reported that they are willing to drive long distances to take their children to good quality parks (Veitch, Bagley, Ball, & Salmon, 2006).

However, there is currently no consensus as to how to define a neighborhood for different target groups such as children, adults and older adults (Timperio et al., 2010).

Flowers et al. (2019) found that while 3-5 years old child's walking distance for open green areas is 705 m, 6-8 years old child's walking distance is 805m. Neighborhood boundaries may be extended for adults and older children, as walking distance is likely to increase as age increases. Thus, accompany of children with parents plays an important role in defining neighborhood boundaries. However, there are no studies, which examined the conditions when the children are immobile and fully dependent on their carers.

Uteng (2011) highlighted that mobility is shaped depending on the disparities between socio-economic classes. This scholar also found that compared to the women living in high income urban areas, the women living in low income urban areas spend more time traveling by foot. She argued that access to transport resources is highly gendered and women are less likely to own a vehicle or have a license to drive (Uteng, 2011). Also in a household with one car where both spouses are employed, the car is usually used by the husband for travel to work (Franck & Paxson, 1989).

Laatikainen et al. (2018) argue that simple administrative boundaries or circular buffers are insufficient for analyzing how individuals move around. Therefore, they define two other models that are more dynamic and individual-specific. One of these models is the well-known 'home-range' model that includes all the places frequently used by residents (like grocers, shopping places, parks, squares and street corners) as they move between the home and the workplace/school. Those models present different methods like GPS tracking or participatory mapping to analyze everyday activity places, thus, areas that are not in the activity range of individual can be distinguished even if they remain in the buffered zone (Laatikainen, 2018). In this sense, neighborhood boundary varies according to one's place preference and use.

2.4.2. Importance of Neighborhood Open Spaces for Mothers

Although there are considerable amounts of research made about the use of open spaces, there are a few specifically regarding parents' or mothers' utilization of these

settings in the literature. Feminist geographers and planners have argued that most cities do not appeal to children or their caregivers (Domosh and Seager, 2001; Walker and Cavanagh, 1999; Weisman, 1994), because as Boyer and Spinney (2015) explains neither infants nor their carers follow the logic of capitalism, which is largely responsible for the shaping of the built form. Gibson-Graham (2006) notes that as a consequence, the needs of both young people and their carers are often ignored in the public realm. Boyer and Spinney (2015, p. 15) asserts that “The limited space for prams on busses and lack of lifts/elevators in tube and train stations illustrate how urban form is stratified for particular kinds of bodies and material-corporeal engagements, favoring those with the most immediate link to wage labor.” Moreover, about how built environment barriers excluding women with children Weisman (1981, p.2) notes:

“A woman with a child in a stroller, trying to get through a revolving door or a subway turnstile, is a ‘handicapped’ person. Public places rarely provide space where infants can be breast-fed or have their diapers changed—the implication being that mothers and children should be at home where they belong.”

Additionally, “the largely routinized work of journey-making are instead a matter of considerable thought and planning...” for parents (Boyer and Spinney, 2015, p. 15). As a result, mothers prefer spending more time at home rather than going out due to the challenges they have to face (Luzia, 2010). Besides, it is claimed that because of gendered tasks related to children and domestic work, women have “close relationship with their immediate urban environment”. (Garcia-Ramon et al., 2004, p. 216). In her study, Lilius (2017) found out that the parents living in Helsinki, went out approximately twice a day during their family leave and their geographical span was very local. She highlighted that “most parents a day included one necessary activity, such as going to the park or walking the baby to sleep in the stroller and one optional activity such as taking a short walk, going to look at cars or scenery or having coffee in a market square” (Lilius, 2017, p.110).

Accessibility to open and green space within their neighborhoods is especially important for certain groups of users such as mothers with babies (Lestan et al., 2014). It has been confirmed that taking children to play is one of the main reasons for visiting urban open spaces for many people (Dunnett et al., 2002). Also, the importance of play for a child's development is proven by a wide range of studies (Woolley, 2003). Moreover, researches highlight those mothers, especially the ones with young children face with isolation (Racki, 1975). Mothers use the open spaces in the immediate surroundings of their homes as a means to socialize and have a break from overwhelming domestic responsibilities of child care and housekeeping for a while. Parks, gardens, pedestrianized pathways or streets with qualified sidewalks in neighborhood provides spaces to mothers for relaxation and mothers use those places sometimes to take a fresh breath, to put babies to sleep or to meet other residents. According to the study of Racki (1975) in almost all of the mothers' perceptions, the lack of a variety of adequate, informal meeting places and play spaces both outdoors and indoors, seems to strongly inhibit the initial and subsequent fact-to-face interactions with other people.

In this sense, with regards to Relph's (1976) description of components of a place, physical setting of neighborhood open spaces influences mothers' activity. Besides just the availability of public spaces that provides opportunity for women to be involved in different activities, design and management of those spaces are important in influencing mothers' place use such as the availability of comfortable sidewalks for strollers, clean and qualified nursery rooms, noise level in those places etc. Thus, the factors affecting mother's activities in neighborhood spaces are examined in Chapter 2.5.

2.5. Factors Affecting Mothers' Use of Neighborhood Open Spaces: A Social-Ecological Model

Original approach on the socio-ecological model stems from Bronfenbrenner's work on ecological systems theory in the 1970's, which identifies five environmental systems interacting with individuals (Bronfenbrenner, 1989). His work explains the influences on behavior as a series of layers, where each layer has a resulting impact on the next level. All levels of the socio-ecological model have an impact on the behavior of the individual (Stokols, 1996). Social-ecological models are widely used as a conceptual framework to structure and understand factors influencing human behavior; such as health behavior, leisure, active living and physical activity studies (e.g. Raymore, 2002; Sallis et al., 2006; Owen et al., 2004), and on the use of urban green space (Schipperijn, 2010).

Sallis and Owen (1997) claims that social-ecological model provides a framework for examining the effects of personal characteristics, interpersonal interaction, and the physical environment on behavioral patterns. Similarly, Giles-Corti and Donovan (2001) use social-ecological model to measure the individual, social and physical environmental factors influencing participation in physical activities and to examine the relative influence of and interaction between those factors. Moreover, Schipperijn (2010) constructs a specific socio-ecological model as a framework for understanding the use of urban green spaces and he claims that behavior of use can be seen as the result of individual factors, the perceived environment, the physical environment and various interactions.

In this study the author has applied social-ecological theoretical approach as a framework for analyzing and understanding the use of open spaces in neighborhoods. Behavior in this thesis is broadly defined as any sort of visit to a neighborhood open space, frequency and purpose of use. The following specific socio-ecological model is developed for this study inspired by Giles-Corti and Donovan (2001); Sallis and Owen (1997); and Schipperijn (2010) (See Figure 2.3).

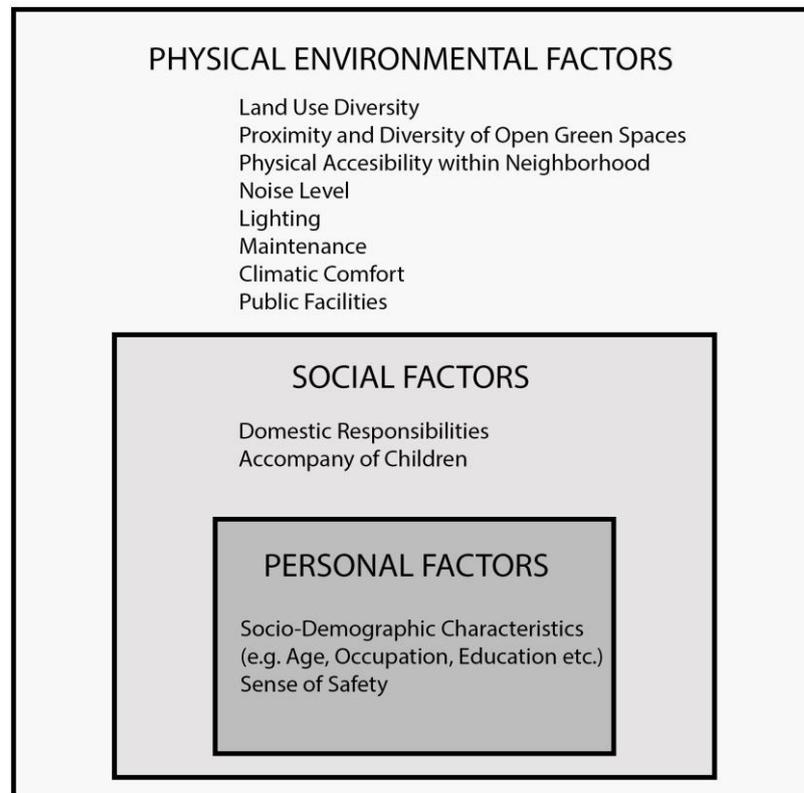


Figure 2.5. Social-ecological Model for Understanding Factors Affecting Mothers' Use of Neighborhood Open Spaces

2.5.1. Personal Factors

Socio-Demographic Characteristics:

People's uses of open spaces differ by their social and demographic characteristics (Whyte, 1980). Various studies have found correlations between individual factors; such as age, education, gender and ethnicity and people's use of open spaces (Giles-Corti et al., 2005; Schipperijn, 2010). For example, Lynch (1960) researched differences in using and accessing to public space in four American cities and he claimed that the different social groups of different races and sexes have different perceptions on built environment. Furthermore, regarding age differences about the use of open spaces Holland et al. (2007) claim that young adults are tend to visit those

spaces with large groups occupying larger sections of areas while older people are sensitive to presence of strangers and they avoid using open spaces after dark.

Men and women are argued to be reading and experiencing the physical world differently (Cuthbert, 2006). Theorists argue that the gendered organization of society and built environment limits women's activity in public spaces thus women are often mentioned as a vulnerable group (Grundström, 2005). In a study conducted in disadvantaged working class neighborhood in Barcelona, it is found out that presence of women and men are rather balanced in afternoons on the selected street, however it is occupied mostly by men, which is claimed to be because of unequal division of household tasks between the two sexes (Garcia-Ramon, Ortiz & Prats, 2004).

Day (2000) adopted the theory of "ethic of care" for examining women's experience in urban space. She argues that women's activities, their satisfaction with the use of public spaces and preferences are shaped by moral obligations of taking care of needs and sustaining relationships, which either constrain or provide possibilities for women's use (Day, 2000). With regards to Day's conception, Rezazadeh and Mohammadi (2013, p. 72) studied women's presence and types of activities in Iran, where they found that "Women are mainly present in space for necessary activities; however, men's presence is mainly for optional and social ones due to imposed responsibilities and sociocultural constraints.". Moreover, according to their research marital status and having children affects activity patterns among women, however socio-economic status or educational backgrounds are not included in the study (Rezazadeh & Mohammadi, 2013). According to Bojorquez et al.'s (2018) research on physical activity of Mexican women, participants with lower education, older women, homemakers, those with young children, and those of lower socioeconomic level are less likely to have access to public spaces. Within this framework, socio-demographic aspects like gender, age, educational and socio-economic status, marital conditions and having children affect mothers' activity in neighborhood open spaces.

Sense of Safety:

Fear of crime has been shown as a limiting factor for occupation of public space and it has been claimed to be having a negative impact on access to education, work, and leisure and reducing the trust of neighbors and strangers (Gardner, 1989; Valentine, 1990; Pain, 2000). Most recent studies of fear of crime recognize that “gender is the most consistent factor” in explaining who fears crime (Grabosky, 1995, p. 8) Thus, women’s use of public spaces is circumscribed by their perceptions of safe and fearful places (Valentine, 1990; Koskela & Pain, 2000; Day, 2000).

Also “Ideologies and images of sexual danger, supported by the media, rumour, first-hand experience and warnings from others, have a role in constructing fear in public space”. (Pain, 2000, p. 374). It is argued that women’s participation in public spaces is inhibited by the fear of violence as much as by the violence itself and ideologies and images of sexual danger, that environment reflects through media, people’s warnings or directly experienced ones, have a role in constructing fear in public space (Pain, 2000). Women’s freedom of movement and activities are restricted by fear and precautionary behaviors which is a way of control over an environment perceived as threatening (Franck & Paxson, 1989).

Research has shown that women are afraid of being attacked in urban spaces particularly in the evening (Allen, Massey & Pryke, 1999). For this reason, fear of crime keeps women off, especially after dark, and out of parks, plazas and public transit (Wekerle & Whitzman, 1995). Franck and Paxson (1989) notes that, once women are in public, unaccompanied by men, they cannot claim as much right to privacy as men can. As a result, fear of crime and harassment limits women’s right to use public spaces and causes women to exist in public urban areas only with accompany of men or by creating various compromises with them (Alkan, 2005). Besides, Valentine (1990, p. 37) notes that parents justify the fear they feel for their children by the cultural image of children as “vulnerable and incompetent in public

space”. In this sense, women’s anxiety, particularly for their children, nurtures their fears more as well (Tandogan & İlhan, 2016).

Planning strategies by theorists aim to reduce fear and encourage people to make more use of urban spaces (Pain, 2000). As Tandoğan and İlhan (2016, p. 2012) asserts “Dark subways, long alleyways, deserted areas, poorly-lit streets, empty parks and dense woodland, along with silent-isolated streets, subways and park areas are defined as urban spaces where fear of crime is highly perceived”. In this framework, physical setting is influencing factor on perceived fear of crime, therefore it can be reduced by design and management strategies.

2.5.2. Social Factors

There is voluminous literature examining the relationship between social factors and the activities held in open spaces (Giles-Corti et al., 2005; Mansfield, Ducharme, & Koski, 2012; Schipperijn, 2010; Van Hecke et al., 2016). However, the factors that were included in these studies were context specific. Many studies showed that women have various domestic responsibilities (like childcare, house cleaning and cooking), limiting their time for non-domestic activities (Day, 2000; Lilius, 2017; Turner & Grieco, 2000; Rezazadeh & Mohammadi, 2013) and mobility while accompanying their children in public spaces (Boyer & Spinney, 2015; Franck & Paxson, 1989; Lilius, 2017). However, accompanying children for outdoor activity is also a motivation for parents (Mansfield et al., 2012; Wolf, Freisthler, Kepple, & Chavez, 2017). In this study, social factors will be examined considering the given literature on mothers.

Domestic Responsibilities:

Studies show that mothers take primary responsibility for housekeeping and childcare whether or not they are employed outside the home (Franck & Paxson, 1989). Franck and Paxson (1989, p.130) notes that women, who “are more frequently engaged in

housekeeping and childcare activities which reduces the time they have available for the discretionary use of public spaces and for travel to public spaces distant from the domestic realm.”. Therefore, women having children are likely to have less leisure time to use open spaces than to women not having children (Day, 2000). Also in their study Mansfield et al. (2012) found that domestic activities were significant contributors to daily physical activity levels of mothers, leaving them with little time or energy for leisure time physical activities.

Although, female labor force participation increased over the years, the change observed in the sharing of household chores is far behind that observed in the sharing of the role of earning money (İmamoğlu, 1991). İmamoğlu (1991) asserts that this derives from social stereotypes about the perception of femininity and masculinity in housework and compared to stereotypes about the participation in paid work, stereotypes related to the sharing of household chores are more resistant. According to the OECD (2010) report, it is stated that women spend about twice as much time on home activities as men, since women spend more time on unpaid labor than men, they spend less time on other activities. Therefore, gendered norms of domestic responsibility restrict the mobility of caregivers who are mainly mothers.

Notably, Mattingly et al. (2003) argues that women’s and men’s free time differs with regards to quantity and quality, because of the domestic work, women typically spend less time on leisure activities than men do. Therefore, the constraints on women’s time and mobility due to gendered nature of childcare and housework can be lessened if other caregivers are available (Franck & Paxson, 1989). For this reason, especially single mothers are considered to be more constrained accessing the urban amenities (Jarvis et al., 2009), however, not just the availability of the father but also the availability of the third-party caregivers should be taken in to consideration.

In addition, parental decisions like giving the child to daycare hold multiple meanings for women. With the increase in participation of women in the labor market, women face various challenges balancing their work and family life, and childcare amenities

can enable women to manage the multiple roles of caring and earning (Greed, 2014). Thus, external childcare can reduce the constraints of time for leisure and other activities, whether working or not (Ekert-Jaffé & Grossbard, 2015). But also it means alterations in daily routines for all family members such as extended and/or altered commutes to and from home (Holloway, 1998) Therefore difficulties related to cost, time and location of external childcare can reduce the positive return in terms of work-family balance (Luppi & Arpino, 2016).

Accompany of Children:

Young children's mobility is strongly tied to their parent's decisions (Perrem, 2018). Thus, children are frequently accompanied by their parents in open spaces. Indeed, the supervision of children affects mothers' use of neighborhood open spaces in multiple ways, from mode of transport to selection of destination. Therefore, the design of public space should ensure possibilities of activities both for the caregiver and children.

Regarding the symbolic access, if the place is restricted to the "adults only" then the adult parents with infants will not be able to have access to that place. According to a study conducted by Lilius (2017, p. 114) among parents in Helsinki about the accessibility of and regulations for the use of space it was found out that "choosing where to go for coffee was connected to where it is alright to go inside with strollers" ; "cafeterias were chosen on the basis of where there was a room for strollers." Also one of the mothers who participated in the study mentioned that she feels like an outsider because she finds streets inappropriate to occupy with children, especially on Friday nights (Lilius, 2017).

According to the study examining experiences of parents in activity spaces, "parents cited the age of their children as a significant force that guided their activities. This was particularly evident with parents of newborns, where parenting was described as an all-consuming task due to the high needs of infants." (Wolf et al., 2017, p.9). In

addition, the biological need to nurse is also closely linking breastfeeding mothers to their children.

Thus, as the child grows old specific content of the childrearing aspect of domestic work changes for the women and recreational and educational activity outside the confines of the home and school may increase (Dyck, 2006). Yet while younger children are seen as barriers to mothers' activities, older children are reported as expanding activity spaces of mothers, as parents drive children to school, lessons, or playdates (Wolf et al., 2017).

2.5.3. Physical Environmental Factors

Previous studies have shown that physical characteristics of neighborhood environments affects the behavior of its residents (Cleland et al., 2008; Giles-Corti et al., 2005; Mansfield et al., 2012; Salvo et al., 2018). Therefore, in order to understand physical environmental factors affecting mothers' neighborhood open space use, neighborhood aspects are examined, under seven categories:

Land Use Diversity:

Functional separation and the strict separation of public and private spaces reinforce the existing traditional gender role separation in society and it provides difficult or useless solutions for the inhabitants with different needs (Jarvis et al., 2009). Sprawled and suburban built environments has been criticized for being a spatial reflection of domestic and waged labor separation, which reinforces the socially structured gender norms and isolates women from public spheres (Hayden, 1980; Madanipour, 2003; Saegert, 1980; Aitken, 2000). Uteng (2011, p.15) claims that regardless of one's socio-economic status, "expansion of urban areas, relocation of slums, booming satellite townships handicaps women to a greater extent than men."

Single use zoning means separation of residential areas from commercial areas and dependence on private vehicle (Silbaugh, 2007). In traditional mixed-use

neighborhoods, therefore the distances between uses are reduced which means less time and money expenditure for travelling to everyday destinations like school and shopping (Silbaugh, 2007). As the primary caregiver, women must cope with the tasks of nursing children, household chores, paid work and all related trips and due to these complicated tasks it has been revealed that women make frequent, irregular and short-term trips to shopping centers, nurseries, schools and work (Monk & Hanson, 1982; Hayford, 1974). Mackenzie (1989) highlights that the current form of built urban environment challenges the dual role of women; residential areas presupposed a person who devoted all her time to organizing home life and this assumption put pressure on women, especially those who are living independently and who has double-income or single-parent families. Mixed-use developments where different uses are in proximate distance generally enable walking or, at least, choice in travel mode, while single use zoning creates car dependency. All in all, in traditional mixed-use urban environments, a person with complicated responsibilities can meet his/her needs without time or transportation investment.

Jane Jacobs (1961) argues that death in urban areas is caused by the elimination of pedestrian activity from urban streets and vital urban life meant streetscape filled with pedestrians at all times of the day. Urban vitality is lacking in environments that depend on private car ownership and adopted single-use development. According to Jacobs (1961), streets with different uses provide opportunities for various activities for pedestrians, thus allowing vitality all hours of the day. Similarly, Krier (as cited in Carmona et al., 2010) argues that all the daily functions of urban life such as dwelling, working and leisure, should be integrated in urban territories. Researchers highlight the isolation that mothers experience especially during the family leave (Holloway, 1998; Racki, 1975). Thus, Lilius (2017) claims mixed-use land use can help both of the parents, coping with the isolation and complicated tasks of caring. Availability of destinations may increase the time spent on leisure activities in neighborhood open spaces. Therefore, as it is claimed to be an important component of urban diversity,

mixed land use increases the potential for social interactions because of the spatial proximity between different land uses (Duany, Speck & Lydon, 2010).

Proximity and Diversity of Open Green Spaces:

The open green spaces that locate in immediate home environment can differ according to scale, proximity or functions. Those physically closest to home can be; private gardens, community gardens and allotments and ones physically further can be parks, playgrounds, playing fields and sports grounds (Woolley, 2003). Green open spaces in neighborhoods can attract different residents; such as play areas, local parks that serve a small unit, district parks which serve a number of units and on the largest scale linear parks, community gardens and country parks on the largest scale (Woolley, 2003).

The accessibility of open spaces is usually assumed to be the most important factor affecting mothers' use of neighborhood environments. Researches showed that the decision to participate in neighborhood recreation open space is dependent on the proximity of those spaces to the users' home (Schipperijn, 2010; Woolley, 2003). Paşaoğulları and Doratlı (2004) claims that there is a positive relationship between the accessibility of a public space and utilization, thus a well-used public space is centrally located in a neighborhood, which is close to the residential units. However, Giles-Corti et al.'s study (2005) on the western Australian city of Perth revealed that among open spaces with similar scales, 70% of the respondents opt to visit open spaces that they find most attractive rather than the nearest ones.

Neighborhood urban open green spaces relates not only with physical issues but also with the social context. Woolley (2003, p.88) notes that "The people that one might meet in the range of neighborhood urban open spaces are likely to be the people who live and possibly work in the area. This could involve different networks of people such as residential neighbors, workmates, parents, carers and staff from nursery or school as well as people from other activities in life such as clubs, organizations and religious and cultural groupings." Therefore, abilities and demands of using the open

green spaces vary by interests of different groups of people, understanding users' interests and needs help designers to plan successful open spaces (Dunnett, Swanwick, & Woolley, 2002). Thus the range of facilities provided will generally appeal to more diverse user groups; like children, elderly and women.

Paşaoğulları and Doratlı claim that (2004, p. 226) “at the scale of neighborhood, public spaces should stop occupying residual space or buffer zones between segregated uses.” and “neighborhood parks should be designed for both active and passive uses.”. Mothers are most likely to accompany children to parks or open space as part of their leisure activities. Public parks are fundamental features of livable and enjoyable higher-density communities, and these areas serve to the residents or users of neighborhood as being the “meeting places, recreational activity centers, childcare facilities, and lunchtime picnic spots” (Paşaoğulları & Doratlı, 2004, p.226). Open green spaces with easy access and good facilities can also be used as a route to destinations (Sugiyama & Ward Thompson, 2008). All in all, open green spaces that has potential for various activities and locates in close proximity may affect the environmental behavior of women residents having children.

Physical Accessibility within Neighborhood:

Public spaces should meet various needs of users including mothers with infants who experience the environment differently. The physical accessibility provided by the design of the space or the route to the space makes those places more accessible for women, especially when accompanied by children (Franck & Paxson, 1989). Referring to accessibility of public spaces Harnik (2003, p.112) notes: “A public space is accessible to everyone regardless of residence, physical abilities or financial resources. They should be sited in such a way that every resident is equitably served. Moreover, accessibility should not be based on an idealized healthy adult but rather on a senior with a cane, a mother pushing a stroller or an eight-year-old riding a bicycle.”.

Physical accessibility of urban environment is challenging for the caregiver in different ways, especially depending dependent mobility of the infants. Caregiver, the mothers in this case, may be pushing strollers, carrying their baby or holding a child's hand for support. Each option is limiting mothers' mobility and movement.

Previous research has shown that walking is preferred as transportation when there are qualified pathways to reach the open spaces (Sugiyama & Ward Thompson, 2008). Local streets are preferable to major arterials and being the links between private and public spaces, sidewalks are significant (Talen, 2000). According to the UN Habitat Report of Gender Issue Guide: Urban Planning and Design (2012) sidewalks should be low and wide enough for strollers, wheelchairs, and walkers. Also according to the Building for Everyone: A Universal Design Approach guidance (2017, p. 62) it is asserted that: "Smooth paving surfaces are easier for everyone to navigate and are particularly valued by people pushing prams and pushchairs and by people who use wheelchairs and walking aids.". Furthermore, gratings can be hazardous to wheelchair users, parents with prams and women with high heels, besides, some people with mobility difficulties find steps easier to use than ramps, while ramps are beneficial for people using wheelchairs and people with prams or luggage.

Besides walking, public transportation may also be an important factor affecting open space use. Many public transit users are walking to transit (Lachapelle et al., 2011), which means they spend time by walking in neighborhood open spaces. Also, residents may prefer public transportation to reach open spaces within neighborhood.

Moreover, motorized traffic is another aspect with a deep impact on open space use. As high intensity of traffic threatens safety of environment, pedestrian activity in streets decreases (Appleyard, 1981). While the physical separation of pedestrian and motorized flows has been the most common measure to secure pedestrians, crosswalks, pedestrian signals and traffic lights should also be used where appropriate so as to make open spaces more accessible to people. Additionally, accessibility of car parks and public transportation stops should not be disregarded examining the

physical accessibility considering that journeys can be made by various modes of transportation (Christian et al., 2014)

Noise Level:

Environmental “soundscapes” are part of open space experiences (Carmona et al., 2010) and it has an important role in public space design (Yang and Kang, 2005), thus it can affect open space use positively or negatively. As Lang (as cited in Carmona et al., 2010) mentions, sonic comfort is not only about the level of sound but also the kind of sound and the perception of the hearer. Because that infants can be more sensitive to loud sounds, noise levels in open spaces may be especially important for women with babies. King et al. notes that (2012, p.1018) “Road, rail, and air traffic sources account for the majority of noise in urban and surrounding areas. Additional sources of noise include industrial/commercial enterprise, construction projects, and such familiar domestic sources as pets and radios/stereos.”. According to the research they conducted in Canada, it is found out that mixed use neighborhoods are more exposed to noise than residential neighborhoods (King et al., 2012). However, it is suggested that urban design elements that creates positive sounds such as waterfalls and fountains, can mask traffic noise (Carmona et al., 2010).

Lighting:

Studies show that “women are less likely to use public spaces with poor visual access” thus visibility is an important factor in enhancing mothers’ feelings of comfort and security (Franck & Paxson, 1989, p.135). Quality lighted environments have larger visual potential therefore can be more attractive and frequently used. In other words, public space use after dark requires efficient lighting. Especially considering the safety concerns of mothers, adequate illumination of main footpaths and key access routes is important to ease women’s discomfort and anxiety (UN-Habitat, 2012).

Maintenance:

Carmona et al. (2010, p 261) assert that “Effective maintenance of the public realm requires the creation and preservation of a clean, healthy and safe environment.”. Several researches show the significance of upkeep for use of urban spaces (Lynch, 1960; Nasar, 1990). Nezhadmasoum (2015, p. 51) defines that “lack of upkeep is associated with dilapidation, dirtiness, weeds, poles, wires, signs and vehicles as well as physical incivilities, which create social disorder.”. Neglected open spaces and empty lots may often be associated with undesirable and illegal activities such as vandalism, which threatens the users, especially women and children (Lo & Jim, 2010). Thus perceived safety of women, especially when accompanied by children, can be supported by well-kept environment. Moreover, children are more vulnerable to diseases and environmental hazards, thus living environments can affect them more seriously than adults (Bartlett, 1999). In this sense, poor standards of hygiene in neighborhood open spaces threaten children’s health and perceived cleanliness may affect mothers place use.

Climatic Comfort:

The weather often comes up in the list of factors that people find significant while deciding to use open spaces. Previous studies identified thermal comfort as a fundamental parameter affecting outdoor activities (Givoni et al., 2003; Vanos et al., 2010; Vanos, 2015). It is argued that the use of open spaces requires various conditions such as adequate sun, shade and breeze (Givoni et al., 2003). Vanos (2015) highlights that young children are more vulnerable adapting the changing microclimatic conditions, thus she claims the environment should be climate-responsive. According to a research conducted in Canada by Mansfield et al. (2012, p.10) “the warmer summer weather was identified by many mothers as an environmental support of both utilitarian and leisure time physical activities.”. In this sense, weather conditions have a significant effect on mothers’ activity in open spaces.

As Carmona et al. (2010, p.205) notes, urban space should be “responsive to differing micro-climatic and weather needs; offering shelter, but also access to the sun when required”. Regarding the vegetation and plants, Seçkin (2018, p.198) highlights that “along with their decorative function they could act as windbreaks in the winter, as shading devices and evaporative coolers in the summer, and as light filters all year long.” She adds that, in landscaping, deciduous trees and shrubs can be used to block summer sunlight and also allow winter sunlight to reach the building.

Public Facilities:

Accompanying young children while using public space means, practicing caring outside the home, which comes with lots of requirements for parents and public toilets are one of them. Beebeejaun (2017, p.329) claims that “sufficient public and well-maintained toilets provide opportunities for women to spend greater amounts of time walking or moving within the city.”. However arguing that there is a decline in the amount of public toilets she adds “quasi-public spaces such as department stores and malls provide toilets and other women-friendly amenities, but these are more accessible to wealthier socioeconomic groups” (Beebeejaun, 2017, p.329).

Some feminist designers argue that public spaces do not provide sufficient and well equipped public toilets (Weisman,1994; Greed,2003; Boyer, 2012). While public parks do not usually have toilets, baby changing tables are even hard to find. Greed (2003, p.225) claims that the provision of public toilets should be responsive to the needs of women with children: they “... should be fully pushchair-accessible and baby changing tables should be provided in separate compartments.”

One of the most argued topics about caregiving in public is about breastfeeding. Mathews (2018, p.12) highlights that “While breastfeeding is supported in health policies and through a socio-legal standpoint, it is typically constructed as a private act.”. Boyer (2012) explains that within the patriarchal framework, act of breastfeeding belongs to home like other care works that should be done by women and also display of women’s breasts is vulgar as its primary function is fulfillment of

male sexual desire. She argues that some women may seek private spaces for nursing to maintain both of their own and baby's comforts, but the assumption that women would prefer an enclosed dark space reinforces that it should be done in private (Boyer, 2012). Nevertheless, provision of clean and accessible public nursery rooms and qualified public toilets may increase mothers' use of neighborhood open spaces.

2.6. Concluding Remarks

In first section of this chapter, the concept of space is examined, which was identified with geometric and locational meanings until 1970s. Later, studies of theorists who consider space as the product of social production processes are researched and the integrating meanings of space and place concepts are examined highlighting subjectivity and experience as distinctive features of place. In accordance with the examination of place concept, Relph's (1976) identification of three mutually influential place components are further explained; physical setting, activity, meaning.

Secondly, the importance of built and natural urban open spaces, which are increasingly recognized by researchers, is examined under four headings based on other studies as; social, health, environmental and economic. Later, types of activities that occur in open spaces are addressed as necessary, optional and social activities according to Gehl's (1987) definition. Then, based on the conceptions on place and Relph's definition of its components neighborhood open spaces are deduced into two as green spaces and civic spaces according to their distinctive physical aspects and possibility of activities they provide.

Then, with regards to socially produced dynamics of both gender norms and space, feminist theorists' examinations on the spatial reflection of gender divisions are addressed. It is noted that, masculine and feminine spaces are reflection of the segregation of gendered activities deriving from the traditional roles attributed to men and women. Feminist geographers have emphasized that gendered distinction of spaces distances women from public environments in many different ways. In

accordance with the literature, gendered features of the spaces have been examined under the titles of physical setting, activity and meaning which Relph defined as components the place.

Lastly, the importance of neighborhood open spaces for mothers is emphasized in accordance with the information based on the definition of problem that especially the women who are responsible for child care cannot spare much time to social and optional activities and the place they perform these activities are limited to the immediate surroundings of the home. Furthermore, it is argued that the neighborhoods cannot be defined in accordance with administrative boundaries or walking distances that adopted in other studies because it can vary according to the perception of specific users and type of activities they perform. Finally, according to the literature review, it is found that the activities of mothers, within different neighborhood contexts in terms of gender, are influenced by various interrelated factors. These factors are examined in accordance with the social-ecological model developed by Bronfenbrenner (1989) and under the headings of personal, social and environmental.

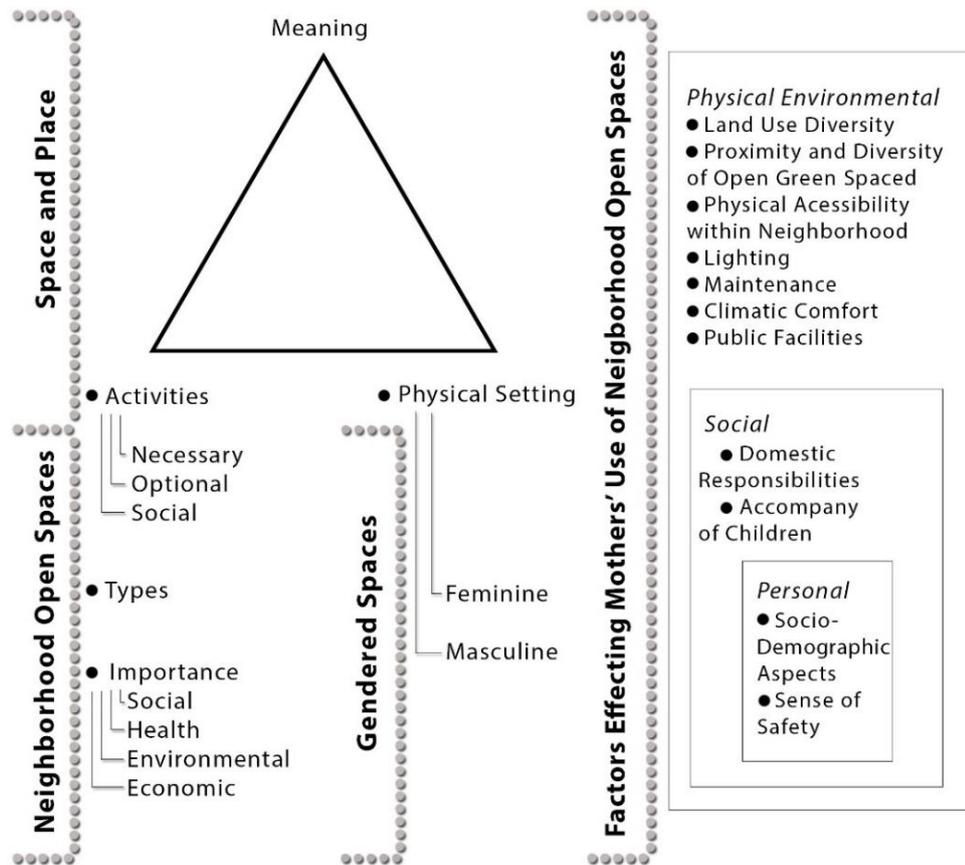


Figure 2.6. Concluding Remarks of the Literature Review

CHAPTER 3

METHOD

3.1.1. Site Selection

This study followed a multi-case study approach. In order to assess mothers' use of neighborhood open spaces and factors affecting their behavior, research is carried out in two different neighborhood contexts. Main reasons for selection of multiple cases are analyzing the effects of different physical environmental settings within different contexts and to synthesize key findings from each one.

Two contradictory neighborhoods were selected in accordance with their physical characteristics based on the findings obtained from the literature review on gendered spaces and the factors affecting mothers' use of space (See Figure 2.4. and Figure 2.5.). The first one is the traditional neighborhood of Mamak District, Kutlu Neighborhood, and the other one is Yapracık TOKİ Houses in Etimesgut District, a mass housing satellite neighborhood. As will be explained in the following sections, once these two neighborhoods were selected, mothers living in each setting were asked to participate in the study. Assuming that the place use differs in different physical environments, mothers living in these two neighborhoods are expected to exhibit different patterns of behavior in terms of use of open spaces. In other words, it was assumed that mothers' open space use differs in neighborhoods that differ in terms of gender codes.

Although the selected neighborhoods are mostly different in terms of physical environmental characteristics, they are not very different in terms of socio-demographic characteristics. As it is examined in the Chapter 2, mobility is shaped by different socio-economic classes and genders (Uteng, 2011). Therefore, in order to assess the role of the physical environment in mothers' use of space, it is important to fix the income status and car ownership rate for the accuracy of the assessment.

Accordingly, the study is conducted within socio-economically lower-middle income class neighborhoods where the mode of travel is assumed to be mostly by foot. Here, the author acknowledges the fact that because the study was conducted in two different settings with two different groups (one living in a mass housing estate and the other one living in a traditional neighborhood context), it is impossible to perfectly understand the impact of different physical attributes of residential areas on mothers' use of place. However, a comparison of how mothers living in different neighborhood contexts with different physical but similar socio-demographic characteristics may provide a starting point for understanding the role of the design of human settlements on their residents' place experiences.

The physical settings of the neighborhoods were examined in the context of feminine and masculine gender codes reflected on the space. Kutlu Neighborhood has an area of approximately 0,80 km² within the administrative boundaries and it is 4 km away from the city center. The approximate area of Yapracık TOKİ houses is 2 km² and it is located 29 km away from the city center.

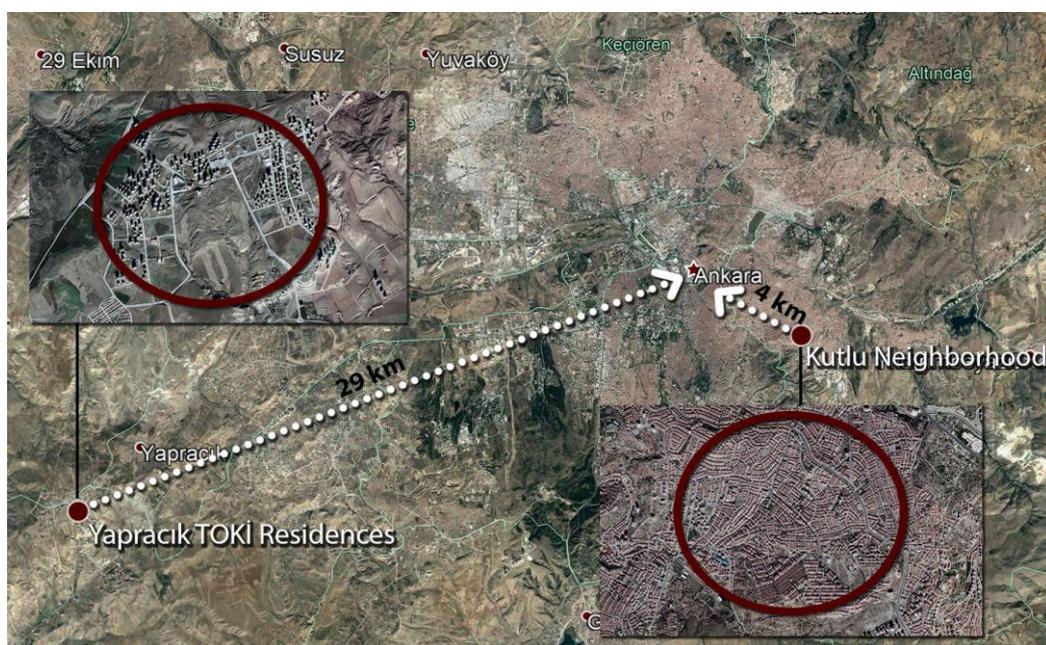


Figure 3.1. Locations of Selected Sites in Ankara

Land-use Diversity

Comparing Kutlu Neighborhood and Yaprak TOKİ Residences in terms of land use, it is observed that Kutlu Neighborhood, as a traditional mixed-use neighborhood, is much more diverse and dense. There are various commercial and service areas along the Mutlu and Dereboyu Streets which are serving in and around the neighborhood. In the building blocks, it is common to come across the market areas on the ground floors of the residential buildings. In addition, on certain days of the week, the neighborhood market is established at 482. Sokak (482nd Street) and there is a closed market area near the administrative neighborhood boundaries. It identified that there are primary schools with pre-school classes in and around Kutlu district, as well as 3 active kindergartens. The distribution of green area in the neighborhood and other recreation areas are shown on the Figure 3.2.



Figure 3.2. Land Use of Kutlu Neighborhood (red, brown, green and blue colors indicate mixed-use [commercial and residential], residential, parks and education areas respectively)

The residents and other uses are completely separated from each other in the Yaprak TOKİ Residences. In addition to large grocery stores in the area, there are buffets for daily needs in certain places. Most of the commercial and social reinforcement areas are concentrated at a point where it may be the geographical center of the neighborhood. Also there is a closed market area that serves on Sundays. There are preschool classes and play time services in the primary schools in the neighborhood. The distribution of uses in the neighborhood is as shown in the Figure 3.3.



Figure 3.3. Land Use of Yaprak TOKİ Residences (red, brown, green and blue colors indicate mixed-use [commercial and residential] or commercial, residential, parks and education areas respectively)

If the neighborhoods are examined in terms of land-use, Kutlu Neighborhood can be classified as masculine environment as it is mixed-use and compact development. Besides, Yaprak TOKİ Residences can be identified as a feminine environment due to the low density development that separates the uses from each other.

Green Spaces

The green areas around Kutlu Neighborhood and its surrounding commonly have children's playgrounds and various seating groups (See Figure 3.4.). The TOKİ region, which has a lower density in terms of land use, is richer and more diverse in terms of green areas (See Figure 3.5.). There are sports venues and walking trails as well as playgrounds and various seating groups. Besides the public parks under the supervision of the municipality, there are small scale parks with children's playgrounds within the residential building blocks.

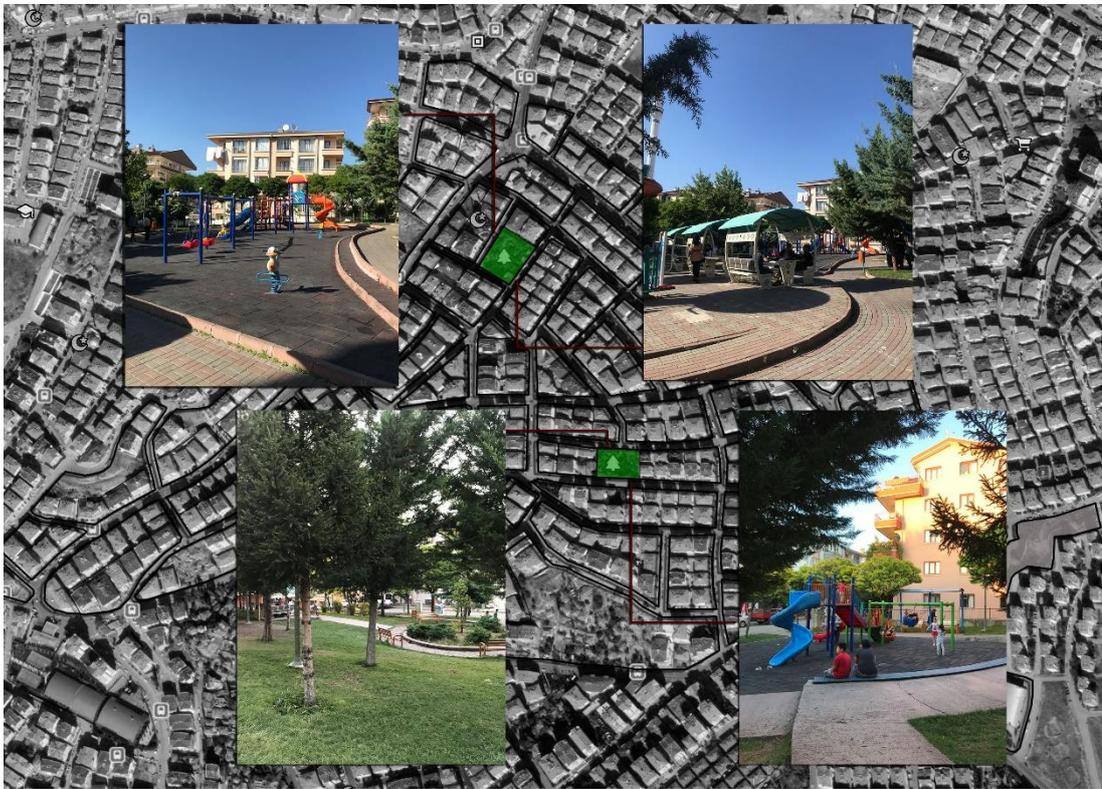


Figure 3.4. Green Spaces in Kutlu Neighborhood

When evaluated in terms of green areas, TOKİ region can be more feminine due to the abundance of playgrounds, but the sports venues that are stated to be masculine are also concentrated in TOKİ.



Figure 3.5. Green Spaces in Yaprıcak TOKİ Residences

Built Form

In Kutlu Neighborhood, 4-5 storey residential apartments are common. In the Yaprıcak TOKİ region, there are 7 and 16 storey apartment buildings. The exemplary façades of the buildings and street section representations are as shown in the Figure 3.6. and Figure 3.7. Although there is not a significant difference in windows, the balconies of the apartment buildings in the Kutlu Neighborhood are generally larger. In this context, it can be interpreted that the residential buildings in Kutlu Neighborhood have more feminine features regarding the size of their balconies. On the other hand, with respect to the building height, Yaprıcak TOKİ is more feminine compared to Kutlu Neighborhood. In other words, according to the feminist literature, while the apartment buildings in Yaprıcak TOKİ promote the private realm, apartment buildings in the Kutlu Neighborhood facilitate women's participation to the public life because of their close interaction with the street activities.

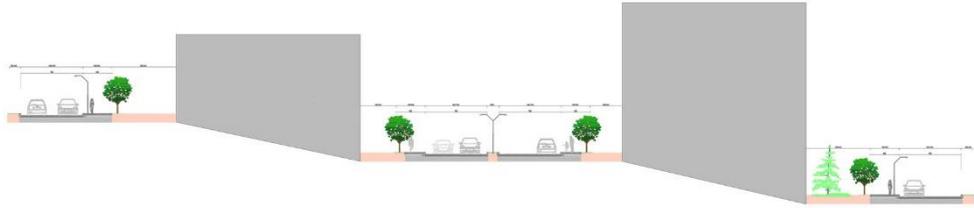


Figure 3.6. Representation of Built Form in Kutlu Neighborhood



Figure 3.7. Representation of Built Form in Yaprak TOKI Residences

Pedestrian Ways and Vehicle Traffic

In Kutlu Neighborhood, pedestrian access is generally provided by the sidewalks surrounding the vehicle roads. In Yaprak TOKI region, in addition to the sidewalks, there are pedestrian pathways that serve residents within the building blocks and since this area is not centrally located, there is very little vehicle traffic observed. On the contrary, The Kutlu neighborhood is surrounded by busy streets, thus vehicle traffic is intense. With respect to the observed quality of the pedestrian roads and pavements and vehicle traffic, Yaprak TOKI region has more feminine characteristics.



Figure 3.8. Exemplary Pedestrian Way and Vehicle Traffic Photos from Kutlu Neighborhood



Figure 3.9. Exemplary Pedestrian Way and Vehicle Traffic Photos from Yapracık TOKİ Residences

Other Physical Aspects

Standardized street lighting is used in both neighborhoods. In Yapracık TOKİ region, there are broad undeveloped and unstructured areas which are not actively used. On the other hand, in the Kutlu Neighborhood and its surroundings, dilapidated buildings and vacant parcels are observed. In addition, no signs of sexist graffiti and posters

were found in open spaces in either neighborhood. Therefore, these mentioned physical characteristics of the gendered spaces were not distinctive for both neighborhoods.

3.1.2. Selection of the Participants

In accordance with the purpose of the study, convenience sampling method is used, which is one of the non-probability sampling selection techniques. The interviews are conducted with the first 10 mothers who agreed to participate in the study in both of the neighborhoods. Mother participants are selected based on a number of criteria. As it is mentioned previously, mothers' use of public spaces is highly dependent on their age and number of their children. Therefore, first of all, mothers who have at least one child age in the 0-6-year age range (young children) were selected as research participants. Secondly, equal numbers of women were intended to be chosen in terms of their ages. The age range of the participants was between 26-40 (early adulthood) (See Table 3.1.). On both of the selected neighborhoods, the majority of the participants had a high-school diploma and no job (See Table 3.2. and Table 3.3.). In the tables below, age distributions, educational backgrounds and job status of the participants from each neighborhood are given respectively.

Table 3.1. Age Distributions of the Participants

Age	<i>Kutlu Neighborhood</i>		<i>Yapracık TOKİ Residences</i>	
	Frequency (n)	Percent (%)	Frequency (n)	Percent (%)
26	1	10	-	-
27	1	10	1	10
28	-	-	2	20
29	-	-	-	-
30	3	30	2	20
32	1	10	-	-
33	3	30	1	10
34	-	-	1	10
35	-	-	2	20
37	-	-	1	10
40	1	10	-	-
<i>Total</i>	<i>10</i>	<i>100</i>	<i>10</i>	<i>100</i>

Table 3.2. Educational Background of the Participants

Educational Background	<i>Kutlu Neighborhood</i>		<i>Yapracık TOKİ Residences</i>	
	Frequency (n)	Percent (%)	Frequency (n)	Percent (%)
Primary School	1	10	-	-
Middle School	4	40	2	20
High School	5	50	8	80
<i>Total</i>	<i>10</i>	<i>100</i>	<i>10</i>	<i>100</i>

Table 3.3. *Job Status of the Participants*

Job Status	<i>Kutlu Neighborhood</i>		<i>Yapracık TOKİ Residences</i>	
	Frequency (n)	Percent (%)	Frequency (n)	Percent (%)
Unemployed	8	80	7	70
Full-time Employed	2	20	3	30
<i>Total</i>	<i>10</i>	<i>100</i>	<i>10</i>	<i>100</i>

3.1.3. Data Collection and Analysis

Data is obtained from in-depth semi-structured interviews with the selected participants and field observations. The interview is conducted two days during the week and one day in the weekend, in the selected parks of both neighborhoods: Şehit Astsubay İrfan Türker Park in Kutlu Neighborhood and Bağbaşı Park in Yapracık TOKİ region (See Table 3.4.). With regards to information derived from literature review, that boundaries of the near home environment vary from person to person and that proximity is an important factor in the use of neighborhood open spaces. This led the Author to select one setting (park) in neighborhoods to control the proximity of participants' residences.

Table 3.4. *Dates of Conducted Interviews*

<i>Site</i>	<i>Dates</i>	<i>Hour</i>
<i>Kutlu Neighborhood</i>	03.08.2019	17:00-20:00
	05.08.2019	17:00-20:00
	07.08.2019	9:30-11:30
<i>Yapracık TOKİ Residences</i>	04.08.2019	17:00-20:00
	06.08.2019	17:00-20:00
	08.08.2019	9:30-11:30

The interviews were carried out in the summer season, between 9:30-11:30 when the sun exposure was less, and 17:00-20:00 when the effect of direct sunlight was decreased. It was assumed that the author could reach to more participants in this season of the year and time spans, since public spaces are more effectively used in good weathers for recreational purposes (see Gehl, 1987). All interviews took approximately 45 minutes.

The interview questions were designed in accordance with the data obtained from literature review and the questions used in previous studies. The interview consisted of 3 parts (see Appendices A). In the first part, open-ended questions, in the second part, closed-ended questions were asked to participants. The last part aimed to understand participants' socio-demographic characteristics.

In the first question of the first part of interview, the data was collected by a mapping technique. Participants were asked which areas they were frequently using within their near home environment. They were expected to mark these places with stickers given in accordance with the legend prepared in advance such as green areas, commercial areas and other urban service areas. Accordingly, for the next question participants were asked why they frequently used those places they marked on the map. In the third question, participants were asked what they found to be encouraging to use open spaces in their neighborhood as a mother. For the fourth question, therefore, participants were asked if there are places that they cannot use and they were asked to explain why they cannot use those places. Lastly it is asked, in a normal day when weather is fine, how much time they were spending in their near home open spaces in a week and weekend day. The responses were recorded by the author in a diary. To increase the accuracy of the results, once the author recorded what she had heard from the participants, the author read aloud what she wrote on her diary so that the participants can confirm whether there were any issues in the recordings.

In closed-ended questions, participants were asked if they agreed with the statements presented (See Table 3.5.). All these questions were asked in a 5 point Likert scale,

from “Strongly Disagree” to “Strongly Agree”. These statements were based on the findings from the literature review. After the answer of each question was marked on the questionnaire form, mothers were also asked if they agree that the statements influenced their use of open spaces around their home.

Table 3.5. *Statements of Close-ended Questions*

<i>Factors</i>	<i>Statements</i>
<i>Personal Factors</i>	Demographic Information
	Feelings of comfort or safety using open spaces with children or alone
<i>Social Factors</i>	Feeling social and cultural pressure when using open spaces
	Discomfort caused by breastfeeding in open spaces
	Availability of other caregivers
<i>Physical Environmental Factors</i>	Availability of various spaces that attracts women with children
	Availability of various spaces that attracts women
	Availability of accessible and qualified preschools
	Adequate lighting
	Adequate sitting
	Discomfort caused by unused and dilapidated areas
	Quality of pedestrian roads and pavements
	Availability of public baby care and breastfeeding facilities
	Presence of elements to be protected against environmental factors
	Maintenance and cleanliness of environment
	Discomfort caused by noise
	Discomfort caused by the height of buildings
	Pedestrian safety in terms of traffic
Proximity and frequency of public transport	

Before the actual interviews, pilot interviews were conducted in open spaces with two mothers with young children. After the pilot interviews, the language of the previously prepared questions was revised, the scale and size of the map to be used were reformed, and the other tools required during the interview were arranged.

The data set from the 20 interviews were: 20 frequently used places maps, 24 pages of transcribed interview text and 80 pages of close ended questions. Intensity of use is shown for each neighborhood in accordance with the maps marked by the participants. The answers of the open-ended questions were transcribed into written text and thematic content analysis was conducted. Lastly, closed-ended evaluation questions and demographic data were analyzed with IBM SPSS Statistics 22 program.

CHAPTER 4

RESULTS

4.1. Findings of Mothers' Use of Neighborhood Open Spaces

Yapracık TOKİ Residences

Participants were asked to name the places that are frequently used in their near home environments. They were also asked to mark those places in maps. Figure 4.1. shows these places, with respect to types of uses such as commercial areas, open green spaces, educational, health and other service areas. The larger concentric circle is, the higher frequency of use is indicated. According to the figure, it is seen that the most preferred green open space by mothers in Yapracık TOKİ is Bağbaşı Park. It is also seen that the commercial areas in the geometric center of the neighborhood and the market area in the western part of the neighborhood are frequently preferred places for shopping. Distribution of marked places in the figure, shows that mothers travel farther places for shopping while they prefer using nearby green open spaces. Thus, three of the participants stated that they use different means of transportation while shopping:

“We go shopping by car. While my husband is at work, I use shuttles of the shopping centers. Those shuttles are free only if you spend 50 TL in the shopping center.” (A 33-year-old mother living in Yapracık TOKİ)



Figure 4.1. Places That Mothers Frequently Use in Yapraklı TOKİ Residences

In Table 4.1. the reasons why participants use open spaces are listed in accordance with their answers. Most of the statements were about their children: five of them stated that they take out their children for playing, two of them stated that they want to enable their children to socialize and one of them stated that she wants her child to get fresh air. The rest of the answers cover individual reasons: three of the mothers indicated that they use open spaces to get fresh air for themselves, one stated that she walks or jogs and one other stated that sometimes she picnics outside.

Table 4.1. Mothers' Activities in Yapracık TOKİ Residences

<i>Remarks Reasons of open space use:</i>	<i>Frequency of Remarks (n=10)</i>	<i>Percentage (100%)</i>
Enabling the child to play with other children	5	50%
Getting fresh air	3	30%
Enabling the child to socialize	2	20%
Walking/jogging	1	10%
Having a picnic	1	10%
Enabling the child to get fresh air.	1	10%

Participants were asked how much time they spent in their near home environments, on weekdays and weekends; Table 4.2. shows the given answers.. Four of the mothers, two of whom work in a full time job, could not answer the question and they stated that it changes circumstantially. Another mother who is also working in a full-time job stated that she uses open spaces 30-45 minutes from time to time. It can be interpreted that working mothers may have more complex time schedules for using open spaces. Also one of the participants stated that she prefers spending time in other places in the city on weekends:

“On weekends, my husband and I go to Çayyolu or town center. There's not any places for spouses and kids in here.” (A 28-year-old mother living in Yapracık TOKİ)

Table 4.2. Time that Mothers Spend in Open Spaces in Yapracık TOKİ Residences

	<i>Weekdays</i>	<i>Weekends</i>	<i>Total</i>
Duration			30-45 min. sometimes
			2 hours everyday
	2 hours	6 hours	
			2 hours everyday
	4 hours		
			Minimum 1 hour everyday

Kutlu Neighborhood

The places, where participants from Kutlu Neighborhood indicated that they frequently use are shown in Figure 4.2. Likewise Figure 4.1., colors are differentiated according to types of use and large concentric circles indicate higher frequency of uses. According to the figure, participants prefer different places within their near home environment for commercial purposes. However, their preference for green space use is concentrated in the Şehit Astsubay İrfan Türker Park. Also, two participants marked “other service areas” and indicated that one of those places is bakery and other one is patisserie.

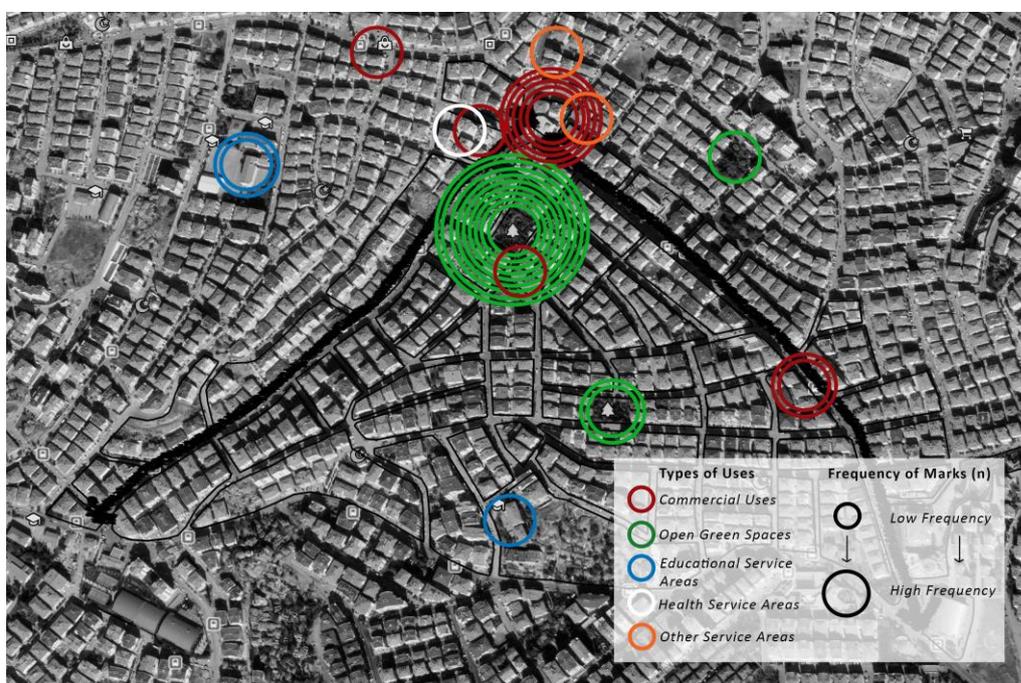


Figure 4.2. Places That Mothers Frequently Use in Kutlu Neighborhood

Participants were asked what they usually do in their near home environment and their answers are shown in the Table 4.3. Remarkably, none of the participants from Kutlu Neighborhood mentioned their individual activities. Four of the mothers stated that they use open spaces for their children to play outside or ride a bike, three of them indicated that they use open spaces for their children to get fresh air and two of them stated that they take their children out to be more active:

“My mother takes care of my son during the day, but he gets bored all day at home. When I come back from work, I take him to the park for him to use up his energy.”
 (A 33-year-old mother living in Kutlu Neighborhood)

Table 4.3. *Mothers’ Activities in Kutlu Neighborhood*

<i>Remarks Reasons of open space use:</i>	<i>Frequency of Remarks (n=10)</i>	<i>Percentage (100%)</i>
Enabling the child to play	4	40%
Enabling the child to get fresh air	3	30%
Enabling the child to be more active	2	20%

Four of the users, who were asked how much time they spent in the open spaces of the neighborhood, couldn’t give an exact answer, indicating that it changes circumstantially. Amount of times that other participants indicate that they spend in open spaces are shown in Table 4.4. One of the two working participants did not give an answer and other working mother indicated that she can only use open spaces for one hour in her off days:

“I’m only off from work on Tuesdays, so I can go out for an hour and make my daughter play in the park. I come home too late on the other days and I want to rest. I have no more time.” (A full-time working mother living in Kutlu Neighborhood)

Table 4.4. *Time that Mothers Spend in Open Spaces in Kutlu Neighborhood*

	<i>Weekdays</i>	<i>Weekends</i>	<i>Total</i>
Duration			5 hours everyday
			1 hour everyday
			1 hour 1 day in a week
	3 hours		
	4 hours		4-5 hours everyday
			3 hours everyday

4.2. Findings of Factors Affecting Mothers' Use of Open Spaces

4.2.1. Personal Factors

Socio Demographic Characteristics

The socio-demographic information of the participants for both neighborhoods is given in Chapter 3.1. Only one of the participants was a primary school graduate, six were middle school and thirteen were high school graduates. The education level of the participants from Yaprıcık TOKİ is higher than the ones in Kutlu Neighborhood (see Table 3.2.). Two mothers in Kutlu Neighborhood and three mothers in Yaprıcık TOKİ residences stated that they were working full-time. Four of them reported that they do not have time to use the open spaces since they are working. Therefore, time limitation can be interpreted as a barrier that working mothers face using open spaces. One of the working participants from Yaprıcık TOKİ mentioned that she uses open spaces if there is any time left from domestic works:

“If I can finish my work at home quickly, I take my daughter out so that she can play.”

(A full-time working mother living in Yaprıcık TOKİ)

Safety

In open-ended questions, participants were asked if there are any reasons discouraging them from using their neighborhood open spaces. While none of the participants from Yaprıcık TOKİ mentioned safety issues, four mothers from Kutlu Neighborhood stated that their neighborhood is not safe and they do not feel secure:

“I can't leave my child alone outside in the streets because it not safe.” (A 32-year-old mother living in Kutlu Neighborhood)

Also in the close-ended questions mothers were asked to assess safety of their near home environment, considering their selves and their children. The survey results for both neighborhoods are shown in Figure 4.3. Results indicated that, while participants

from Yaprak TOKİ mostly agree that their near home environment is safe, mothers from Kutlu mostly disagree. Also the mothers were asked whether sense of safety affects their use of open spaces in their neighborhoods and Figure 4.4. shows the results. Accordingly, all but one of the participants agreed that sense of safety is a factor affecting their place use.

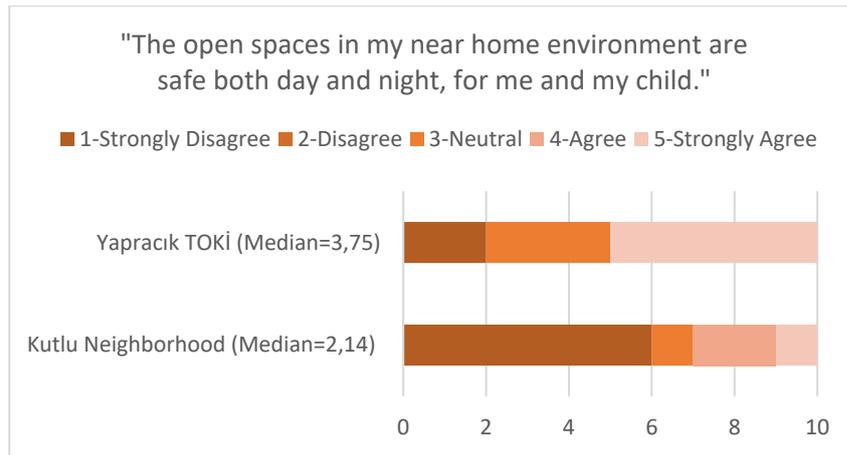


Figure 4.3. Evaluation of Safety of Neighborhoods

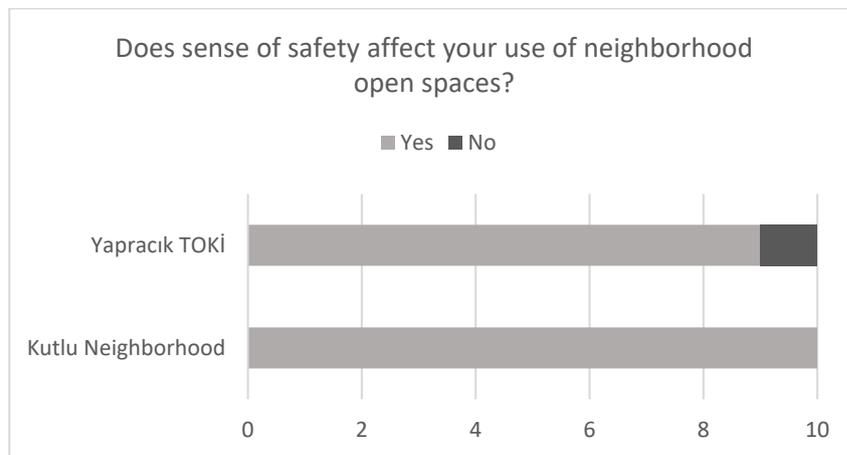


Figure 4.4. Assessment of Safety as a Factor Affecting Open Space Use

4.2.2. Social Factors

Domestic Responsibilities

According to the data collected from the interviews, three users indicated that their domestic responsibilities prevented them from using the open spaces in their neighborhood and all of them were participants from Yapracık TOKİ residences. One of those three mothers mentioned that she cannot use some of the places in her neighborhood because of her caregiving responsibilities:

“I can't go to some of the places because I have kids. For example, I want to do sports and there is an indoor sports center in neighborhood. But I prepare the children to school and I send them, then I prepare their meals and so on... There is no time left for me.” (A mother having two children living in Yapracık TOKİ)

Similarly, another participant mentioned that she can use the neighborhood open spaces only if the household chores are done. Also one of those three participants indicated that she can't find time to use open spaces because she got many children and old mother-in-law requiring care:

“I have many children, and I look after my husband's sick mother at home. It's a tough job, their needs never end. I don't have much time for other things.” (A mother having three children living in Yapracık TOKİ)

The mothers who participated in the study were asked if there are any other people that can help them for nursing their children at home and the results are shown in the Figure 4.5. Nine out of a twenty respondents answered yes. Those nine mothers, who stated that there are other helpers in their home were also asked whether they could leave the child alone and spend time by their self, and all but one said yes. These results indicate that, most of the participants are primary caregivers of their children, additionally child and elderly care and household chores can prevent them from using open spaces in their neighborhoods.

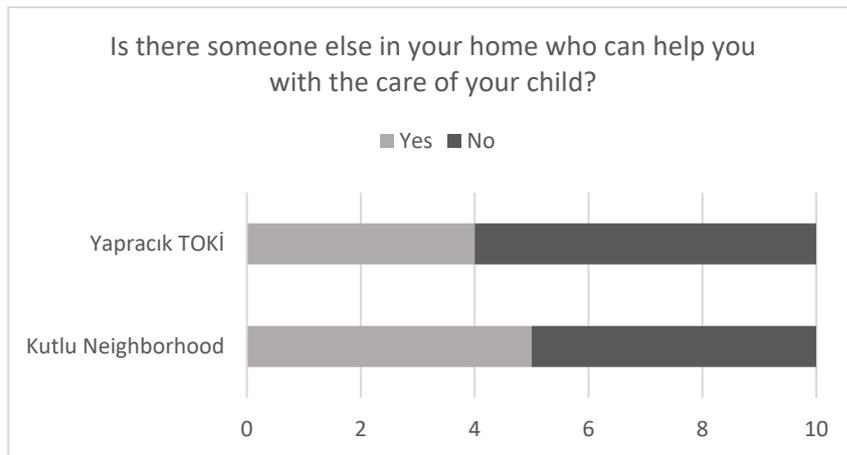


Figure 4.5. Availability of Other Caregivers

Participants' evaluations of the statement "In my near home environment, there are enough preschool institutions of sufficient quality, quantity and safety that I can send my child to" are shown in Figure 4.6. Results for both Yaprak TOKİ and Kutlu Neighborhood indicate that, mothers mostly don't agree that there are accessible and qualified pre-school institutions in their neighborhoods.

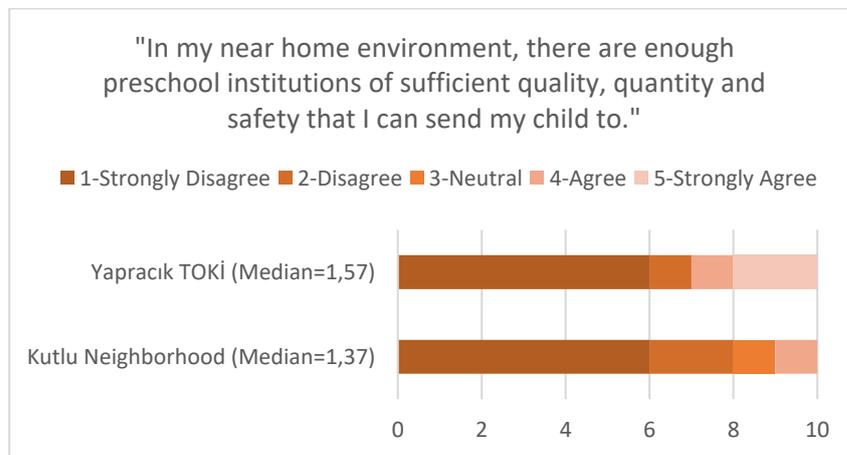


Figure 4.6. Evaluation of Pre-schools in Neighborhoods

The answers of the question whether the presence of preschool institutions affect the use of open spaces in the neighborhood are as in Figure 4.7. According to the results, two participants from each neighborhood didn't answered the question. Five of the

participants from Yapracık TOKİ and two participants from Kutlu Neighborhood indicated that availability of pre-schools affects their use of open spaces.

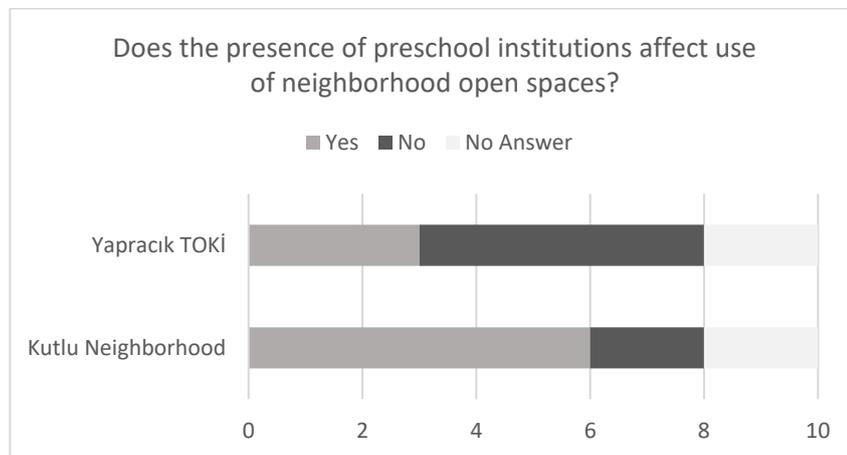


Figure 4.7. Assessment of Pre-schools as a Factor Affecting Open Space Use

Again, in closed-ended questions, participants were asked whether there are any places or persons in their near home environment who or where they can trust to leave their children in an urgent need. The representation of the results for both neighborhoods is as in Figure 4.8. Mothers' assessments for both neighborhoods are mostly positive. There is not much difference between the results; mothers from Yapracık TOKİ mostly agree with the given statement and mothers from Kutlu Neighborhood mostly strongly agree.

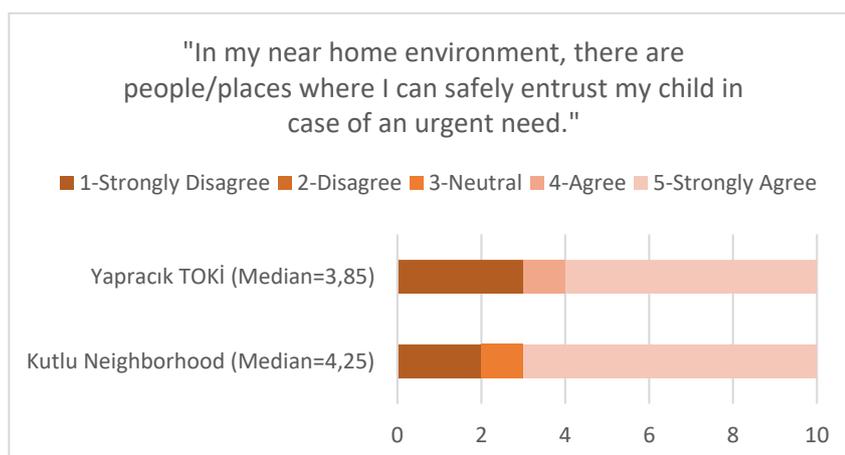


Figure 4.8. Evaluation of People/Places to Look After Children in Neighborhoods

The Figure 4.9. shows the results of the question whether the presence of people or places that can look after children affects mothers' use of neighborhood open spaces. Seven participants from each neighborhood gave 'yes' as an answer to the question. Thus, presence of people or places to look after children can be interpreted as a factor affecting open space use.

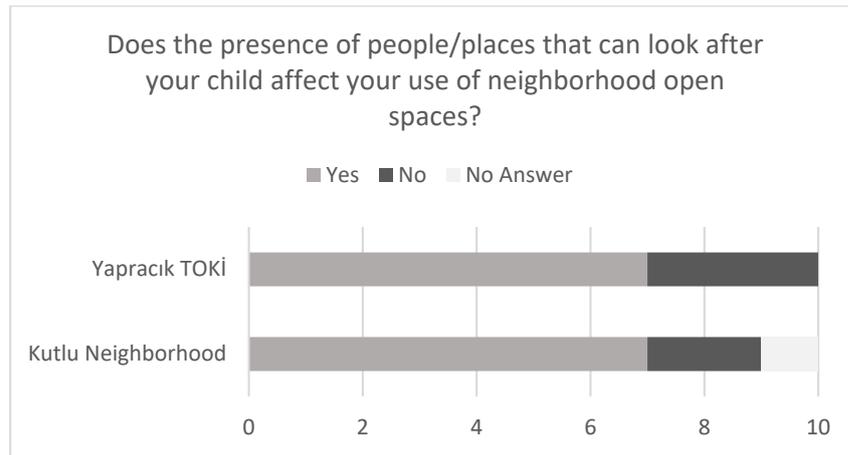


Figure 4.9. Assessment of People/Places to Look After Children as a Factor Affecting Open Space Use

Accompany of Children

As it is mentioned previously in the Chapter 4.1.1., mothers were asked what types of activities they usually engage in their near home environment. Most of the given answer to this question involves activities with children such as, taking out children to play, to socialize with their peers and to get fresh air (see Table 4.1. and Table 4.3.). These findings indicate that, for mothers, needs of their children are encouraging them to use neighborhood open spaces. Therefore, accompanying children can be assessed as a factor affecting open space use. Furthermore, based on the findings of literature review (see Lilius,2007), accompany of children was found to be complicating the place experiences of mothers, however none of the participants of this study mentioned any negative indicators.

Neighbors and Other Users

According to the findings of the research, presence of neighbors and other users of the open spaces is one of the most mentioned factors affecting mothers' place use. Mothers' reviews involved both negative and positive effects. Firstly, according to the results obtained from Yapracık TOKİ residences, five of ten participants stated that they use the open spaces of their neighborhood together with their neighbors or friends:

“I go to parks where my friends are. I spend at least an hour a day in parks and more if there are my friends.” (A 30-year-old mother living in Yapracık TOKİ)

Two of the people who stated that they use open spaces with their acquaintances complained about lack of neighborhood culture in their near home environment. In addition, another participant said that she uses the park where the interview was held in because it is usually more crowded:

“I come to this park more often because there are usually more people than other parks. I love the vitality of this park.” (A 35-year-old mother living in Yapracık TOKİ)

On the other hand, according to the interviews conducted in the Kutlu Neighborhood, none of the participants mentioned presence of neighbors or friends as a factor affecting the open space use. However, the Author observed that some of the participants spent time in the park with their acquaintances (See Figure 4.10.) According to the results, neighborly relations are found to be more intense in Yapracık TOKİ.



Figure 4.10. Some of the Participants from Kutlu Neighborhood Spending Time in Open Spaces

Furthermore, five participants from Yapracık TOKİ and six participants from Kutlu Neighborhood made negative remarks regarding the other users of their neighborhood. These reviews are shown in Table 4.5. According to the findings, mothers are mostly afraid of strangers, but they feel uncomfortable with strangers due to different reasons. For example, one mother from Kutlu mentioned that she is afraid of harassment of strangers:

“I have complaints about strangers. For example, we hear from neighbors around, some strangers harass people in streets and they abuse verbally. One cannot walk around peacefully.” (A 32-year-old mother living in Kutlu Neighborhood)

Four mothers from Kutlu Neighborhood mentioned their discomfort due to the foreigners living in their neighborhood:

“There are many people of foreign origin here; they live on the upper street. They have a bad influence on children. For example, the other day they were playing at park, and when she came home she started use bad words. Her speech was changed. I don't want my child to talk to them.” (A 26-year-old mother living in Kutlu Neighborhood)

Findings indicate that, mothers from Kutlu Neighborhood are relatively more threatened due to the presence of strangers than mothers from Yapracık TOKİ. The reason that participants from Kutlu Neighborhood feel more threatened may depend on the factors like land-use typology and location of the neighborhood. Because Kutlu Neighborhood is mixed-use traditional neighborhood which is more centrally located, there may be more users from outside the neighborhood.

Another remarkable point that participants mentioned is the presence of older children in the parks. Three mothers stated that they feel uncomfortable because older children and their pre-school children have to share same open spaces:

“My daughter is young and tiny; we cannot move comfortably in the park. Big children run around like crazy. They grab the play equipment in the park such as swings, so we cannot use them. At least the playgrounds need to be separated; I've seen some examples in other parks.” (A 34-year-old mother living in Yapracık TOKİ)

Table 4.5. *Remarks About Other Users*

<i>Remarks</i>	<i>Frequency of Remarks</i>		<i>Percentage</i>	
	<i>Yapracık TOKİ (n=10)</i>	<i>Kutlu Neighborhood (n=19)</i>	<i>Yapracık TOKİ (100%)</i>	<i>Kutlu Neighborhood (100%)</i>
Presence of older children	2	1	20%	10%
Presence people who consume drugs/alcohol	1	1	10%	10%
The socio-cultural level of other inhabitants	1	1	10%	10%
Presence of strangers		1		10%
Presence of strangers who are men	1		10%	
Harassment of strangers		1		10%
Presence of foreigners		4		40%

Socio-Cultural Pressure

In close-ended questions, participants were asked if they feel social or cultural pressure when using the open spaces in their neighborhood, with their children. The distributions of mothers' answers are shown in Figure 4.11. According to the results, none of the participants from Yapracık TOKİ feel social or cultural pressure using open spaces in their near home environment, but one mother from Kutlu Neighborhood stated that she feels pressure:

“In fact, I would like to engage in different activities around the neighborhood. For example, I want to go to a course center of municipality. But these activities are not approved around here. I feel under pressure that everyone including my mother-in-law criticizes me.” (A 27-year-old mother living in Kutlu Neighborhood)

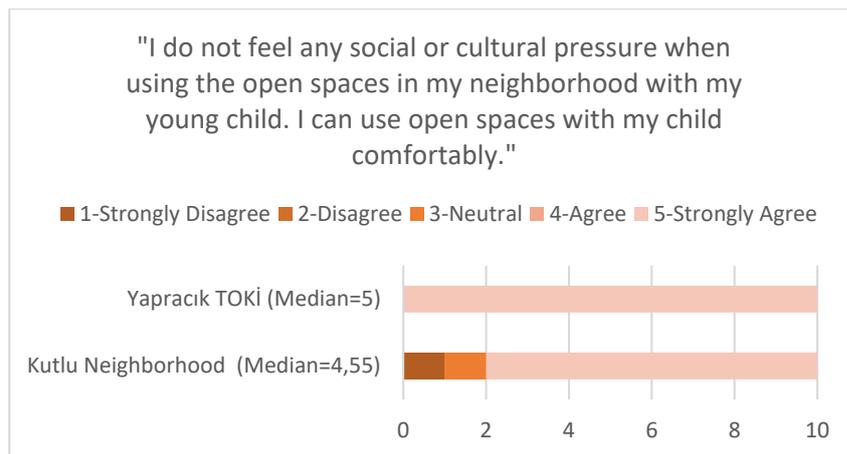


Figure 4.11. Evaluation of Socio-Cultural Pressure in Neighborhoods

Additionally, Figure 4.12 shows the answers to the question of whether socio-cultural pressure affects mothers' use of open spaces. Four of the mothers' from Kutlu Neighborhood didn't answer the question but the majority for both of the neighborhoods agreed that socio-cultural pressure is a factor affecting their use of open spaces.

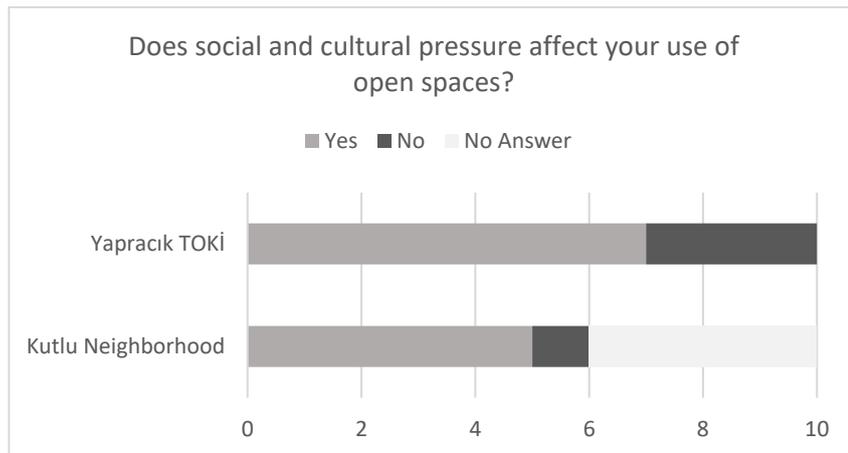


Figure 4.12. Assessment of Socio-Cultural Pressure as a Factor Affecting Open Space Use

4.2.3. Physical Environmental Factors

Land Use Diversity

Participants were asked if there are any places in their near home environment to meet their needs as mothers with young children. Many of the answers obtained from Yapracık TOKİ, where the uses are separated, were related to the land use diversity. Table 4.6. shows different expressions of mothers from Yapracık TOKİ. Most mentioned remarks were about distance of health care services and the insufficiency of restaurants. On the other hand, for the same question asked, only one mother from Kutlu Neighborhood referred to the land use:

“There are no indoor exercise places. If there was one, I would like to go.” (A 33-year-old mother living in Kutlu Neighborhood)

Table 4.6. *Remarks About Land Use from Yapracık TOKİ Residences*

<i>Remarks from Yapracık TOKİ</i>	<i>Frequency of Remarks (n=10)</i>	<i>Percentage (100%)</i>
Complaints about restaurants for being small and crowded	3	30%
Complaints about distant hospital	3	30%
Getting emergency needs from the buffet	2	20%
Request for closed areas for slimming	1	10%
Request for picnic areas	1	10%
Request for cafes and patisseries	1	10%
Request for special place for women	1	10%
Complaints about no social activity for mothers and their spouses	1	10%
Complaints about no activities for children such as swimming	1	10%
Complaints about no family places to go such as cinema and tea garden	1	10%
Request for using vacant common areas under the buildings	1	10%

Mothers' evaluation of the statement "In my near home environment, there are many different places that I can walk to, which interests me and my child together" are shown in Figure 4.13. Mothers in both of the neighborhoods mostly disagree with the given statement. Also mothers were asked if availability of those places affect their use of neighborhood open spaces and the answers are shown in Figure 4.14. Results indicate that availability of places in walking distance that interest mothers and their child affects mothers' use of neighborhood open spaces.

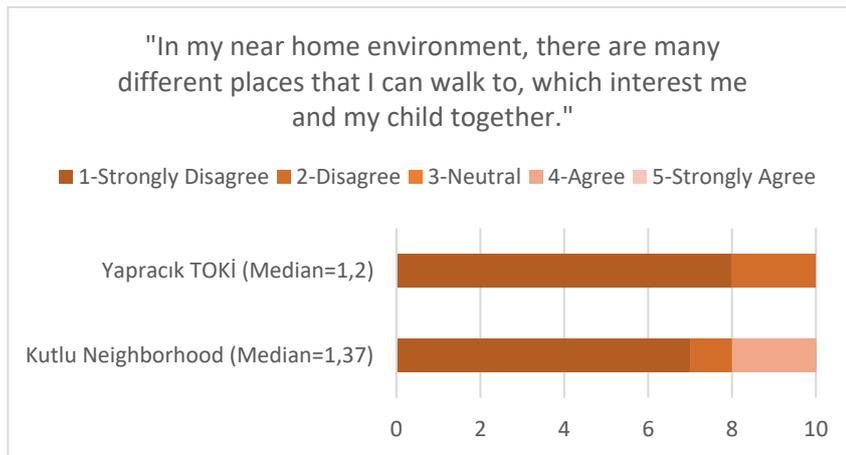


Figure 4.13. Evaluation of Places Attracting Both Mother and Child in Neighborhoods

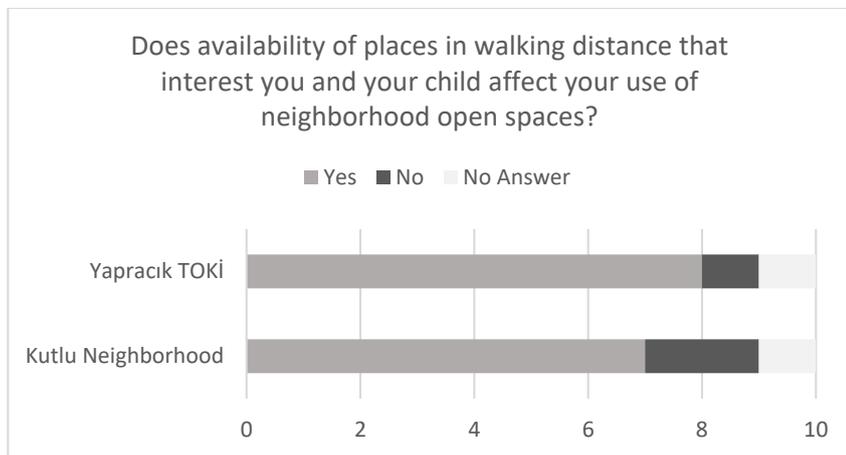


Figure 4.14. Assessment of Places Attracting Mothers with Children as a Factor Affecting Open Space Use

Furthermore, mothers were asked if there are places in their near home environment that meet their needs as a woman. According to the answers shown in the Figure 4.15., similar to the results of previous statement, mothers from both neighborhoods mostly disagree. Also, the Figure 4.16 shows the distribution of responses to the question whether availability of places attracting women is a factor affecting their use of neighborhood open spaces, and most of the answers were positive.

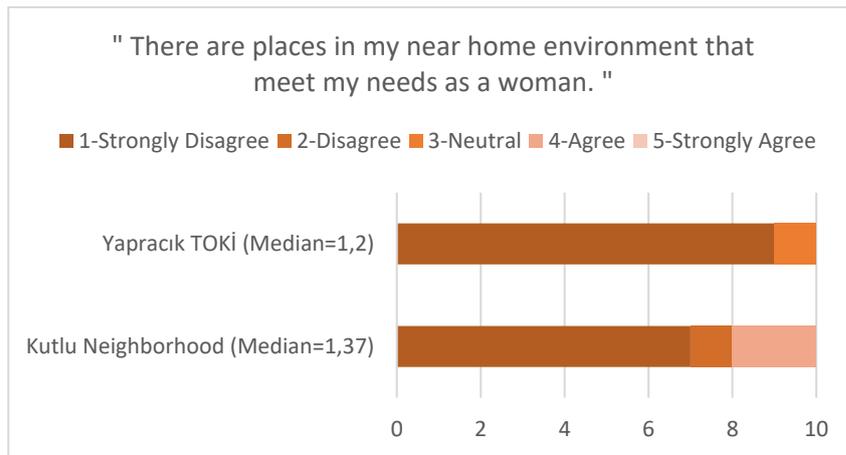


Figure 4.15. Evaluation of Places Attracting Women in Neighborhoods

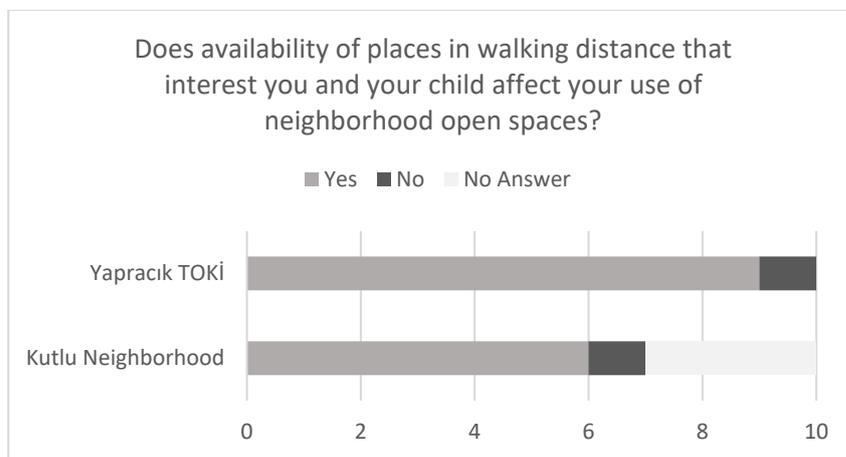


Figure 4.16. Assessment of Places Attracting Women as a Factor Affecting Open Space Use

Figure 4.17. shows the responses of the participants to the statement "The presence of unbuilt areas and dilapidated buildings in my near home environment does not disturb me and does not affect my use of open spaces.". The answers given for both neighborhoods do not show a clear trend. Moreover, five of the participants from Yapracık TOKİ residences stated that unstructured empty lots make them feel relaxed and they like them. One of them stated that they sometimes use these areas for picnics and other used the phrase:

“I feel relieved looking at the empty lots in neighborhood; this landscape makes me relaxed. That's why I like my neighborhood most.” (A 37-year-old mother living in Yaprıcak TOKİ)

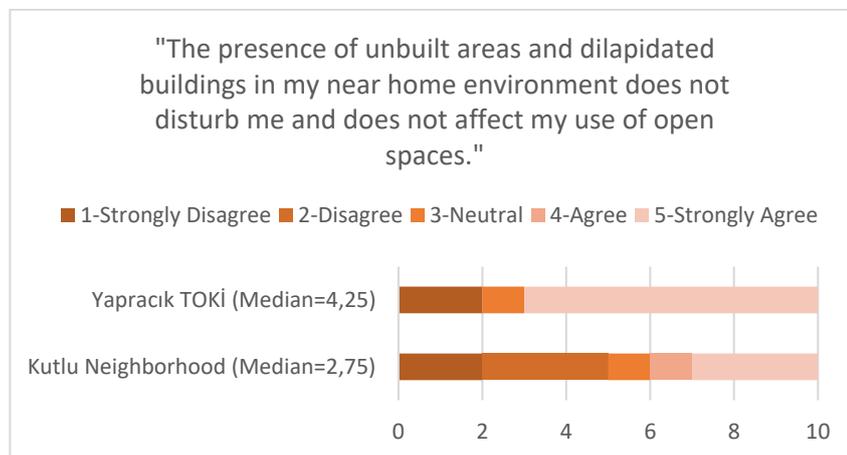


Figure 4.17. Evaluation of Unbuilt Areas and Dilapidated Buildings in Neighborhoods

Proximity and Diversity of Open Green Spaces

Mothers were asked why they frequently use the places that they marked on the maps. Six participants from Kutlu Neighborhood and four participants from Yaprıcak TOKİ residences stated that the close proximity of open spaces that they marked is the reason they frequently use. Four mothers from each study site indicated that they use the places they marked on the maps because those places are close to their home or where they work. One participant from Kutlu Neighborhood stated that she could not use some places such as sports fields because they are far from her home. Another mother from same neighborhood stated that:

“I’d like to take my kids to the playground of school for them to play and ride a bike. But it is far away.” (A 30-year-old mother living in Kutlu Neighborhood)

When mothers were asked what they would like to be done or improved in their neighborhood for themselves and their children, none of the participants from Yaprıcak TOKİ mentioned quality or quantity of green spaces. However, contrary to

Yapracık TOKİ residences, participants from the Kutlu Neighborhood mostly complained about the variety of activities that the parks offer both for themselves and their children. Remarks of mothers from Kutlu Neighborhood are listed in Table 4.7. Considering activities of their children, four of the mothers mentioned that playgrounds in parks are inadequate and they are not attracting kids. Also two stated that they have no walking or jogging pathways for physical exercise.

Table 4.7. *Remarks About Diversity of Open Green Spaces from Kutlu Neighborhood*

<i>Remarks from Kutlu Neighborhood</i>	<i>Frequency of Remarks (n=10)</i>	<i>Percentage (100%)</i>
Complaints about no walking/jogging pathways	2	20%
Complaints about inadequacy of play equipment for children	2	20%
Complaints about lack of things that attracts children	2	20%
Complaints about inadequacy of parks	1	10%

Physical Accessibility within Neighborhood

The participants were asked different questions to evaluate physical accessibility within the neighborhoods they are living in. Firstly, mothers were asked if there were any objects on sidewalks or pathways preventing them and their children from walking. In Figure 4.18 and Figure 4.19., there are exemplary photos of sidewalks in study sites, as it can be seen in the figures, Author observed that there were conflicts between pedestrian and vehicle ways in Kutlu Neighborhood. Besides, pathways in Yapracık TOKİ residences were more qualified. However, according to the answers shown in the Figure 4.20. while participants from Kutlu Neighborhood are neutral about the quality of pedestrian paths and pavements in their near home environment, participants from Yapracık TOKİ disagree that they can easily walk with their children. Mothers were also asked if the quality of sidewalks affects their use of

neighborhood open spaces and according to the results shown in Figure 4.21, mothers mostly said yes. In addition, one participant from each neighborhood mentioned the difficulty of walking uphill with children:

“It is very difficult to climb the slopes with the child. He gets tired and we pause constantly.” (A 33-year-old mother living in Yapracık TOKİ)



Figure 4.18. Exemplary Photos of Pedestrian Ways in Yapracık TOKİ



Figure 4.19. Exemplary Photos of Pedestrian Ways in Kutlu Neighborhood

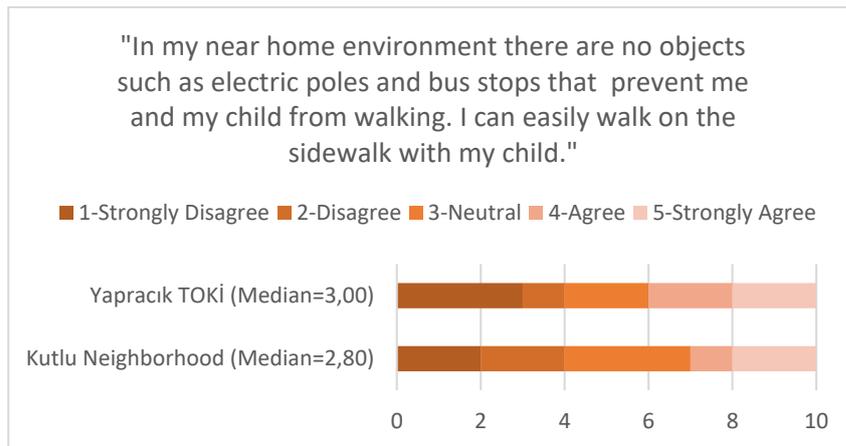


Figure 4.20. Evaluation of Quality of Sidewalks in Neighborhoods

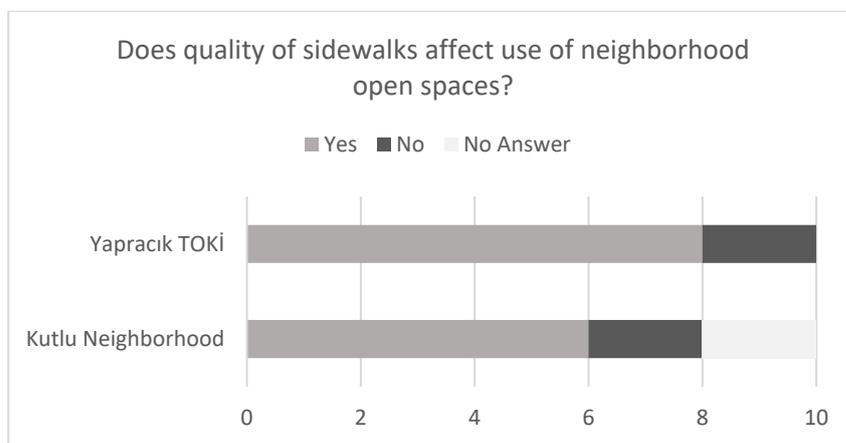


Figure 4.21. Assessment of Quality of Sidewalks as a Factor Affecting Open Space Use

Secondly, mothers were asked if they feel uncomfortable due to the speed of traffic vehicles in their neighborhood. The results, as shown in Figure 4.22, indicate that while mothers in Kutlu Neighborhood don't feel safe in streets due to the speed of vehicles, mothers in Yaprak TOKİ feel safe. According to the Author, this result is consistent with what is expected because Kutlu Neighborhood was centrally located and surrounded by busy roads. Additionally, complaining about the traffic safety, a mother from Kutlu Neighborhood stated that:

"When my son plays in the park, cars pass by him. I'm afraid at any moment in case he gets on the road. There must be a barrier around the park." (A 27-year-old mother living in Kutlu Neighborhood)

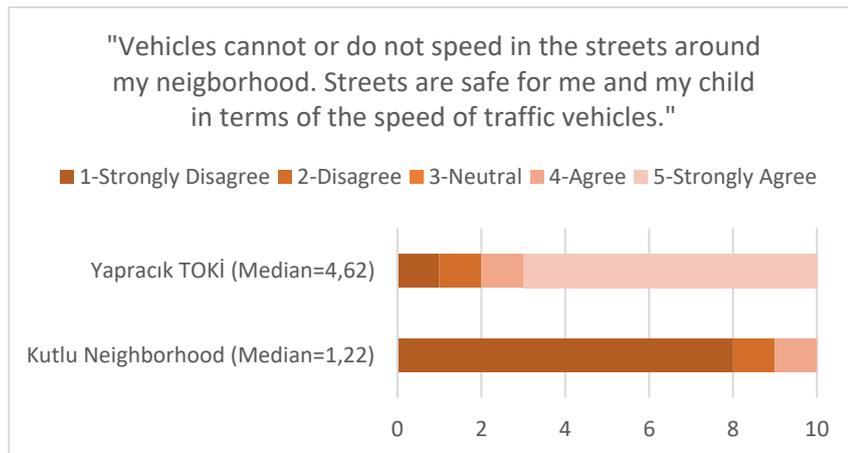


Figure 4.22. Evaluation of Speed of Traffic Vehicles in Neighborhoods

Mothers were also asked if speed of traffic vehicles affect their use of open spaces. While all of the mothers from Yaprak TOKİ agreed that it affects their place use, only five mothers from Kutlu Neighborhood agreed, three didn't agree and two didn't answer (See Figure 4.23.). One of those who said speed of vehicles doesn't affect her use of open spaces indicated that:

"Cars are fast; but one way or another I use neighborhood spaces; it doesn't affect me."
 (A 40-year-old mother living in Kutlu Neighborhood)

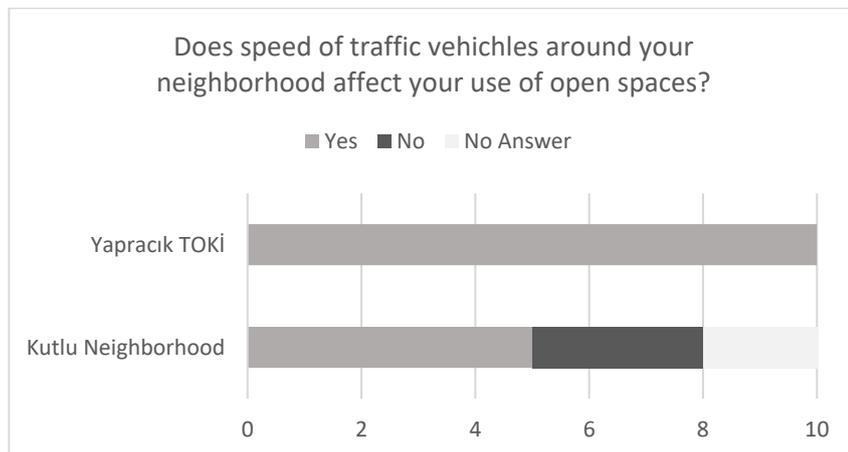


Figure 4.23. Assessment of Speed of Traffic Vehicles as a Factor Affecting Open Space Use

Moreover, mothers evaluations of the statement "I find the streets around my neighborhood safe when crossing the street with my child." are shown in the Figure

4.24. Similar to the previous answers, while mothers from Yaprıcık TOKİ mostly strongly agree with the statement, mothers from Kutlu Neighborhood disagree. Mothers were asked if safety of pedestrian crossing affect their use of open spaces and as shown in the Figure 4.25., most of them said yes as an answer.

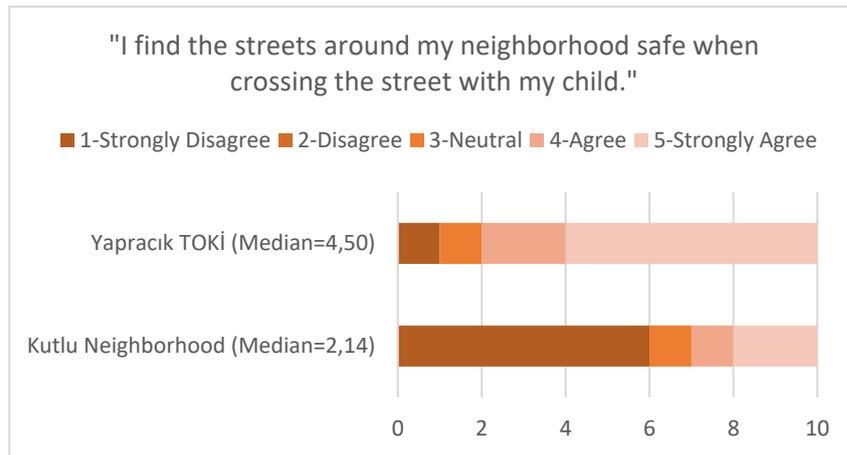


Figure 4.24. Evaluation of Safety of Pedestrian Crossing in Neighborhoods

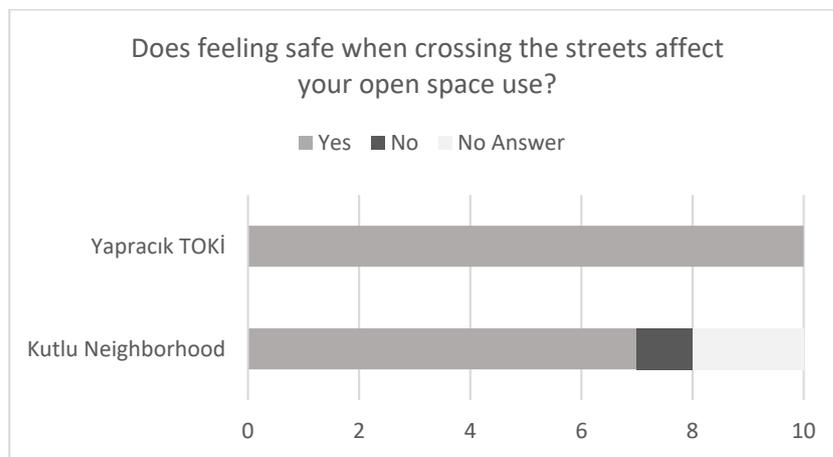


Figure 4.25. Assessment of Safety of Pedestrian Crossing as a Factor Affecting Open Space Use

Finally, the answers of participants to the statement “Public transportation vehicles passes close to my home environment frequent enough” are given in Figure 4.26. Also the answers to the question whether this statement affects the use of open spaces is shown in Figure 4.27. These results indicate that while mothers mostly agree that the frequency of public transportation is adequate, they are almost neutral that it affects

their use of neighborhood open spaces. Additionally, one participant from Yaprıcak TOKİ stated that public busses spend a lot of time within neighborhood until reaching target destination:

“The neighborhood is already far from the center, and the bus goes around in the neighborhood for an hour until it leaves. My baby gets bored; I can't amuse her for hours.” (A 28-year-old mother living in Yaprıcak TOKİ)

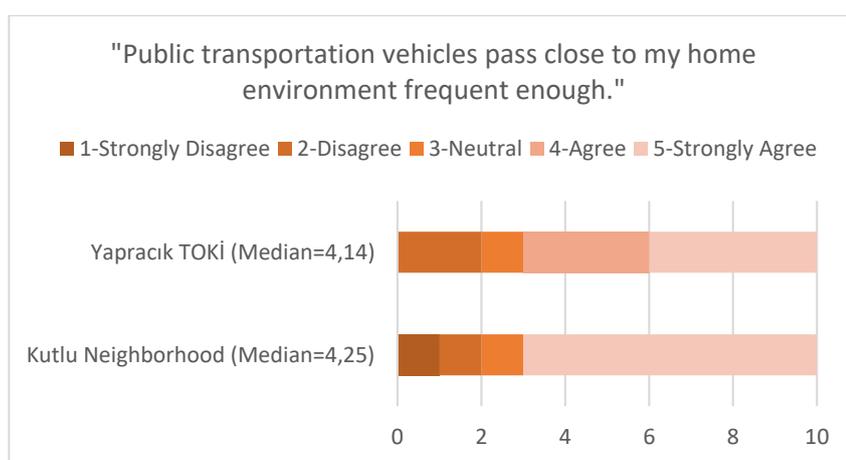


Figure 4.26. Evaluation of Public Transportation in Neighborhoods

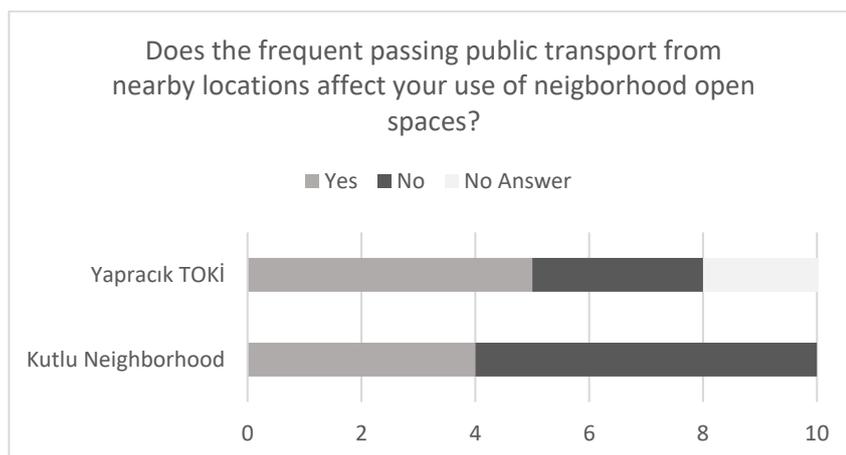


Figure 4.27. Assessment of Public Transportation as a Factor Affecting Open Space Use

Noise Level

Participants were asked if they and their children are disturbed by noisiness of their near home environment. According to the results shown in the Figure 4.28., mothers from both of the neighborhoods are mostly aren't disturbed by the noise level. Furthermore, participants were asked if noisiness affects their use of neighborhood open spaces and their answers are as shown in the Figure 4.29. Results indicate that mothers mostly agree that noise level is a factor affecting their open space use.

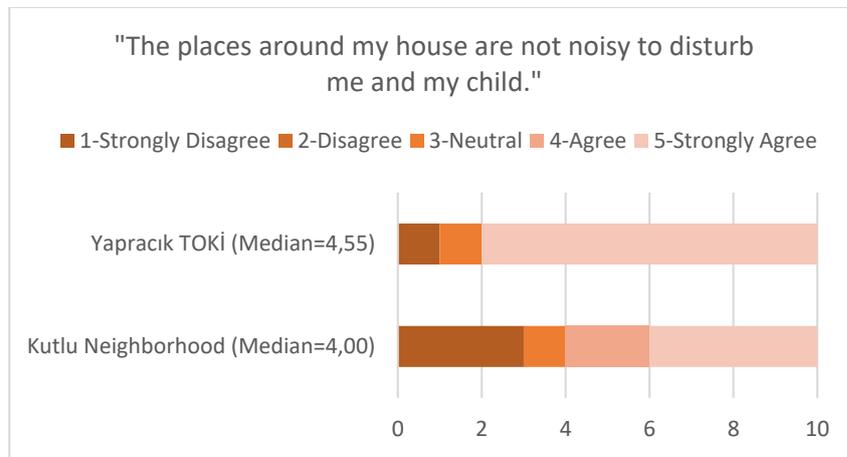


Figure 4.28. Evaluation of Noise Level in Neighborhoods

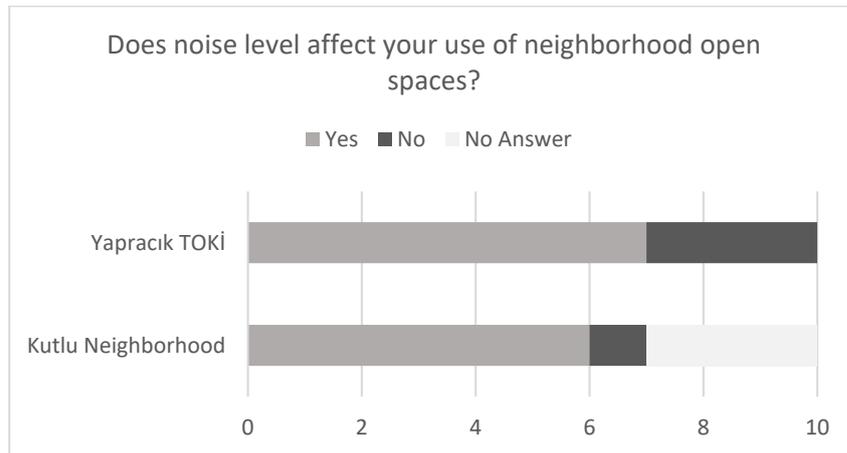


Figure 4.29. Assessment of Noise Level as a Factor Affecting Open Space Use

Lighting

In close-ended questions participants were asked if night illumination is sufficient in their near home environment. Similarly, with the Author's observation, results are almost equal and mothers from both of the neighborhoods are satisfied with the lighting in their near home environment (See Figure 4.30.). Participants were also asked if sufficiency of night illumination affects their open space use. According to the results, as shown in Figure 4.31. all but one mother from Yaprak TOKİ agreed that it affects. On the other hand, while six of the mothers from Kutlu Neighborhood stated that lighting affects their place use, four mothers didn't give any answer. One from who didn't answer indicated that:

"I had never paid attention to lighting before. Even if it is less or more, I use open spaces if I want or have to." (A 33-year-old mother living in Kutlu Neighborhood)

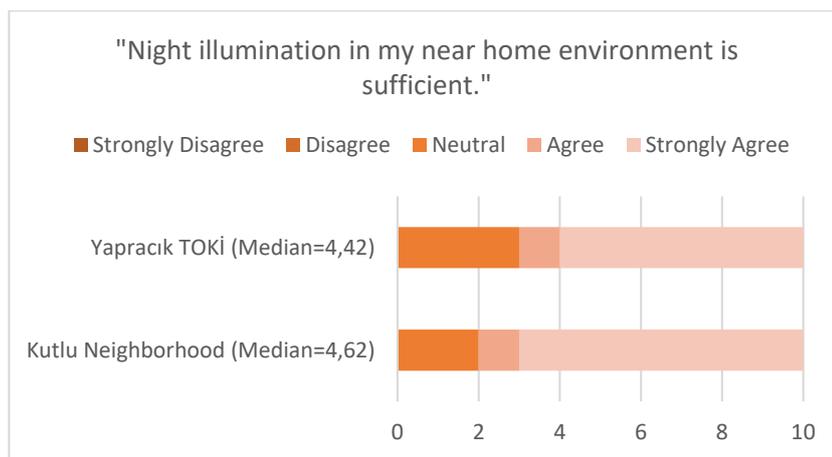


Figure 4.30. Evaluation of Lighting in Neighborhoods

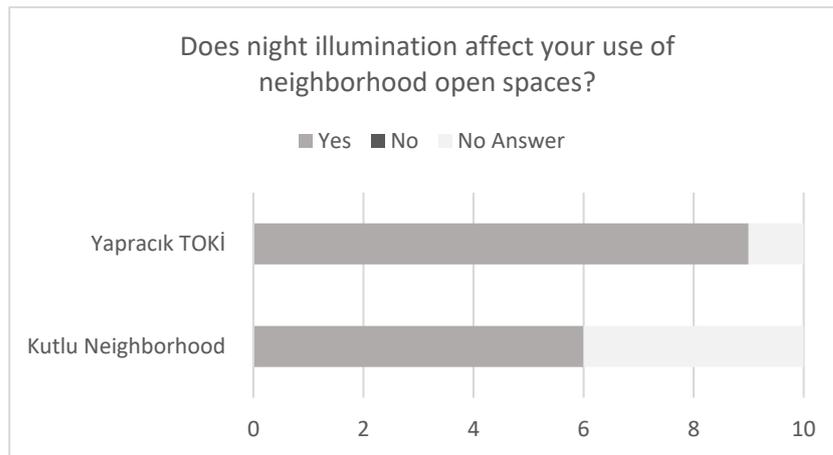


Figure 4.31. Assessment of Lighting as a Factor Affecting Open Space Use

Seating Elements

Participants were asked to evaluate the statement “Seating elements in my near home environment are sufficient” and the results are shown in the Figure 4.32. Findings indicate that mothers in both neighborhoods are mostly satisfied with the adequacy of seating elements. Additionally, mothers were asked if adequacy of seating elements affects their use of open spaces. According to the results shown in the Figure 4.33. all but three of the mothers agree that sufficient number of seating elements affects their use of open spaces. Therefore, seating can be assessed as an important factor affecting place use. Supporting the importance of seating elements, a participant from Yapracık TOKİ residences stated that:

“If there were banks in front of my apartment building, I would spend time there while my daughter was playing.” (A 35-year-old mother living in Yapracık TOKİ)

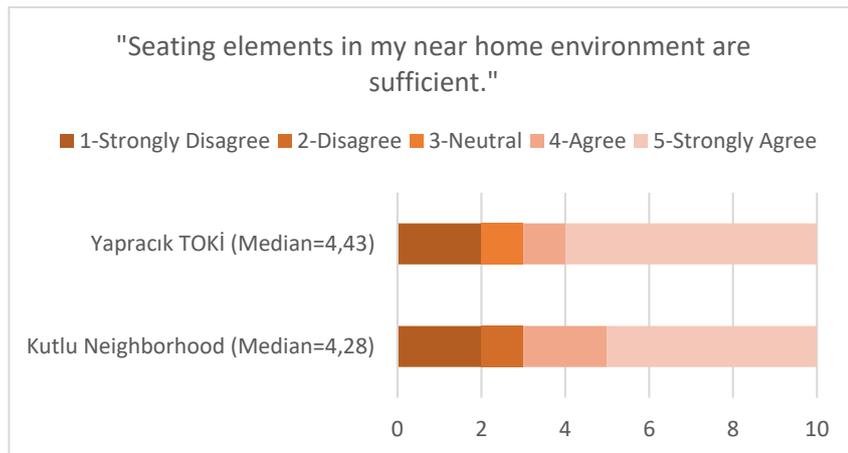


Figure 4.32. Evaluation of Seating Elements in Neighborhoods

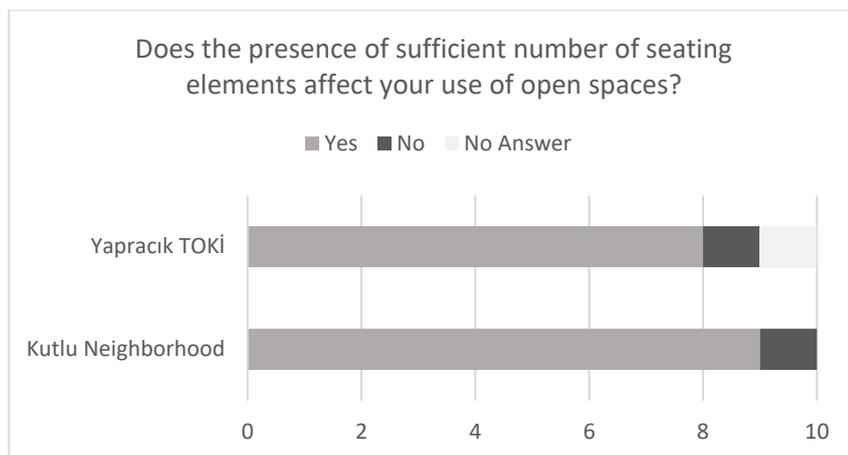


Figure 4.33. Assessment of Seating Elements as a Factor Affecting Open Space Use

Maintenance

Participants were asked if they think that their near home environment is well maintained and clean. Mothers evaluations are shown in the Figure 4.34. Results show that while mothers most from Yaprıcak TOKİ residences think their neighborhood is well maintained and clean, mothers from Kutlu Neighborhood are mostly negative about maintenance of their near home environment. Results of this closed-ended question supports some of the statements that mothers indicated during interviews. When mothers were asked why they use the open spaces in their neighborhoods, three

participants from Yaprıcak TOKİ residences stated that they found their neighborhood clean and well-maintained. One mother said that:

“Neighborhood is generally clean and well maintained. But people who uses these open spaces, pollute environment. They do not care if other people use those places.”
(A 35-year-old mother living in Yaprıcak TOKİ)

Also, when mothers were asked what discourages them from using open spaces in their neighborhoods, two mothers from Kutlu Neighborhood mentioned maintenance of environment. Referring to an unpleasant smell, a mother in Kutlu Neighborhood stated that she finds her neighborhood unclean and another mother complained that:

“Market sets up every Friday on street behind this park. Sellers left their trashes behind and there are bugs everywhere. It bothers me.” (A 32-year-old mother living in Kutlu Neighborhood)

Additionally, except one person from Yaprıcak TOKİ, all of the participants gave yes as an answer to the question whether the cleanliness and maintenance of the environment affects their use of neighborhood open spaces.

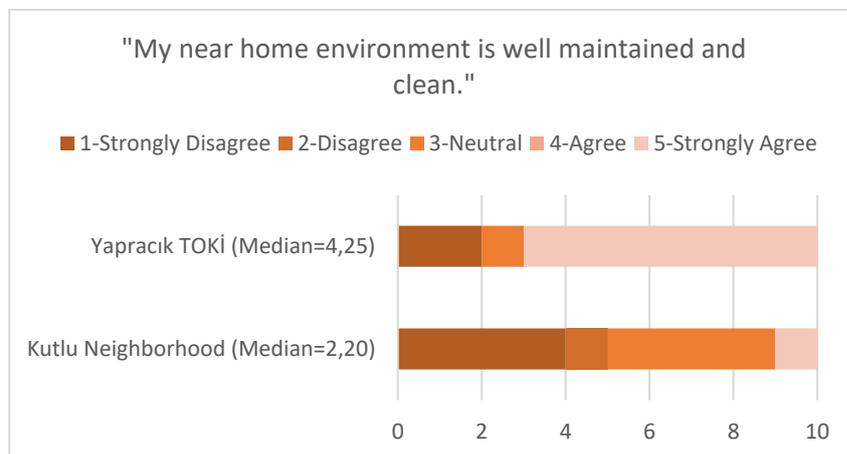


Figure 4.34. Evaluation of Cleanliness and Maintenance of Neighborhoods

Climatic Comfort

When participants were asked why they use the open spaces in their near home environment or what discourages them from using those spaces, they gave many answers related to climatic comfort. In terms of protection from different weather conditions, many negative comments were received from Yapracık TOKİ residences and they are documented in Table 4.8. In Kutlu Neighborhood, which is denser in terms of built environment, there is only one remark about sun protection. However, seven of the ten women from Yapracık TOKİ, remarked that their use of open spaces is limited due to the weather conditions during interviews:

“It is almost impossible to go out in winter. We're stuck in the house all winter. And it's very windy here all the time. When it gets dark, you feel cold even in summer. (A 37-year-old mother living in Yapracık TOKİ)

Table 4.8. *Remarks About Climatic Comfort*

Remarks	Frequency of Remarks		Percentage	
	<i>Yapracık TOKİ</i> (n=10)	<i>Kutlu Neighborhood</i> (n=10)	<i>Yapracık TOKİ</i> (100%)	<i>Kutlu Neighborhood</i> (100%)
Uses open spaces if there is shadow	1		10%	
Uses open spaces in afternoons	1	1	10%	10%
Can't use open spaces if there is wind	2		20%	
Uses open spaces in summers	2		20%	
Feels like trapped in house in winters	2		20%	

The evaluations of the statement “In my near home environment, there are elements that make shades when there is sun, and elements to be protected from wind and getting wet when it rains” are shown in Figure 4.35. Results indicate that mothers in

Yapracık TOKİ are not satisfied with the elements that provide climatic comfort in their near home environment and mothers in Kutlu Neighborhood are mostly neutral. Moreover, results of the question whether the presence of these elements affects mothers use of open spaces is shown in Figure 4.36. Results shows that presence of elements to be protected from different weather conditions is an important factor affecting mothers' open space use.

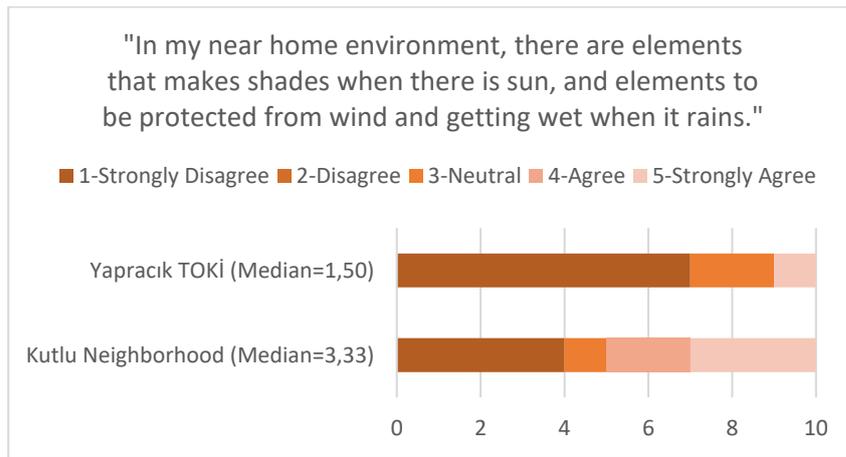


Figure 4.35. Evaluation of Climatic Comfort of Neighborhoods

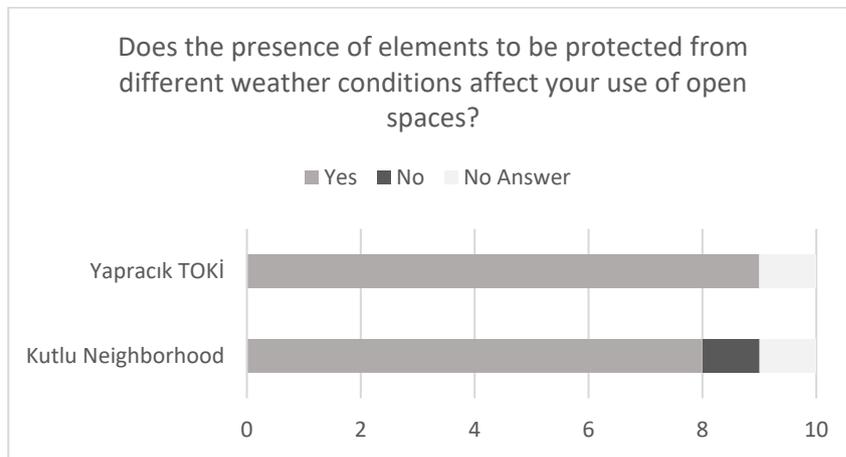


Figure 4.36. Assessment of Climatic Comfort as a Factor Affecting Open Space Use

Public Facilities

Mothers were asked to evaluate the statement “I feel comfortable about breastfeeding my child in open spaces in my near home environment, with or without closed baby breastfeeding places.”. According to the results, only one mother from Yapratic TOKİ strongly agreed with the given statement and everyone else stated that they strongly disagree. Additionally, most of the mothers avoided answering whether public breastfeeding affects their open space use as it is shown in Figure 4.37.

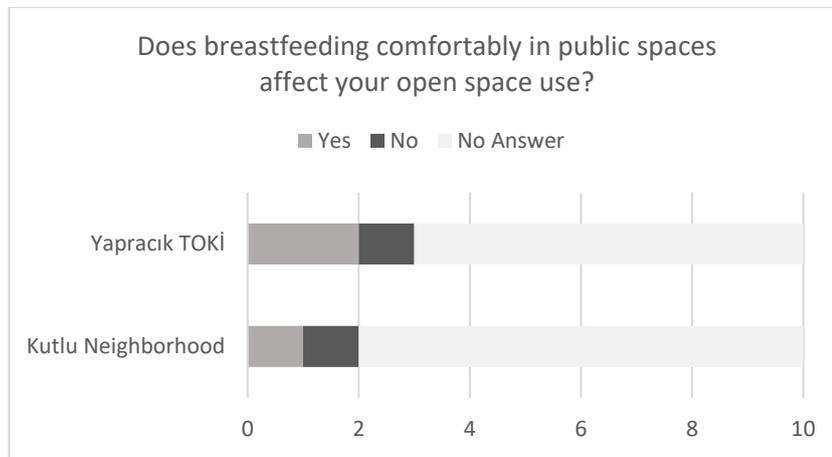


Figure 4.37. Assessment of Breastfeeding in Public Spaces as a Factor Affecting Open Space Use

Furthermore, to the statement of “There are closed baby care and breastfeeding areas in my near home environment, which are clean and easily usable” all of the participants stated that they strongly disagree. This result is consistent with Author’s observations; there are no public breastfeeding or baby care facilities in both of the neighborhoods. Mothers were also asked if presence of those facilities affect their use of open spaces and the results are shown in the Figure 4.38. The results indicate that the availability of baby care and breastfeeding facilities is a factor affecting mothers place use.

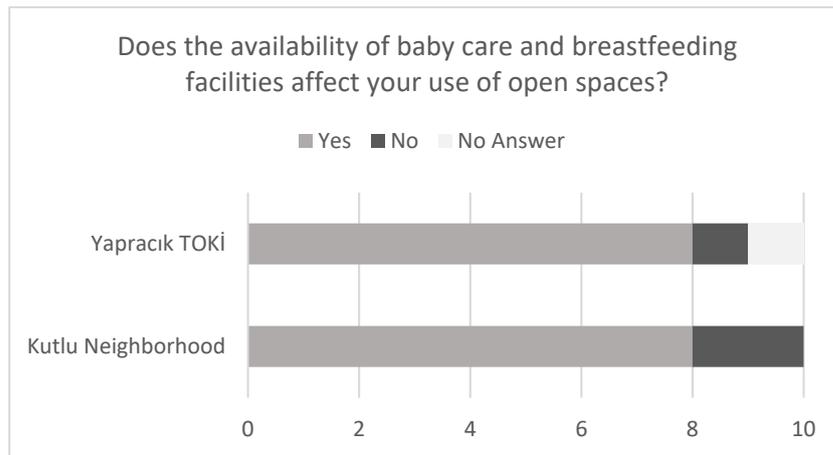


Figure 4.38. Assessment of Baby Care and Breastfeeding Facilities as a Factor Affecting Open Space Use

Built Form

In close-ended questions, participants were asked if they and their children are comfortable with the height of the buildings in their neighborhoods. According to the results shown in the Figure 4.39. mothers from both of the neighborhoods are mostly not bothered by the height of surrounding buildings. Additionally, mothers were asked if height of the buildings in their neighborhood affects their use of open spaces. According to the results which are shown in the Figure 4.40., only three mothers from Yaprack and two mothers from Kutlu Neighborhood agreed with the statement and all of the others gave no as an answer. Which indicates that, according to the participants, height of the built environment doesn't affect the use of neighborhood open spaces.

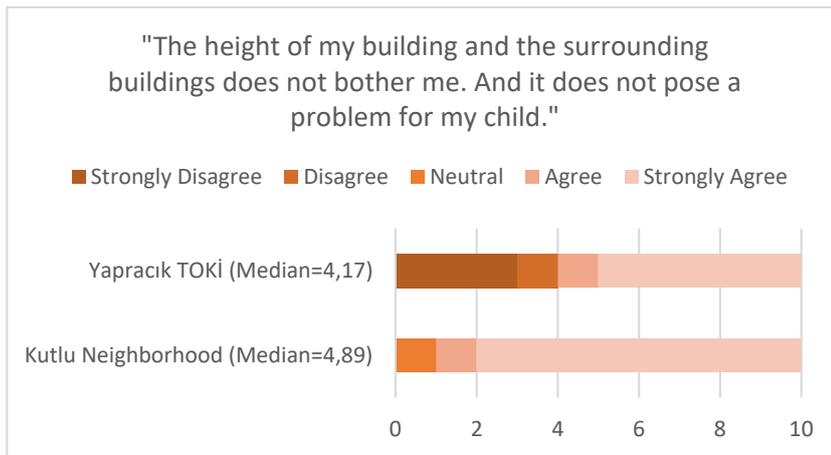


Figure 4.39. Evaluation of Height of Buildings in Neighborhoods

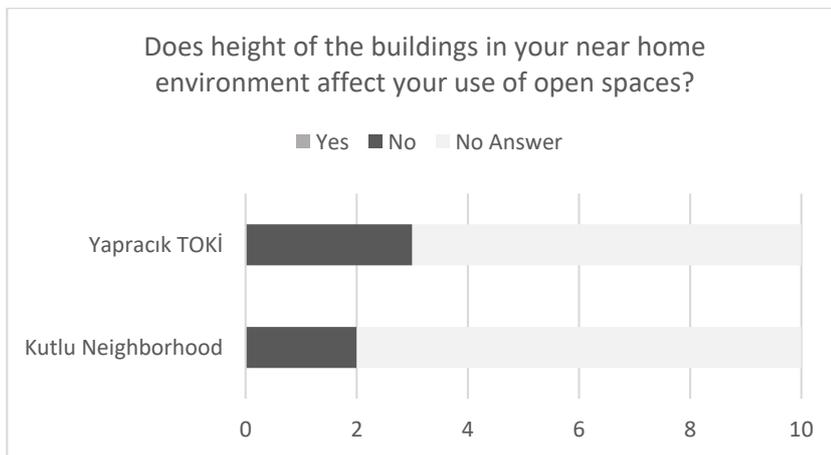


Figure 4.40. Assessment of Height of Buildings as a Factor Affecting Open Space Use

4.3. Concluding Remarks

The places, where participants indicated that they frequently use are mostly different in terms of the variety of use types and distribution of frequency of use (See Figure 4.1. and Figure 4.2.). According to the findings, places that mothers in Yaprak TOKİ preferred for shopping were concentrated in specific points, as commercial uses are concentrated in geometrical center of the neighborhood. On the other hand, as it is a traditional mixed-use neighborhood, the distribution of places that mothers in Kutlu

Neighborhood use for shopping were more dispersed. For this reason, mothers in Yaprıcık TOKİ travel longer distances for commercial purposes. While some of the mothers from Kutlu Neighborhood marked several service areas like restaurant and bakeries, none of the mothers from Yaprıcık TOKİ marked any service areas except from health and education areas. Major similarity for both of the neighborhoods is the distribution of frequently used green open spaces, according to the findings obtained from marked maps. Even there are many green open spaces in terms of quantity in Yaprıcık TOKİ, preference of mothers is concentrated in a single park. This result is same for Kutlu Neighborhood.

Findings indicate that participants from both of the neighborhoods mostly use neighborhood open spaces for their children to socialize, play, get fresh air etc. Additionally, five of the participants from Yaprıcık TOKİ mentioned their individual activities such as walking, jogging and picnicking. Also some of the participants from Yaprıcık TOKİ indicated that they use open spaces in their near home environment with their friends or acquaintances. However, none of the mothers from Kutlu Neighborhood mentioned presence of their neighbors or friends. Therefore, neighborly relations are found to be more intense in Yaprıcık TOKİ.

The median results of mothers' evaluations about their near home environments are listed in Table 4.9. According to the data obtained from study, mothers from Yaprıcık TOKİ were feeling safer about traffic in their neighborhood, more satisfied with maintenance and cleanliness of their near home environment and more comfortable with unbuilt lands around. Moreover, there were much more complaints about presence of strangers in Kutlu Neighborhood. On the other hand, during the interviews, seven of ten mothers from Yaprıcık TOKİ complained about the effect of weather conditions on the use of open spaces. From Kutlu Neighborhood, which is denser in terms of built environment, there are fewer comments about wind and sun protection and results indicate that mothers from Kutlu Neighborhood were more satisfied with the availability of elements to provide climatic comfort. Also, there were negative remarks about sense of safety from Kutlu Neighborhood. In close-ended

questions, participants from the Kutlu neighborhood reported that they felt less secure than those in Yaprak TOKİ.

Mothers from both of the neighborhoods are dissatisfied with availability of pre-school institutions and presence of places that interest them as a women, also them with their children. Moreover, as there is no breastfeeding nor baby care facilities in neighborhoods, thus participants' evaluations were negative. Besides, mothers from both of the selected sites are satisfied with frequency of public transportation, sufficiency of night illumination and seating elements and they are mostly comfortable with noise level and height of the buildings in their neighborhood.

In order to compare medians of interview findings from both neighborhoods, two-tailed Mann-Whitney U test is used. Significance level (α) is taken as 0.05. Since sample size is less than 20, exact calculation is used. Therefore, the test statistic U-value equals to 189.50. The critical value of U at $p < 0.05$ is 99. As U value is in the accepted range, the result is not significant at $p < 0.05$. In other words, comparing all of the statistical results, there is no significant difference between mothers' evaluations of their neighborhoods from one context to another.

Table 4.9. Comparison of Results Obtained from Study

Statements	Medians	
	<i>(1:Strongly Disagree, 2:Disagree, 3:Neutral, 4:Agree, 5:Strongly Agree)</i>	
	Yapracık TOKİ	Kutlu Neighborhood
Sense of safety	3,75	2,14
Availability of pre-school institutions	1,57	1,37
Presence of people/places to look after children	3,85	4,25
Not feeling under socio-cultural pressure	5	4,55
Presence of places that interest mother and her child	1,2	1,37
Presence of places that interest mother as a woman	1,2	1,37
Feeling comfortable with unbuilt lands and dilapidated areas	4,25	2,75
Perceived quality of sidewalks	3	2,8
Feeling comfortable with speed of vehicles	4,62	1,22
Safety of pedestrian crossing	4,5	2,14
Frequency of public transportation	4,14	4,25
Feeling comfortable with noise level	4,55	4
Sufficiency of night illumination	4,42	4,62
Sufficiency of seating elements	4,43	4,28
Maintenance of environment	4,25	2,2
Availability of elements to provide climatic comfort	1,5	3,33
Feeling comfortable with breastfeeding in open spaces	-	-
Availability of baby care and breastfeeding facilities	1	1
Feeling comfortable with height of buildings	4,17	4,89

CHAPTER 5

CONCLUSION

5.1. Evaluation of the Results

Assessment of Mothers' Use of Neighborhood Open Spaces in Study Areas

In the neighborhoods, with regards to Gehl's (1987) type of activities, mothers carry out necessary activities such as shopping for essential needs and optional activities where they use open green spaces for various reasons. This study found out that the activities carried out by mothers in the open spaces of the neighborhoods were mainly for children and/or accompanied by children. In addition, the findings show that participants spend time socializing in open spaces with their neighbors or friends, while accompanying their children. Results supports the theory that women tend to subsume their own leisure activities to fostering it in other members of the family (Munro&Madigan, 1999). Considering that children have important role in open space activities of women, the presence and inclusive design of places for both children and mothers is of great importance.

The research sites of this study was selected based on the framework that Author formed for reading gendered spaces places (See Figure 2.4.), which was prepared according to the findings obtained from literature review. In this regard, while Kutlu Neighborhood shows more masculine physical aspects and Yapracık TOKİ shows feminine physical aspects. Thus, participants from Kutlu Neighborhood was expected to find their environment more threatening than participants from Yapracık TOKİ. The results of the study confirm this assumption; two neighborhoods were assessed differently by mothers in terms of safety. While some of the mothers from Yapracık TOKİ residences, remarked that they find their neighborhood safe and relaxing, mothers from Kutlu Neighborhood mostly stated that they found their near home

environment threatening for different reasons. Most frequently mentioned reasons were about other users of neighborhood such as, foreigners, strangers and those who consume products like alcohol etc.

Although more number of participants were expected to remark felt socio-cultural pressure in Kutlu Neighborhood, only one mother of ten participants mentioned that she feels socio-cultural pressure while engaging in social activities in neighborhood. In other words, the results of this study shows that mothers were not affected by socio-cultural pressure while using open spaces. Furthermore, neighborly relations were found to be more intense in Yapracık TOKİ residences. Considering the socialization needs (Racki, 1975) and limited mobility of mothers with young children (Franck & Paxson, 1989; Lilius, 2017), Yapracık TOKİ, which hosts strong neighborly relations, can be evaluated as being more welcoming than Kutlu Neighborhood.

Assessment of Factors Affecting Mothers' Use of Open Spaces

Personal Factors: According to the results of the interviews, it is clear that the working status affects mothers' use of open spaces. In both neighborhoods, women who are working full-time stated that they could not use open spaces in the neighborhood because they either have limited time or no time. It can be evaluated that, time constraint is one of the most important factors affecting the working mothers' use of open spaces. Therefore, evaluating the mothers' duration of use of the open spaces may not give accurate results due to lack of equal number of employees and lack of samples. Moreover, in accordance with the results obtained from this research, similarly with the findings of previous studies (See Wekerle & Whitzman, 1995), the feeling of safety is important factor affecting mothers' use of open spaces in the neighborhood.

Social Factors: According to the findings of the interviews, similarly with Day 's (2000) study, domestic works such as housekeeping, child and elderly care affects women's use of open spaces. Some of the users indicate that they use open spaces if there is any time left from domestic works. Thus, it can be interpreted that domestic

work also causes time limitation for mothers. Again, according to the results of the research, most of the participants are the primary caregivers of their children in both neighborhoods. Only eight participants out of twenty, said that they could spend time leaving their children to other caregivers.

Furthermore, similar with the findings of Dunnett et. al, (2002) almost all respondents reported that they often use open spaces to make their children play, get fresh air and socialize. Thus, it can be concluded that accompanying children encourages women to use open spaces.

Most of the participants from TOKİ indicated that they use open spaces to spend time with their neighbors or acquaintances. On the other hand, many participants from the Kutlu Neighborhood stated that they were disturbed by some other users of the neighborhood. Therefore, it can be considered that other users of the neighborhood can be both encouraging and discouraging factors effecting use of open spaces.

Physical Environmental Factors: According to the data obtained from maps where the participants marked the places they frequently use, in the mixed use Kutlu Neighborhood mothers use a variety of places in terms of commercial and service areas. On the other hand, mothers from Yapracık TOKİ, where functions are separated, remarked many different usage requests, like restaurants, cafes and picnic areas during the interviews. In addition to differences in land uses of neighborhoods, the distance to the city center should also be taken into consideration with regards to these remarks. Results show that in both neighborhoods, there are a few places that attract mothers' interest both alone and with their children; but it is assessed that mothers require such places. Additionally, it is worth noting that the unstructured areas in Yapracık TOKİ are found relaxing by mothers and used for different purposes like having a picnic.

According to the data collected from marked maps, although there are greater amount of parks in Yapracık TOKİ, it is observed that mothers' preferences of use of the open green spaces are concentrated in a single park. The same result applies to the Kutlu

Neighborhood where there are fewer parks. Contrary to Yapracık TOKİ residences, participants from the Kutlu Neighborhood complained about the variety of activities that the parks offer both for themselves and their children. Additionally, in accordance with Woolley's (2003) statements, this study showed that close proximity is one of the most important factors affecting the use of open green spaces in both neighborhoods.

According to the findings, it is found out that mothers in Kutlu Neighborhood are more anxious due to traffic factor and traffic control is important for mothers in terms of use of space. Furthermore, quality of pavements and other pedestrian roads is also of great importance. According to the marked maps, in Yapracık TOKİ residences where the uses are separated, the places that are frequently used by the participants are in longer distances than the ones in Kutlu Neighborhood. During the interviews, some of the mothers stated that they reach the places they marked with cars or shuttles, but there was no data to be evaluated regarding public transportation.

According to the data obtained from the study, climatic comfort is another important factor affecting the use of open spaces by mothers, similar to the studies of Givoni et. al (2003). In terms of protection from different weather conditions, many negative comments were received from TOKİ residences. Seven of the ten women, remarked that their use of open spaces is limited by the weather conditions. In Kutlu Neighborhood, which is denser in terms of built environment, there are fewer comments about wind and sun protection.

Moreover, according to the findings of the study, although only one of the participants stated that she feels socio-cultural pressure while using the open spaces, again only one mother stated that she can breastfeed her baby in open areas comfortably. It can be interpreted that socio-cultural pressure is not the reason why participants are not comfortable with public breastfeeding. Also participants avoided answering whether this situation effects their open space use. However, sixteen of twenty mothers stated

that closed and clean baby care and breastfeeding facilities will affect their use of open spaces positively.

According to the results, the noise level and environmental pollution are higher in Kutlu Neighborhood than Yaprıcık TOKİ residences. All but one of the participants assessed that the maintenance and cleanliness of the environment is an important factor in using open spaces, some especially emphasized it considering health of their children. Again, the majority stated that the noise level is a factor affecting their open space use, similarly with the previous studies. In addition, the lighting and seating elements were found to be almost sufficient for both neighborhoods, and both were found to be factors that affect space use. Finally, according to the mothers' perception height of the buildings doesn't affect their open space use.

To conclude, the different aspects of neighborhoods were evaluated differently by mothers. Results of this study indicates that Kutlu Neighborhood is found to be poorer in terms of green space diversity, more polluted, noisier, less safe and more threatening with respect to traffic and other users like strangers and foreigners. Besides, Yaprıcık TOKİ Neighborhood is found to be more relaxing and welcoming, but the need for different uses of mothers from this neighborhood is remarkable. However, comparing all of the statistical findings, the Mann-Whitney U test result shows that there is no significant difference between mothers' evaluations of Kutlu Neighborhood and Yaprıcık TOKİ. The Author acknowledges the fact that sample size may not provide valid results. An increase in the sample size may show significant difference between neighborhoods regarding mothers' use of open spaces.

5.2. Implications for Urban Design

The findings of this study reveal a number of individual, social and physical factors affecting mothers' use of open spaces in neighborhoods having different characteristics. In addition, the types of activities that mothers carry out, in the open spaces of their near home environments are among the findings of the study.

Therefore, urban design strategies to be developed based on these findings can provide a suitable environment for mothers and encourage them to use open spaces in their neighborhoods.

Firstly, findings of the study indicated that mothers mostly use open spaces in their neighborhoods for accompanying their children while they are playing, riding a bike or socializing with other children. Thus, design of neighborhood open spaces should be sensitive to the needs of both women and children. Many studies address design problems with this respect, such as research report of DTLR (2002). Also, it is found out that mothers use open spaces to exercise, therefore providing facilities for physical exercise like walking or jogging are of great importance.

Moreover, findings indicate that mothers use seating elements for various reasons like watching out their children or socializing with other neighbors. Additionally, according to participants' evaluations, night illumination is of great importance for open space use. Thus, providing different and sufficient number of seating and adequate illumination is significant for mothers. According to the results, especially for mothers who breastfeed, availability of clean and well-equipped baby care and nursing facilities is important. Boyer's (2012) study proposes design strategies in this regard. Research results indicate that another factor that affects mothers' use of space is the noise level. The design strategies which reduce noise level and provide acoustic comfort can be adopted in the design of neighborhood open spaces, as in the study of Kang (2007). Moreover, mothers who participated in the study mentioned several times that the weather conditions affect their use of space. In this context, weather-sensitive neighborhood design can encourage mothers to use open spaces (see Oke et al., 2017).

According to the thesis findings, traffic safety is one of the important factors affecting mothers use of space. In addition to traffic regulations such as safety of pedestrian crossings and control of vehicle speeds, design strategies should be adopted to eliminate pedestrian and traffic conflicts in the open spaces of the neighborhood. In

addition, with regards to the findings, it is important that pedestrian paths and sidewalks are of good quality for women pushing baby strollers, carrying loads and toddlers who just started walking.

Last but not least, according to the findings of the study sense of safety is one of the most important factors affecting mothers' use of open spaces. There are many studies addressing the security and safety in the design of public spaces (see Wekerle & Whitzman, 1995; Valentine, 1990). Therefore, the open spaces which designed with the strategies to be developed in line with these studies, may create more inclusive neighborhood environments for mothers with young children.

REFERENCES

- Adams, M. (2014). Quality of Urban Spaces and Wellbeing. In R. Cooper, E. Burton, & C. L. Cooper (Eds.), *Wellbeing and the Environment*. London: Wiley-Blackwell.
- Addy, C. L., Wilson, D. K., Kirtland, K. A., Ainsworth, B. E., & Sharpe, P. (2004). Associations of Perceived Social and Physical Environmental Supports With Physical Activity and Walking Behavior. *American Journal of Public Health, 94*(3), 440–443. <https://doi.org/10.2105/AJPH.94.3.440>
- Agnew, J. (2011). Space and place. In J. Agnew & D. Livingstone (Eds.), *The SAGE handbook of geographical knowledge* (pp. 316–330). London: SAGE Publications.
- Aitken, S. C. (2000). Mothers, communities and the scale of difference. *Social and Cultural Geography, 1*(1), 65–82. <https://doi.org/10.1080/14649369950133494>
- Alkan, A. (1999). *Toplumsal Cinsiyet ve Kentsel Mekanın Düzenlenmesi Çerçevesinde Kent Planlaması Disiplini* (pp. 1–32). pp. 1–32.
- Alkan, A. (2005). *Toplumsal Cinsiyet ve Yerel Yönetimler: Kadınların Kentteki Görünmez Varlığı*. Ankara: Dipnot.
- Allen, J., Massey, D., & Pryke, M. (1999). *Unsettling cities*. London: Routledge.
- Altman, I. (1975). *Environment and social behavior*. Brooks, CA.
- Anderson-Khleif. (1981). Housing Needs of Single-Parent Mothers. In S. Keller (Ed.), *Building for Women*.
- Appleyard, D. (1981). *Livable Streets*. Berkeley: University of California Press.
- Arjmand, R. (2017). Public Urban Space, Gender and Segregation. In *Public Urban Space, Gender and Segregation*. <https://doi.org/10.4324/9781315603025>
- Arnberg, A. (2010). Urban Densification and Recreational Quality of Public Urban Green Spaces—A Viennese Case Study. *Sustainability, 4*(12), 703–720.
- Ball, K., Timperio, A. F., & Crawford, D. A. (2006). Understanding environmental influences on nutrition and physical activity behaviors: where should we look and what should we count? *International Journal of Behavioral Nutrition and Physical Activity, 3*(33). <https://doi.org/10.1186/1479-Received>
- Bartlett, S. (2017). Building Better Cities with Young Children and Families. *Environment and Urbanization, 14*(2), 3–10. Retrieved from <https://bernardvanleer.org/app/uploads/2017/10/BvLF-8-80-Cities-Report->

Final.pdf

- Beebeejaun, Y. (2017). Gender, urban space, and the right to everyday life. *Journal of Urban Affairs*, 39(3), 323–334. <https://doi.org/10.1080/07352166.2016.1255526>
- Blöbaum, A., & Hunecke, M. (2005). Perceived danger in urban public space; the impacts of physical features and personal factors. *Environment and Behavior*, 37(4), 465–486.
- Bojorquez, I., Ojeda-Revah, L., & Diaz, R. (2018). Access to public spaces and physical activity for Mexican adult women. *Cadernos de Saúde Pública*, 34(4). <https://doi.org/10.1590/0102-311x00065217>
- Bondi, L. (1992). Gender symbols and urban landscapes. *Progress in Human Geography*, 16(2).
- Bondi, L., & Rose, D. (2003). Constructing gender, constructing the urban: A review of Anglo-American feminist urban geography. *Gender, Place & Culture*, 10, 229–245.
- Boyer, K. (2012). Affect, corporeality and the limits of belonging: Breastfeeding in public in the contemporary UK. *Health and Place*, 18(3), 552–560. <https://doi.org/10.1016/j.healthplace.2012.01.010>
- Boyer, K., & Spinney, J. (2015). *Motherhood, mobility and materiality: Material entanglements, journey-making and the process of 'becoming mother.'* (December), 1–32.
- Brenner, S. A. (1998). *The Domestication of Desire: Women, Wealth, and Modernity in Java*. Princeton Univ. Press.
- Bronfenbrenner, U. (1989). Ecological systems theory. *Annals of Child Development*, 6, 187–249.
- Canter, D. (1977). *The Psychology of Place*. London: Architectural Press.
- Carby, H. V. (2018). *Policing the Black Woman 's Body in an Urban Context*. 18(4), 738–755.
- Carmona, M., Tiesdell, S., Oc, T., & Heath, T. (2010). *Public Places Urban Spaces: The Dimensions of Urban Design*. Elsevier Science.
- Carr, S., Francis, M., Rivlin, L. G., & Stone, A. M. (1992). Needs in Public. *Public Space*, (January 2006), 87–136.
- CEUD. (2017). *Building for everyone: A universal design approach*. Centre for Excellence in Universal Design.
- Chermayeff, S., & Alexander, C. (1963). *Community and Privacy*. Pelican.
- Chiesura, A. (2004). The Role of Urban Parks for the Sustainable City. *Landscape*

- and *Urban Planning*, 68(1), 129–138.
<https://doi.org/10.1016/j.landurbplan.2003.08.003>
- Christian, H., Knuiiman, M., Divitini, M., Foster, S., Hooper, P., Boruff, B., ... Giles-Corti, B. (2014). A longitudinal analysis of the influence of the neighborhood built environment on walking for transportation. *American Journal of Epidemiology*, 180(5), 453–461.
<https://doi.org/http://dx.doi.org/10.1093/aje/kwu171>
- Cleland, V. J., Timperio, A., & Crawford, D. (2008). Are perceptions of the physical and social environment associated with mothers' walking for leisure and for transport? A longitudinal study. *Preventive Medicine*, 47(2), 188–193.
<https://doi.org/10.1016/j.ypmed.2008.05.010>
- Cowan, A. (2011). Seeing is believing: Urban gossip and the balcony in early modern venice. *Gender and History*, 23(3), 721–738. <https://doi.org/10.1111/j.1468-0424.2011.01651.x>
- Cuthbert, A. R. (2006). Gender. In *The Form of Cities: Political Economy and Urban Design* (pp. 127–149).
- Day, K. (2000). The Ethic of Care and Women's Experiences of Public Space. *Journal of Environmental Psychology*, 20(2), 103–124.
<https://doi.org/10.1006/jevp.1999.0152>
- Domosh, M. (2005). Architecture and Planning. In *A Companion to Gender Studies* (pp. 475–483). <https://doi.org/10.1080/10304310903201676>
- Domosh, M., & Seager, J. (2001). *Putting Women in Place: feminist geographers make sense of the world*. New York: Guilford Press.
- DTLR, (2002). *Improving urban parks play areas and open space*. Department of Transport Local Government and Regions; London.
- Duany, A., Speck, J., & Lydon, M. (2010). *The Smart Growth Manual*. New York: McGraw Hill.
- Dunnett, N., Swanwick, C., & Woolley, H. (2002). Improving Urban Parks , Play Areas and Green Spaces. *Department for Transport, Local Government and the Regions*, (ISBN 1 85112 576 0), 217.
<https://doi.org/papers3://publication/uuid/A85EC5F0-75BD-4B3E-9D99-59967F595C4C>
- Dunnett, N., Swanwick, C., Woolley, H., & Government, L. (2002). *Improving Urban Parks , Play Areas and Green Spaces*. (May).
- Dyck, I. (2006). Space, Time, and Renegotiating Motherhood: An Exploration of the Domestic Workplace. *Environment and Planning D: Society and Space*, 8(4), 459–483. <https://doi.org/10.1068/d080459>

- Eeden, J. van. (2006). The gender of shopping malls. *Communicatio*, 32(1), 38–64. <https://doi.org/10.1080/02500160608537962>
- Ekert-Jaffé, O., & Grossbard, S. (2015). Time Cost of Children as Parents' Foregone Leisure. *Mathematical Population Studies*, 22(2), 80–100. <https://doi.org/10.1080/08898480.2013.836332>
- Fenster, T. (1999). Space for gender: cultural roles of the forbidden and the permitted. *Environment and Planning D: Society and Space*, 17(2), 227–246. <https://doi.org/10.1068/d170227>
- Ford, L. R. (2000). *The Spaces Between Buildings*. Baltimore: The Johns Hopkins University Press.
- Franck, K. A. (1985). Social Construction of the Physical Environment: The Case of Gender. *Sociological Focus*, 18(2), 143–160.
- Franck, K. A., & Paxson, L. (1989). Women and Urban Public Space: Research design, and policy issues. In Irwin Altman & E. Zube (Eds.), *Public Places and Spaces* (pp. 121–146). <https://doi.org/10.1007/978-1-4684-5601-1>
- Frank, L. D., Andresen, M. A., & Schmid, T. L. (2004). Obesity relationships with community design, physical activity, and time spent in cars. *American Journal of Preventive Medicine*, 27(2), 87–96. <https://doi.org/10.1016/j.amepre.2004.04.011>
- Frank, L. D., Schmid, T. L., Sallis, J. F., Chapman, J., & Saelens, B. E. (2005). Linking objectively measured physical activity with objectively measured urban form: Findings from SMARTRAQ. *American Journal of Preventive Medicine*, 28(2 SUPPL. 2), 117–125. <https://doi.org/10.1016/j.amepre.2004.11.001>
- Garcia-Ramon, M. D., Ortiz, A., & Prats, M. (2004). Urban planning, gender and the use of public space in a peripheral neighbourhood of Barcelona. *Cities*, 21(3), 215–223. <https://doi.org/10.1016/j.cities.2004.03.006>
- Gardner, C. B. (1989). Analyzing gender in public places: Rethinking Goffman's vision of everyday life. *The American Sociologist*, 20, 42–56.
- Gehl, J., & Svarre, B. (2013). *How to Study Public Life*. Washington, D.C.: Island Press.
- Gehl, Jan. (1987). *Life between buildings : using public space*. New York: Van Nostrand Reinhold.
- Gibson-Graham, J. K. (1996). *The End of Capitalism (As We Knew It): A Feminist Critique of Political Economy*. Cambridge: Blackwell Publishing.
- Giles-Corti, B., & Donovan, R. J. (2001). The relative influence of individual, social and physical environment determinants of physical activity. *Social Science and Medicine*, 54(12), 1793–1812. [https://doi.org/10.1016/S0277-9536\(01\)00150-2](https://doi.org/10.1016/S0277-9536(01)00150-2)

- Giles-Corti, B., Timperio, A., Bull, F., & Pikora, T. (2005). Understanding physical activity environmental correlates: Increased specificity for ecological models. *Exercise and Sport Sciences Reviews*, 33(4), 175–181. Retrieved from <http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=emed7&NEWS=N&AN=2005482157>
- Givoni, B., Noguchi, M., Saaroni, H., Pochter, O., Yaakov, Y., Feller, N., & Becker, S. (2003). Outdoor comfort research issues. *Energy and Buildings*, 35(1), 77–86. [https://doi.org/10.1016/S0378-7788\(02\)00082-8](https://doi.org/10.1016/S0378-7788(02)00082-8)
- Gobster, P. H. (2001). Neighbourhood-open space relationships in Metropolitan planning: A look across four scales of concern. *Local Environment*, 6(2), 199–212. <https://doi.org/10.1080/13549830120052827>
- Grabosky, P. N. (1995). Fear of Crime, and Fear Reduction Strategies. *Current Issues in Criminal Justice*, 7(1), 7–19. <https://doi.org/10.1080/10345329.1995.12036675>
- Greed, C. (2003). *Inclusive Urban Design: Public Toilets*. London: Routledge.
- Greed, C. (2014). Social Town Planning. In *Social Town Planning*. <https://doi.org/10.4324/9780203019962>
- Grundström, K. (2005). Gender and use of public space. *Housing Development and Management—HDM, Lund University Introduction*, 1–10.
- Harnik, P. (2003). *The Excellence City Park System: What Makes it Great and How to Get There*. Washington, D.C.
- Harnik, P., & Welle, B. (2009). *Measuring the Economic Value of a City Park System*. Chicago.
- Hartig, T., Mang, M., & Evans, G. (1991). Restorative effects of natural environments experiences. *Environment and Behavior*, 23, 3–26.
- Hayden, D. (1980). What Would a Non-Sexist City Be Like Speculations on Housing , Urban Design , and Human Work. *Women and the American City*, 5(3), 170–187. <https://doi.org/10.1021/bi0017172>
- Hayden, D. (1984). *Redesigning the American Dream*. New York: W. Norton.
- Hayden, D., & Wright, G. (1976). Architecture and Urban Planning. *Signs: Journal of Women in Culture and Society*, 1(4), 923–933. <https://doi.org/10.1086/493309>
- Hayford, A. M. (1974). The Geography of Women: An Historical Introduction. In *Theory and Methods: Critical Essays in Human Geography*. <https://doi.org/https://doi.org/10.1111/j.1467-8330.1974.tb00590.x>
- Healey, P. (2010). *Making Better Places: The Planning Project in the Twenty-First Century*. Red Globe Press.

- Holcomb, B. (1984). Women in the City. *Urban Geography*, 5(3), 247–254.
- Holland, C., Clark, A., Katz, J., & Peace, S. (2007). Social interactions in urban public places. *The Open University*, 12(1), 1–84. <https://doi.org/10.1186/1745-6215-12-264>
- Holloway, S. L. (1998). “She lets me go out once a week”: Mothers’ strategies for obtaining “personal” time and space. *Area*, 30(4), 321–330. <https://doi.org/10.1111/j.1475-4762.1998.tb00077.x>
- Holloway, Sarah L. (1998). Local childcare cultures: Moral geographies of mothering and the social organisation of pre-school education. *Gender, Place and Culture*, 5(1), 29–53. <https://doi.org/10.1080/09663699825313>
- Hough, M. (1995). *City Form and Natural Process: Towards a new urban vernacular*. London: Routledge.
- İmamoğlu, E. O. (1991). Aile İçinde Kadın-Erkek Rollerini. In *Türk Aile Ansiklopedisi*. Ankara: Türkiye Yazarlar Birliği Vakfı.
- Jacobs, J. (1961). *The death and life of great American cities*. New York: Vintage Books Edition.
- Jarvis, H., Kantor, P., & Cloke, J. (2009). *Cities and Gender*. Routledge.
- Kallus, R. (2001). *From Abstract to Concrete : Subjective Reading of Urban*. 6(2), 129–150. <https://doi.org/10.1080/1357480012005781>
- Kang, J. (2007). *Urban Sound Environment*. Taylor & Francis.
- Kaplan, R., Kaplan, S., & Ryan, R. (1998). *With People in Mind: design and management of everyday nature*. Washington, D.C.: Island Press.
- Kaplan, Rachel. (1983). The analysis of perception via preference: a strategy for studying how the environment is experienced. *Landsc. Urban Plan*, 12, 161–176.
- Kaplan, Rachel, & Kaplan, S. (1989). *The Experience of Nature : A Psychological Perspective*. New York: Cambridge University Press.
- Kayden, J. S. (2000). *Privately Owned Public Space: the New York City Experience*. New York: John Wiley.
- Kennedy, M. (1981). Toward a Rediscovery of “Feminine” Principles in Architecture and Planning. *Women’s Studies International Quarterly*, 4(1), 75–81.
- King, G., Roland-Mieszkowski, M., Jason, T., & Rainham, D. G. (2012). Noise levels associated with urban land use. *Journal of Urban Health*, 89(6), 1017–1030. <https://doi.org/10.1007/s11524-012-9721-7>
- Klodawsky, F., & Lundy, C. (1994). *Women’s Safety in the University Environment*. 11(2), 128–136.

- Knopp, L. (1992). Sexuality and the spatial dynamics of capitalism. *Environment & Planning D: Society & Space*, 651–669.
- Knopp, L. (1995). If you're going to get all hyped up, you'd better go somewhere! *Gender, Place & Culture*, 2(8).
- Knopp, L. (1998). Sexuality and urban space: gay male identities, communities and cultures in the U.S., U.K. and Australia. In Fincher & Jacobs (Eds.), *Cities of Difference*. New York.
- Knox, P., & Pinch, S. (2000). *Urban Social Geography: An Introduction*. Harlow: Prentice Hall.
- Koskela, H., & Pain, R. (2000). Revisiting fear and place: women's fear of attack and the built environment. *Geoforum*, 31, 269–280.
- Krier, R. (1979). *Urban Space*. New York.
- Laatikainen, T. E., Hasanzadeh, K., & Kyttä, M. (2018). Capturing exposure in environmental health research: Challenges and opportunities of different activity space models. *International Journal of Health Geographics*, 17(1), 1–14. <https://doi.org/10.1186/s12942-018-0149-5>
- Lachapelle, U., Frank, L., Saelens, B. E., Sallis, J. F., & Conway, T. L. (2011). Commuting by public transit and physical activity: where you live, where you work, and how you get there. *Journal of Physical Activity & Health*, 8 Suppl 1(January). <https://doi.org/10.1123/jpah.8.s1.s72>
- Lefebvre, H. (1991). *The Production of Space*. Cambridge, Massachusetts: Basil Blackwell.
- Lestan, K. A., Eržen, I., & Golobič, M. (2014). The role of open space in urban neighbourhoods for health-related lifestyle. *International Journal of Environmental Research and Public Health*, 11(6), 6547–6570. <https://doi.org/10.3390/ijerph110606547>
- Lilius, J. (2017). Urban space in the everyday lives of mothers and fathers on family leave leave in Helsinki. *European Urban and Regional Studies*, 24, 104–118. <https://doi.org/10.1177/0969776415619662>
- Lo, A. Y. H., & Jim, C. Y. (2010). Differential community effects on perception and use of urban green spaces. *Cities*, 27, 430–442.
- Lofland, L. H. (1998). *The public realm: Exploring the city's quintessential social territory*. Transaction Publishers.
- Löw, S. M., & Lawrence-Zúñiga, D. (2001). Locating Culture. In S. M. Löw & D. Lawrence-Zúñiga (Eds.), *The Anthropology of Space and Place, Locating Culture*. (pp. 1–48). Blackwell Publishing.

- Luppi, F., & Arpino, B. (2016). Childcare Arrangements and Mothers' Satisfaction with Work-Family Balance Francesca. *Research and Expertise Center for Survey Methodology*, (49), 1–2.
- Luzia, K. (2010). Travelling in your backyard: The unfamiliar places of parenting. *Social and Cultural Geography*, 11(4), 359–375. <https://doi.org/10.1080/14649361003774571>
- Lynch, K. (1960). *The Image Of The City*. Cambridge: The MIT Press.
- Mackenzie, S. (1989). Women in the City. In *New Models in Geography: The Political Economy Perspective* (Vol. 2, pp. 109–126). London.
- Madanipour, A. (1996). Urban design and dilemmas of space. *Environment & Planning D: Society & Space*.
- Madanipour, A. (2003). *Public and Private Spaces of the City*. London and New York: Routledge.
- Mansfield, E. D., Ducharme, N., & Koski, K. G. (2012). Individual, social and environmental factors influencing physical activity levels and behaviours of multiethnic socio-economically disadvantaged urban mothers in Canada: A mixed methods approach. *International Journal of Behavioral Nutrition and Physical Activity*, 9(1), 1. <https://doi.org/10.1186/1479-5868-9-42>
- Marans, R., & Mohai, P. (1991). Leisure Resources, Recreation and the Quality of Life. In P. J. Brown & G. L. Peterson (Eds.), *Benefits of Leisure*. Venture Publishing.
- Marans, R. W. (2003). Understanding environmental quality through quality of life studies: the 2001 DAS and its use of subjective and objective indicators. *Landscape and Urban Planning*, 65(1–2), 73–83. [https://doi.org/10.1016/S0169-2046\(02\)00239-6](https://doi.org/10.1016/S0169-2046(02)00239-6)
- Maruani, T., & Amit-Cohen, I. (2007). Open space planning models: A review of approaches and methods. *Landscape and Urban Planning*, 81, 1–13.
- Massey, D. (1994). *Space, Place, and Gender*. Cambridge: Polity Press.
- Mathews, V. (2018). Reconfiguring the Breastfeeding Body in Urban Public Spaces. *Social and Cultural Geography*, 9365, 1–19. <https://doi.org/10.1080/14649365.2018.1433867>
- Mattingly, M. J., Bianchi, S. M., Forces, S. S., & Mar, N. (2003). Gender Differences in the Quantity and Quality of Free Time: The U. S. Experience. *Oxford University Press*, 81(3), 999–1030.
- McDowell, L. (1983). Towards an understanding of the gender division of urban space. *Environment & Planning D: Society & Space*, 1(1), 59–72. <https://doi.org/10.1068/d010059>

- Mitchell, D. (2003). The Right to the City: Social Justice and the Fight for Public Space. *Contemporary Sociology: A Journal of Reviews*, 33(3), 361–362. <https://doi.org/10.1177/009430610403300361>
- Mitchell, R. (2013). Is physical activity in natural environments better for mental health than physical activity in other environments? *Social Science & Medicine*, 91, 130–134.
- Mitchell, R., & Popham, F. (2008). Effect of exposure to natural environment on health inequalities: an observational population study. *Lancet*, 372, 1655–1660.
- Monk, J., & Hanson, S. (1982). On not excluding half of the human in human geography. *Professional Geographer*, 34(1), 11–23. <https://doi.org/10.1111/j.0033-0124.1982.00011.x>
- Montgomery, J. (1998). Making a city: Urbanity, vitality and urban design. *Journal of Urban Design*, 3, 93–116.
- Nakhal, J. (2015). Women as Space/Women in Space: Relocating our Bodies and Rewriting Gender in Space. *Kohl: A Journal for Body and Gender Research*, 1(1).
- Nasar, J. L. (1990). The Evaluative Image of the City. *Journal of the American Planning Association*, 56(1), 41–53. <https://doi.org/10.1080/01944369008975742>
- Nasar, J. L., & Fisher, B. (1992). Design for vulnerability: cues and reactions to fear of crime. *Sociology and Social Research*, 48–58.
- Nezhadmasoum, S. (2015). *Analyzing the Aesthetic Quality of Street Through User Preference: A Case Study of Mehmet Akif Street, Nicosia, Cyprus*. Eastern Mediterranean University.
- Norberg-Schulz, C. (1967). The Phenomenon of Place. In M. Larice & E. Macdonald (Eds.), *The Urban Design Reader* (2nd ed., pp. 272–283). Routledge.
- OECD. (2010). Gender Brief. *OECD Social Policy Division Report*, (March), 1–35. Retrieved from <http://www.oecd.org/social/family/44720649.pdf>
- Oke, T., Mills, G., Christen, A., & Voogt, J. (2017). *Climate-Sensitive Design*. In *Urban Climates* (pp. 408-452). Cambridge: Cambridge University Press. doi:10.1017/9781139016476.016
- Ortiz, A., Garcia-Ramon, M. D., & Prats, M. (2004). *Women ' s use of public space and sense of place in the Raval (Barcelona)*. 61(3), 219–227.
- Owen, N., Humpel, N., Salmon, J., & Oja, P. (2004). Environmental Influences on Physical Activity. In P. Oja & J. Borms (Eds.), *Health Enhancing Physical Activity*. Belin: International Society of Sport Science and Physical Education.

- Pain, R. (2000). Place, social relations and the fear of crime: A review. *Progress in Human Geography*, 24(3), 365–387. <https://doi.org/10.1191/030913200701540474>
- Pasaogullari, N., & Doratli, N. (2004). Measuring accessibility and utilization of public spaces in Famagusta. *Cities*, 21(3), 225–232. <https://doi.org/10.1016/j.cities.2004.03.003>
- Peake, L. (1993). ‘Race’ and Sexuality: Challenging the Patriarchal Structuring of Urban Social Space. *Environment & Planning D: Society & Space*, 415–432.
- Perrem, J. G. (2018). Immigrant parents’ everyday encounters with exclusion and public space mobilities: ‘Some type of force field.’ *Space and Polity*, 22(1), 1–14. <https://doi.org/10.1080/13562576.2018.1433013>
- Purcell, M. (2002). Excavating Lefebvre: The right to the city and its urban politics of the inhabitant. *GeoJournal*, 58, 99–108.
- Racki, R. (1975). *Mothers’ Perception of Housing Space*. Massachusetts Institute of Technology.
- Rapoport, A. (1990). *The Meaning of the Built Environment: A Nonverbal Communication Approach*. University of Arizona Press.
- Raymore, L. A. (2002). Facilitators to leisure. *Journal of Leisure Research*, 34, 37–51.
- Relph, E. (1976). *Place and placelessness*. London: Pion.
- Rezazadeh, R., & Mohammadi, M. (2013). Responsive Urban Space Special Need Group (Women), Case study: Chizar Neighborhood Space, Tehran, Iran TT -. *Iust*, 23(1), 64–73. Retrieved from <http://ijaup.iust.ac.ir/article-1-21-en.html>
- Rofè, Y., Feierstein, G., & Zarchin, I. (2012). Quantity and quality of public open spaces in Israel. *Proceedings of the Institution of Civil Engineers - Urban Design and Planning*, 165(3), 177–187. <https://doi.org/10.1680/udap.11.00021>
- Sack, R. D. (1997). *Homo Geographicus*. London: The Johns Hopkins University Press.
- Saegert, S. (1980). Masculine Cities and Feminine Suburbs: Polarized Ideas, Contradictory Realities. *Signs: Journal of Women in Culture and Society*, 5(S3), 96–111. <https://doi.org/10.1086/495713>
- Saelens, B. E., Sallis, J. F., & Frank, L. D. (2003). Environmental Correlates of Walking and Cycling: Findings From the Transportation, Urban Design, and Planning Literatures. *Annals of Behavioral Medicine*, (February). <https://doi.org/10.1207/S15324796ABM2502>
- Sallis, J. F., Certero, R. B., Ascher, W., Henderson, K. A., Kraft, M. K., & Kerr, J.

- (2006). An Ecological Approach To Creating Active Living Communities. *Annual Review of Public Health*, 27(1), 297–322. <https://doi.org/10.1146/annurev.publhealth.27.021405.102100>
- Sallis, J. F., & Owen, N. (1997). Ecological models. In *Health Behavior and Health Education: Theory, Research, and Practice* (pp. 403–4024). San Francisco: Jossey-Bass.
- Salvo, G., Lashewicz, B. M., Doyle-Baker, P. K., & McCormack, G. R. (2018). Neighbourhood built environment influences on physical activity among adults: A systematized review of qualitative evidence. *International Journal of Environmental Research and Public Health*, 15(5). <https://doi.org/10.3390/ijerph15050897>
- Saygılıgil, F. (2013). *Anahtar Sözcükler : Mekân, Toplumsal Cinsiyet, Şiddet, Yazmak Alan Tan ı m ı : Sosyoloji (Toplumsal Cinsiyet)*. 8012(1), 209–218.
- Schipperijn, J. (2010). Use of Urban Green Space. In *Skov & Landskab Københavns Universitet. (Forest and Landscape Research)*.
- Seagert, S., & Winkel, G. (1980). The home: A critical problem for changing sex roles. In G. Wekerle, R. Peterson, & D. Morley (Eds.), *New spaces for women* (pp. 41–64). CO: Westview.
- Seçkin, N. P. (2018). Environmental control in architecture by landscape design. *A/Z ITU Journal of the Faculty of Architecture*, 15(2), 197–211. <https://doi.org/10.5505/itujfa.2018.90022>
- Shumaker, S. A., & Taylor, R. B. (1983). Toward a clarification of people-place relationships: A model of attachment to place. In N. R. Feimer & E. S. Geller (Eds.), *Environmental psychology: Directions and perspectives* (pp. 219–251). New York: Praeger.
- Silbaugh, K. B. (2007). Women’s Place: urban planning, housing design, and work-family balance. *Fordham Law Review*, 76(3), 1797–1852.
- Spain, D. (1993). Gendered Spaces and Women’s Status. *Sociological Theory*, 11(2), 137–151.
- Stedman, R. C. (2003). Is it really just a social construction?: The contribution of the physical environment to sense of place. *Society and Natural Resources*, 16(8), 671–685. <https://doi.org/10.1080/08941920309189>
- Steele, F. (1981). *The sense of place*. Boston: CBI Publishing Company.
- Sugiyama, T., & Ward Thompson, C. (2008). Associations between characteristics of neighbourhood open space and older people’s walking. *Urban Forestry and Urban Greening*, 7(1), 41–51. <https://doi.org/10.1016/j.ufug.2007.12.002>
- Tandogan, O., & Ilhan, B. S. (2016). Fear of Crime in Public Spaces: From the View

- of Women Living in Cities. *Procedia Engineering*, 161, 2011–2018. <https://doi.org/10.1016/j.proeng.2016.08.795>
- Thompson, C. W. (2002). Urban open space in the 21st century. *Landscape and Urban Planning*, 60, 59–72.
- Timperio, A., Jeffery, R. W., Crawford, D., Roberts, R., Giles-Corti, B., & Ball, K. (2010). Neighbourhood physical activity environments and adiposity in children and mothers: A three-year longitudinal study. *International Journal of Behavioral Nutrition and Physical Activity*, 7, 1–8. <https://doi.org/10.1186/1479-5868-7-18>
- Trancik, R. (1986). *Finding Lost Spaces*. New York: Van Nostrand Reinhold.
- Tuan, Y.-F. (2001). *Space and Place: The Perspective of Experience*. Minneapolis: University of Minnesota Press.
- Tuan, Y. F. (1979). Space and Place: Humanistic Perspective. *Philosophy in Geography*, 20, 387–427.
- Tuncer, S. (2014). *Going Public: Women's Experience of Everyday Urban Public Space in Ankara Across Generations Between The 1950s and the 1980s*. METU.
- Turner, J., & Grieco, M. (2000). Gender and time poverty: the neglected social policy implications of gendered time, transport and travel. *Time and Society*, 9(1), 129–136.
- Turney, K., & Harknett, K. (2010). Neighborhood disadvantage, residential stability, and perceptions of instrumental support among new mothers. *Journal of Family Issues*, 31(4), 499–524. <https://doi.org/10.1177/0192513X09347992>
- Ulrich, R. S. (1981). Natural versus urban sciences: some psycho-physiological effects. *Environment and Behavior*, 13, 523–556.
- UN HABITAT. (2012). *Gender Issue Guide: Urban Planning and Design*. 72.
- Uteng, T. P. (2011). Gendered Bargains of Daily Mobility Citing cases from both Urban and Rural settings. *World Development Report: Gender Equality and Development*, 98 pages. Retrieved from <https://openknowledge.worldbank.org/handle/10986/9111>
- Valentine, D. (2002). We're Not about Gender: The Uses of Transgender. In E. Lewin & W. L. Leap (Eds.), *The Emergence of Lesbian and Gay Anthropology*. University of Illinois Press.
- Valentine, G. (1989). The geography of women's fear. *Area*, 21, 385–390.
- Valentine, G. (1990). Women's Fear and the Design of Public Space. *Built Environment*, 16(4), 288–303.

- Valentine, G. (1993). *(Hetero)Sexing Space: Lesbian Perceptions and Experiences of Everyday Spaces*. *11*(4), 395–413. <https://doi.org/10.1068/d110395>
- Van Hecke, L., Deforche, B., Van Dyck, D., De Bourdeaudhuij, I., Veitch, J., & Van Cauwenberg, J. (2016). Social and physical environmental factors influencing adolescents' physical activity in urban public open spaces: A qualitative study using walk-along interviews. *PLoS ONE*, *11*(5), 1–24. <https://doi.org/10.1371/journal.pone.0155686>
- Vanos, J. K. (2015). Children's health and vulnerability in outdoor microclimates: A comprehensive review. *Environment International*, *76*, 1–15. <https://doi.org/10.1016/j.envint.2014.11.016>
- Vanos, J. K., Warland, J. S., Gillespie, T. J., & Kenny, N. A. (2010). Review of the physiology of human thermal comfort while exercising in urban landscapes and implications for bioclimatic design. *International Journal of Biometeorology*, *54*(4), 319–334.
- Veitch, J., Bagley, S., Ball, K., & Salmon, J. (2006). Where do children usually play? A qualitative study of parents' perceptions of influences on children's active free-play. *Health and Place*, *12*(4), 383–393. <https://doi.org/10.1016/j.healthplace.2005.02.009>
- Völker, B., Flap, H. D., & Lindenberg, S. (2007). When are neighbourhoods communities? Community in Dutch neighbourhoods. *European Sociological Review*, *23*, 99–114.
- Wajcman, J. (2001). The Built Environment: Women's Place, Gendered Space. In *Women, Science and Technology* (pp. 194–208). NY: Routledge.
- Walker, L., & Cavanagh, S. (1999). Women's Design Service: feminist resources for urban environments. In J. Rothschild (Ed.), *Design and Feminism: Re-visioning spaces, places and everyday things* (pp. 149–158). Rutgers.
- Weisman, L. (1994). *Discrimination by Design: A feminist critique of the man-made environment*. University of Illinois Press.
- Weisman, L. K. (1981). Women's Environmental Rights: A Manifesto. *A Feminist Publication on Art and Politics*.
- Wekerle, G., Peterson, R., & Morley, D. (1980). *New Space for Women*. Westview Press.
- Wekerle, G. R. (1985). A Woman's Place is in the City. *Antipode*, *17*(2–3), 145–153. <https://doi.org/10.1111/j.1467-8330.1985.tb00343.x>
- Wekerle, G. R., & Whitzman, C. (1995). *Safe Cities: Guidelines for Planning, Design and Management*. U.S.A.: A Division of International Thomson Publishing.
- Whitzman, C. (2007). Stuck at the front door: Gender, fear of crime and the challenge

of creating safer space. *Environment and Planning A*, 39(11), 2715–2732. <https://doi.org/10.1068/a38449>

Whyte, W. H. (1980). *The social life of small urban spaces*. Washington, D.C.: The Conservation Foundation.

Wolf, Jennifer P., Freisthler, B., Kepple, N. J., & Chavez, R. (2015). The places parents go: understanding the breadth, scope, and experiences of activity spaces for parents. *GeoJournal*, 82, 355–358.

Wolf, Jennifer Price, Freisthler, B., Kepple, N. J., & Chavez, R. (2017). The places parents go: understanding the breadth, scope, and experiences of activity spaces for parents. *GeoJournal*, 82(2), 355–368. <https://doi.org/10.1007/s10708-015-9690-y>

Woolley, H. (2003). *Urban Open Spaces*. London: Spon Press.

Yang, W., & Kang, J. (2005). Acoustic comfort evaluation in urban open public spaces. *Applied Acoustics*, 66(2), 211–229.

APPENDICES

A. Interview Form

Görüşme Formu

1. Kısım – Açık Uçlu Sorular

1. Evinizin yakın çevresinde sıklıkla kullandığınız alanları haritada işaretler misiniz? Sizden her bir farklı kullanım için farklı bir yapışkanı kullanmanızı isteyeceğim. Örneğin, evinizin yakın çevresinde kullandığınız parklar varsa, parklar için kullandığınız yapışkanı çevredeki kullandığınız bütün parklara yapıştırmanızı rica ediyorum. Bakkallar, manavlar, piknik amaçlı kullanılan alanlar veya çocuklarınızla birlikte kullandığınız yerler gibi diğer alanlar için de başka yapışkanlar kullanacağız.
2. Haritada işaretlediğiniz her bir yeri niçin sıklıkla kullandığınızı söyleyebilir misiniz? Diğer bir deyişle, sizi belirttiğiniz bu alanları kullanmaya çeken neler var?
3. Bir anne olarak, çocuğunuzun ihtiyaçlarını karşılamak için, örneğin güneşe çıkması, uyuması, beslenmesi, oynaması veya gelişmesi için, bu bahsettiğiniz alanlardan hangilerini sıklıkla kullanmaktasınız ve niçin?
 - 3.1. Konuşmanızda, sizi bir anne olarak bu yerlere çeken şu mekânsal özelliklerden bahsettiniz: Bunlar haricinde başka mekânsal özelliklerden bahsetmeniz mümkün olur mu?
4. Bir anne olarak sizi yakın çevrenizde kullanmaya caydıran, kullanmak istediğiniz ama kullanamadığınız yerler nelerdir? Nedenleriyle birlikte anlatır mısınız?
 - 4.1. Konuşmanızda, sizi bir anne olarak yaşadığınız çevredeki bazı yerlerden iten, bu alanları daha yoğun kullanmanızı engelleyen şu mekânsal özelliklerden bahsettiniz: Bunlar haricinde başka mekânsal özelliklerden bahsetmeniz mümkün olur mu?
 - 4.2. Bugün belediyeden bir anne olarak açık alanların planlanması, tasarlanması ve işletmesine yönelik istekleriniz olsa ne isterdiniz? Şu an çevrenizde annelerin ihtiyaçlarını karşılamaya yönelik neler yok? Belediyenin yaşadığınız çevrede küçük çocuğu olan anneler için neler yapmasını isterdiniz?
5. Havanın iyi olduğu, tipik
 - 5.1. Hafta içi bir günde ortalama kaç dakika/saat çocuğunuzla birlikte evinizin yakın çevresindeki açık alanlarda vakit geçiriyorsunuz?
 - 5.2. Hafta sonu bir günde ortalama kaç dakika/saat çocuğunuzla birlikte evinizin yakın çevresindeki açık alanlarda vakit geçiriyorsunuz?

2. Kısım – Kapalı Uçlu Sorular

Size 20 tane kısa cümle okuyacağım. Cümlelerde yer alan ifadelere 1'den 5'e kadar, 1: "kesinlikle katılmıyorum," 3: "orta derecede katılıyorum" ve 5: "kesinlikle katılıyorum" u ifade edecek biçimde ne derecede katıldığınızı belirtir misiniz?

Her cümle sonrasında sorulur: Açıklamada bahsedilen tanımın mekanları kullanmanızda etkisi olduğunu düşünüyor musunuz? Evet veya Hayır şeklinde cevap verebilirsiniz.

	1	2	3	4	5	E / H
Evimin yakın çevresindeki açık alanlar gece-gündüz hem sadece benim, hem de çocuğumla birlikte benim için güvenlidir. Rahatlıkla tek başıma vakit geçirebilirim veya çocuğumla birlikte dolaşabilirim.						
Evimin yakın çevresinde çocuğumu gönderebileceğim yeterli sayıda, kalitede ve güvende okul öncesi eğitim kurumları vardır.						
Evimin yakın çevresinde bir acil ihtiyaç durumunda çocuğumu güvenle emanet edebileceğim kişiler/ yerler vardır.						
Evimin yakın çevresinde gece aydınlatması yeterlidir.						
Evimin yakın çevresindeki açık alanları küçük çocuğumla birlikte kullanırken her hangi bir sosyal veya kültürel baskı hissetmem. Rahat rahat çocuğumla birlikte açık alanları kullanabilirim.						
Evimin yakın çevresinde kullanılmayan/ atıl alanların ve binaların varlığı beni rahatsız etmez, park ve sokak gibi açık alanları kullanmamı etkilemez						
Evimin yakın çevresinde, sokak ve park gibi açık alanlarda çocuğumla yürürken yolumuzu kesen, yürümemizi engelleyen elektrik direği, otobüs durağı gibi nesnelere bulunmaz; çocuğumla birlikte kaldırımlarda rahatlıkla yürüyebilirim.						
Evimin yakın çevresinde yürüyerek gidebileceğim, benim ve çocuğumun bir arada ilgisini çeken birçok farklı yer vardır. Örneğin çocuğum eğlenerek oynarken benim de bir yandan yanında olduğum bir yandan da sıkılmadan durduğum yerler gibi.						
Evimin çevresinde bir kadın olarak benim ilgimi çeken, ihtiyaçlarıma karşılık veren yerler vardır. Bu yerlere örnek sosyalleşme alanları, kültürel alanlar, eğitim alanları, rekreasyon alanları olabilir.						
Evimin yakın çevresindeki açık alanlarda, kapalı bebek emzirme alanları olsun olmasın, çocuğumu emzirmekten rahatsızlık duymam.						
Evimin yakın çevresindeki alanlarda kapalı bebek bakım ve emzirme yerleri vardır ve bu alanlar temizdir, rahatlıkla kullanılabilir düzeydedir.						
Evimin yakın çevresinde bulunan oturma elemanları yeterlidir.						

Evimin yakın çevresinde güneş olduğunda gölgelik yapan, yağmur yağdığıında ıslanmaktan ve rüzgardan korunacak elemanlar vardır.						
Evimin yakın çevresindeki ara sokaklarda araçlar hız yapmazlar veya yapamazlar. Bu yüzden çocuklar rahatlıkla ara sokaklarda oyun oynayabilir. Ara sokaklar, arabaların hızları bağlamında benim ve çocuğum açısından güvenlidir.						
Evimin yakın çevresindeki sokakları çocuğumla birlikte karşıdan karşıya geçerken güvenli bulmaktayım.						
Evimin yakın çevresi yeteri kadar bakımlı ve temizdir.						
Evimin yakın çevresindeki alanlar beni ve çocuğumu rahatsız edecek düzeyde gürültülü değildir.						
Evimin ve çevresindeki binaların yüksekliği beni rahatsız etmez. Çocuğum açısından da bir sorun teşkil etmez.						
Evimin ve çevresindeki binaların açık alanları rahatlıkla görebildiğini düşünüyorum. Çocuğum dışarıda evimin önündeki bir alanda vakit geçirirken evimden bu alanı rahatlıkla görebileceğim pencereler, balkonlar, çıkmalar bulunur						
Toplu taşıma araçları bulunduğum çevreye yakın yerlerden yeteri kadar sık geçer.						

3.Kısım – Demografik Veriler

1. Yaşınız.

2. Eğitim durumunuz.

İlkokul Ortaokul Lise Üniversite Lisansüstü

3. İş durumunuz nedir?

Tam zamanlı çalışıyorum Yarı zamanlı çalışıyorum Çalışmıyorum Diğer: _____

4. Evinizde sizin dışınızda çocuğunuzun bakımında size yardımcı olacak biri veya birileri var mı?

- (Varsa) gerektiğinde bu kişilere çocuğunuzun bırakıp çevrede tek başınıza vakit geçirebiliyor musunuz?