## **CZECH UNIVERSITY OF LIFE SCIENCES**

## **Faculty of Environmental Science**



The Relationship Between the User's Perception, Quality of Space and Urban Activities in the Public Open Spaces: Asik Veysel Recreation Area, Izmir, Turkiye

Author: Seda Bagci

Thesis Supervisor: Doc. Peter Kumble

Diploma Thesis

### CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Environmental Sciences

# **DIPLOMA THESIS ASSIGNMENT**

Ing. Seda Bagci, MS, BSc

Landscape Planning

Thesis title

'The Relationship Between the User's Perception, Quality of Space and Urban Activities in the Public Open Spaces: Asik Veysel Recreation Area, Izmir, Turkiye.

#### **Objectives of thesis**

This study will examine user perceptions specific to the quality of open space in urban parks, specifically, research explores what are the user's awareness of public park spaces and their preference regarding recent changes as a result of Covid-19 restrictions relative to social distancing and public gathering. The work also aims to determine how urban park is used by examining their physical structure. This analysis will focus on one of the most visited urban parks in Izmir, Bornova (Asik Veysel Recreation Area). The acknowledgment will be given to their social and communal context while explaining the relationship between the quality of urban park space. Lastly, research will attempt to determine the effects of four space quality components (access and linkages; uses and activities; sociability; and, comfort and image) which were developed by Project for Public Spaces (PPS, 2000) and Covid-19 restrictions upon users' perception and preferences for public park spaces. The methodology employed involves selected in-person interviews at the study location in Bornova. In the questionnaire study, firstly the socio-demographic characteristics of the users will be examined, then the questions about the quality criteria will be evaluated and the hypotheses will be tested

#### Methodology

- Current published literature on the topic will be reviewed. Survey methodologies will be reviewed.
- o The study aims to understand the relationship between spatial quality in open public park space and the user activities in the study area; Asik Veysel Recreation Area.
- o Social environment data will also be evaluated in addition to an analysis of physical-space with the intent to measure and identify the spatial quality and user's preferences.
- o Life Between Buildings: Using Public Space (1987, 2011), by John Gehl; and PPS (Project for Public Space, 2000), which works on the quality of space in public open spaces, was established in 1975 to expand the work of William H. Whyte, who is the author of the book "Social Life of Small Urban Spaces" will be employed in the survey questions and study in order to evaluate the park spaces are currently used.
- Case study method will be used. The main research location will be Asik Veysel Recreation Area in Bornova, Izmir. Research of the case study location will consist mainly two parts:

o Data collection will include mainly three parts: on-site surveys and questionnaires/interviews with park users, and face to face surveys with residents. Quantitative and qualitative data will be used to understand the perception of preference of users on usage of public parks. Online resources and materials from the library will be used for in-depth research.

o Data analysis and interpretation of the results will be made through digital techniques.



#### The proposed extent of the thesis

55+ pages

#### **Keywords**

Urban parks, public space, Covid-19

#### **Recommended information sources**

Gehl, J. (1987), Life Between Buildings: Using Public Space. Copenhagen.

PPS (Project for Public Space) (2000), How to Turn a Place Around: A Handbook of Creating Successful Public Spaces. New York.

LIFE SCIENCES

Whyte, W. H. (1980), The Social Life of Small Urban Space. New York, Routledge.

#### **Expected date of thesis defence**

2022/23 SS - FES

#### The Diploma Thesis Supervisor

doc. Peter Kumble, Ph.D.

#### **Supervising department**

Department of Landscape and Urban Planning

Electronic approval: 17. 3. 2023

prof. Ing. Petr Sklenička, CSc.

Head of department

Electronic approval: 17. 3. 2023

prof. RNDr. Vladimír Bejček, CSc.

Dean

Prague on 19. 03. 2023

DIPLOMA THESIS AUTH	OR'S DECLARATION
I hereby declare that I have independently elaborated the diploma 'The Relationship Between the User's Perception, Quality of Spa Public Open Spaces: Asik Veysel Recreation Area, Izmir, Turkiy	ace and Urban Activities in the
information sources that I used in the thesis and that are also list the list of used information sources. With my own signature, I at version is identical to the printed version and the data stated in the	also declare that the electronic
relation to the GDPR.	
Prague on/2023	Cada Darai
	Seda Bagci

#### **ACKNOWLEDGEMENTS**

Firstly, I'd like to express my thanks to my patient and supportive supervisor, Peter Kumble, who has supported me throughout this thesis work. His guidance and advice carried me through all the stages of writing my project.

Also, I would like to thank the residents of Bornova who were so generous with their time in completing the questionnaire surveys.

Finally, I would like to give special thanks to my family as a whole for their continuous support and understanding when undertaking my research and writing my project. Your support for me was what sustained me this far.

#### **ABSTRACT**

Urban open-green spaces provide many important contributions to the physical structure and functionality of a city. In order to increase the quality of urban life, it is important to offer various active and passive recreation opportunities to people in urban environments. Urban parks, which contain different active and passive recreation opportunities, contribute to the efforts to increase the quality of urban life. In this context, green areas are critical components of urban macro form and life in terms of creating natural habitats and healthy environments within the context of city life. Evaluation of the environmental performance of open-green areas, which is a meeting point with nature, albeit limited, is an important step towards its development and protection. Accordingly, many of those who live in urban spaces demonstrate a strong desire to experience nature. Especially this need has come to the fore with the effect of the Covid-19 pandemic and restrictions on the movement of people during lockdown events.

In this thesis, four main criteria specified by Project for Public Spaces (PPS, 2000) are focused on measuring the importance of sustainable planning, design, and management of urban open-green spaces. These criteria include the following: access and linkages; uses and activities; sociability; and, comfort and image. The findings were examined and contrasted to published literature and applied to a case study location: Asik Veysel Recreational Area in the Bornova district of the city of Izmir in Turkiye. The importance and evaluation of each criterion on the basis of users were examined with the observation, mapping, interview, and survey methods made in the study area. These results were visualized and presented using Excel software. In addition, the approach of users to open green and public spaces in the workspace and general scale was compared with their behavior during the Covid-19 pandemic period. Users in the case study location indicated that in general, they were more inclined toward using green and public spaces after Covid-19 restrictions were removed. Among the specified criteria, it was concluded that the most important factor is transportation and safety.

#### **KEYWORDS**

Urban parks, public space, Covid-19

# CONTENTS DIPLOMA THESIS AUTHOR'S DECLARATION ACKNOWLEDGEMENTS ABSTRACT KEY WORDS

CHAPTER 1: INTRODUCTION	1
1.1.Aim of the Thesis	1
1.2. Objectives of the Thesis	2
1.3. Structure of the Thesis	3
CHAPTER 2: LITERATURE REVIEW	5
2.1. The city as a 'Living Organism'	5
2.2. The Changes of Public Space Definition by Time	6
2.3. Spatial Quality in Public Open Spaces	7
2.3.1. PPS's Approach	8
2.3.2. Jan Gehl's Approach	9
2.4. Space Quality Components	10
2.4.1. Access & Linkages	11
2.4.2. Uses and Activities	15
2.4.3. Sociability	16
2.4.4. Comfort and Image	19
CHAPTER 3: METHODOLOGY	21
3.1. Previous Methodologies	21
3.2. Research Method for Case Study Area	22
3.3. General Information About Case Study Area	24
3.3.1. History of Izmir, Bornova	25
3.3.2. Location and Surroundings	26
3.3.3. General Characteristics of the Study Area	27
3.4. Space Quality Examination of Asik Veysel Recreation Area	29
3.4.1. Access and Linkages	29
3.4.2. Usage and Activities	29
3.5.3. Sociability	30
3.5.4. Comfort and Image	32
CHAPTER 4: RESULTS	33
4.1. Survey and Participants	33
4.2. Space Quality Components Results	36

3.5.5. Holistic Evaluation of the Survey Results	42
CHAPTER 5: DISCUSSION	45
CHAPTER 6: CONCLUSION	48
CHAPTER 6: REFERENCES	51
CHAPTER 7: APPENDIX	55
The Questionnaire of The Case Study of Asik Veysel Recreation Area	55

#### **CHAPTER 1: INTRODUCTION**

#### 1.1. Aim of the Thesis

Since the formation of cities, each city has shaped the society it hosts, and likewise, it has been shaped by being influenced in many ways by every individual that constitutes this society. According to current living conditions, change is one of the main reasons why we define cities as living organisms. At this point, the most important factor that makes users constantly changing, transforming and developing, is "living" organisms, appears as public spaces. This important role of public spaces - especially open public spaces - in cities and human life makes cities more livable and dynamic. Especially today, global differences that change with technology are one of the most important reasons of this result (such as pandemic, economic fluctuations and technology).

According to Sennett (1977), public spaces work to create the ambiance of the city, provide a carrier of democracy, and establish the heart of the city and its spirit where the feelings and memories of citizenship and belonging take place. Public spaces are tools to transform and reshape the city physically, socially and symbolically. This definition by Sennett (1977) is also very important in terms of emphasizing the multidimensional characteristics of public spaces such as equality, sharing, feeling of place and both physical and social content.

#### Therefore;

- Public spaces play an essential role in strengthening this interaction and forming more livable cities, beyond a fixed concept like a physical element of the city and engagement clarity.
- It was determined as the starting point of the study to examine the importance and meaning of public open spaces for both cities and individuals, through the social and psychological dimensions of the interaction of individuals with the space they live in, by revealing the relationship between urban space activities and space quality.

In this context, the relationship between urban space activities and space quality will be evaluated by examining in the context of how the users define the urban park, for what purpose they use it, what kind of interactions are made, and to what extent these areas physically allow these interactions and socio-spatial actions. Accordingly, their tendency to use public spaces will be compared between two periods which are Pre Covid-19 and Post Covid-19.

#### 1.2. Objectives of the Thesis

In this thesis, which aims to understand the relationship between spatial quality in open public spaces and urban area activities in the study area, social environment data will be also evaluated in addition to physical-space analyzes to measure spatial quality. In-person survey will be conducted with a total of 62 residents who are living in Bornova, Izmir, Turkiye. It is aimed to analyze the Asik Veysel Recreation Area in terms of spatial layout or distribution and social aspects and to make an evaluation by interviewing the users. The data obtained after the survey will be evaluated with the Microsoft Excel program.

Three methods will be used in this assessment. The first is the concrete "quality measurement indicators", the second is the survey studies based on the subjective inferences of the users and hypotheses determined according to the space quality indicators will be tested. For those purposes, the socio-demographic characteristics of the users of the study area will be determined, then the questions about the quality criteria will be evaluated and the hypotheses will be tested.

Quality measurement indicators are handled within the framework of Project for Public Space (PPS, 2000), which defines four key features of space quality in public spaces with a holistic approach, based on the indicators has been taken. In the survey studies, within the context of 3 types of urban space activities defined by Gehl (1996), the users will be asked questions to understand how often, for what purpose they use the space, what is the quality of space and how they feel in the area and the meaning of the area for them before and after COVID-19. With the field study to be carried out, it is intended to test the hypothesis whether the users' perception as good quality varies according to their general taste of public spaces. Accordingly, the following sub-hypotheses have been created:

- H1: It depends on whether the users perceive the urban parks as quality spaces and, if they find the activities and uses sufficient.
- H2: The users' perception of urban parks depends on whether users find the diversity of the activities in the park sufficient or not.
- H3: The users' perception of the urban parks depends on whether users find the accessibility to the park sufficient or not.

H4: The users' perception of the urban varies according to their satisfaction with physical comfort in the park (having benches, shaded areas having kiosks, etc).

H5: The users' perception of the urban parks varies according to their satisfaction with the park image (maintenance of the park, having greenery, aesthetic elements of the park, etc.).

H6: The users' perception of the urban parks depends on whether they find the urban parks safe or not.

H7: The users' perception of the urban parks depends on whether they find the urban parks well-maintained.

H8: Users' perception of the urban parks varies depending on whether they find urban parks as social and gathering spaces.

H9: Users' perception of the urban parks varies according to their sense of ownership about the park.

H10: Users' perception of the urban parks has or has not changed after Covid-19

#### 1.3. Structure of the Thesis

This study consists of seven main chapters, including an introduction.

Chapter 2 is the Literature Review which focuses on the theoretical background of the public open space to examine its concept and approaches of it. It explains the concept of public space, public open space. Also, in order to specify the theoretical focal points of the thesis, research, and works done by PPS and Jan Gehl are mentioned. Accordingly, various perspectives on the open space concept and quality indicators are examined to provide a summary of the major findings from space quality components. Then, the changes in the meaning of open space quality during times of social distancing are explained. The last section of the chapter provides a conceptual framework described through principles that come from literature research in order to analyze the open space quality of urban parks. These principles are composed of four main ideologies which are access and linkages, uses and activities, sociability, and comfort and image. The main purpose of this part is to categorize the principles affecting user preferences on open spaces and assess the space quality of the case study areas.

Chapter 3 introduces and explains the research method of the thesis. Firstly, previous research which have been done to analyze and compare space quality is examined. Then, history of Bornova, Izmir is summarized chronologically. Also, the study area and its surroundings are evaluated according to the literature findings with site observation and alaysis.

In Chapter 4, demographics of the survey participant is analyzed. Then, each quality of space quality indicators are presented according to the survey results. Then, research tools are explained the methods used in this thesis in order to understand open space and space quality components terms in the literature and to measure space quality in the urban park.

Chapter 5 gives an in-depth exploration of the results, going into detail about the meaning of the findings and citing relevant sources to put them in context. Finally, hypotheses that were given in the previous section is tested.

In Chapter 6, conclusion and recommendations are given.

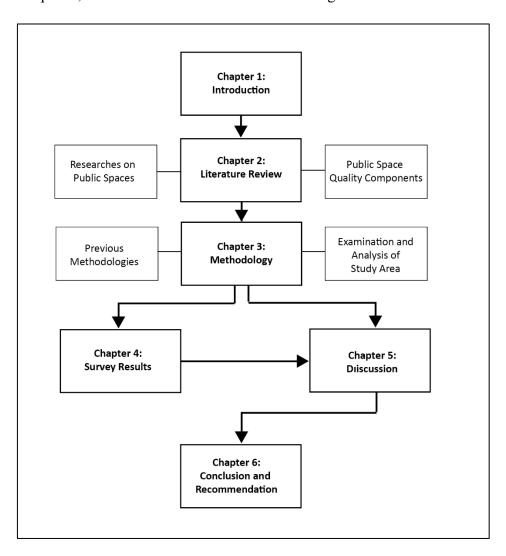


Figure 1.1. Structure of the Thesis (Prepared by author)

#### **CHAPTER 2: LITERATURE REVIEW**

#### 2.1. The city as a 'Living Organism'

From the past to the present, cities have always maintained their existence as dynamic structures that are constantly changing and transforming with their diversity. The structure of the cities evolves based on the culture and differences of the individuals that change based on the different societies.

There are many different approaches in the definition of the concept of city. In addition to the approaches that consider the city only as a static tool that people use to sustain their lives, there are also approaches that consider it as a lively and dynamic structure. While some researchers approach the city only within the boundaries of physics-space (Ribeiro FL, Perc M and Ribeiro HV; 2022), many researchers define the city by associating it with many elements such as social and social structure, economy and culture. It is seen that many urban scientists who go to a definition based on this relationship define the city as a "living organism".

There are certain characteristics that can be said in common for all cities formed from the past to the present. The most important of these is that cities are constantly changing, and transforming individuals by influencing all social, economic and cultural systems they include in this process of change / transformation. In this sense, it can easily be said that cities and global changes directly affect human behavior and relationships, and associations in individuals' minds. In addition, the individual is the greatest power that guides the city within the framework of his/her wishes, expectations and rights. In this direction, the most basic tool that can be used will again be public spaces.

Norberg Schulz (1988) defines the city as a meeting place made up of public spaces where different people coexist. This definition is very important in terms of emphasizing the relationship between social structure-urban space and public space. The existence of cities depends on the existence of elements such as quality of life, movement, collective, cultural and social life in the city. Public spaces are suitable urban spaces where collective, cultural and social life needs can be met with this mobility in cities. At this point, cities have become a "living organism" in line with the public spaces it hosts and continues its existence as a holistic system consisting of many sub-systems. The main parallel of understanding the relationship

between the space quality of these public spaces in urban space and urban space activities is to grasp the concept of public space correctly.

#### 2.2. The Changes of Public Space Definition by Time

In the years following the first industrial revolution, urban parks were seen as the stage of cities where healthy and prosperous generations would grow up. Over time, they have become the distinguishing element of modern urban planning. The period, which has been called the fourth industrial revolution since the beginning of the 21st century and where labor-intensive production has been replaced by advanced technology-oriented production, marks new turning points for cities (Atanur, 2017). Twenty-first century, cities have started to face serious land and resource optimization problems, with a perspective of seeking a balance between the natural and the built environment. Population growth, rapid urbanization, awareness of the limitation of natural resources, transformation in consumption patterns, rapid ecological and environmental depreciation brought along a period in which the awareness of cities and citizens about the value of open and green space as well as urban land increased (Özdil, 2017).

Nowadays, it can be easily guessed that the world is increasingly transforming into a park community. Different types of parks have been mentioning such as park houses, senior citizens' parks, shopping parks, sculpture parks, leisure parks, amusement parks, cultural parks, industrial parks, office parks, technology parks, science parks, etc. What distinguishes these new categories is that they now represent only a green environment, as symbols of pollution and congestion, a departure from everything reminiscent of fatigue. The impression of greenery is sufficient as a phenomenon that activates its associations and a symbol of exalting spaces (Wiggershaus, 1998). However, for the cities of the fourth industrial revolution, which were shaken by disasters ranging from earthquakes to global epidemics, the importance of urban parks as the landmark of the urban green is much greater than in the past. Instead of creating actually non-green parks, shopping malls, large housing projects, it is necessary to optimize the existing green and, in this context, rethink the relationships of the existing green establishes with housing and work areas. The changing public needs and user requirements, which are stated to have affected the design of city parks throughout history, are another issue that the designer should consider.

In the process of the global COVID-19 epidemic we were in, we see that green areas have started to become an important component of urban health, ironically, as in the first industrial revolution. However, it should be noted that the situation we encounter here seems quite different from the past. Within the framework of Appleton's (1996) "Prospect and Refuge" theory, we see that different behavioral patterns, social distance understandings and consequently user expectations have emerged in city parks that offer us opportunities and shelters. In order to understand and evaluate these expectations, it is necessary to increase the environmental behavior-oriented work approaches. The main goal of these studies should be to present the spatial equivalents of the results in urban park designs.

#### 2.3. Spatial Quality in Public Open Spaces

"Quality" is a subjective concept that expresses the level of well-being of any character / situation, and can vary from person to person. However, there are objective indicators used to measure quality in urban space. The quality-of-life dimension in the urban area has been handled in relation to environmental factors in a broader sense, including the physical, social and economic environment (Das, 2008). One of the important elements of the urban environment is public open spaces (Shirvani, 1985). Public open spaces can be seen in various forms, each with important functions such as protection, recreation, relating to nature, and providing mental and social health (Lynch, 1972).

Nowadays, it is seen that there is no consensus and a holistic approach is not formed in studies on the quality of space in public open spaces. Until today, the concept of space quality has been handled within the framework of either only the functional physical features of the space in question, or the socio-morphological structures of the users of the space. Although there are many different perspectives on the concept of space quality, there are also important points where these different approaches intersect (Table 2.1).

Whyte (2000) touched upon four basic characteristics that define what makes a public space successful. These are; be accessible, allow people engage in various activities, the place should have a comfortable and good image, and it is a friendly place that supports social activities where people meet each other and provide more social interaction. Many researchers (Gehl, 1987; Lynch, 1972) like Whyte defined one of the most basic features of public spaces as being "suitable for social interaction and activities".

Visual and functional diversity in urban spaces is a feature that users need psychologically. Pedestrians look for interesting visual experiences, diversity, and attractive outdoor activities. In this sense, creating quality open public spaces spatially will contribute to the quality and healthy development of the social structure.

#### 2.3.1. PPS's Approach

PPS (Project for Public Space), which works on the quality of space in public open spaces, was founded in 1975 to expand the work of William H. Whyte, who is the author of the book "Social Life of Small Urban Spaces". PPS, a non-profit planning, design and education organization that aims to help people who create and sustain public spaces that build stronger societies, has identified four key attributes related to the quality of space in open public spaces. These are; access and linkages, comfort and image, uses and activities, and sociability (Figure 2.1).

These four criteria developed by PPS (2000) formed one of the bases for the research method and user survey questions were prepared within the framework of these four criteria.

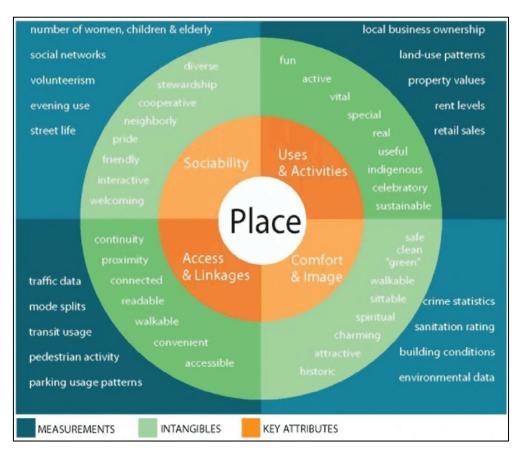
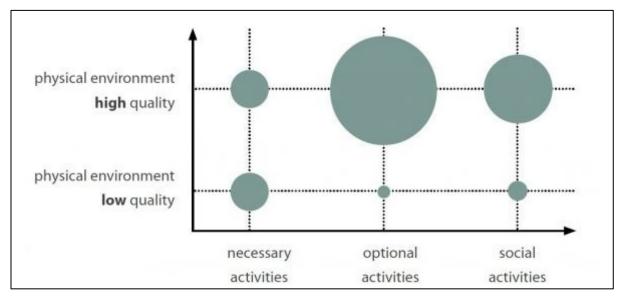


Figure 2.1. Project for Public Places 'What Makes a successful Place?' Matrix. Source: (www.pps.org)

#### 2.3.2. Jan Gehl's Approach

Gehl (1987; 2011) analyzed the relationship between urban space activities and the quality of physical space by examining the activities under three headings. These are necessary activities, optional activities and social activities. Gehl argues that each of these three types of urban space activity has different dependencies on the physical environment (Figure 2.2).



**Figure 2.2.** Spectrum of Activities and quality of environment. Source: (https://2018-2019.nclurbandesign.org/2019/05/the-living-city/)

Necessary activities according to Gehl; activities that include daily necessities such as going to school, bank, home, grocery shopping and are the least associated activity type with the physical environment. Optional activities, on the other hand, are those that require time and well-designed areas for the realization of the activity, and therefore the type of activity with the highest dependence on the physical environment. Although activities such as sitting, resting, sunbathing, outdoor reading, eating, and doing sports are included in the optional activities group, each of them needs well-resolved and designed, comfortable, and useful areas. Finally, social activities have been defined by Gehl as all activities that depend on the presence of other people in the public sphere. Activities such as interacting with other people, meeting, talking, meeting can be given as examples.

In addition, there is a relationship between social activities and optional activities. Since optional activities are longer activities, this length of time factor also causes more people to come together and therefore social activities to take place more. In this sense, it can be said that longer-term optional activities lay the groundwork for more diverse social activities.

#### 2.4. Space Quality Components

Recent studies on the quality of open urban spaces involve different types of approaches. These approaches are only due to the functional properties, or only due to the physical properties or else due to the socio morphological properties of the users. Besides different perspectives on the space quality approaches, there are points where these approaches also intersect (Table 2.1). The success of spatial qualities in public spaces does not only depend on physical inputs. Furthermore, space user profile, purpose, frequency of use and mood are the other factors that have a deep impact on the quality. Recently, it is accepted that high quality in these open urban spaces is the aspect which can meet the requirements of the users totally and equally and make sense for a large part of society.

Table 2.1. Approaches according to space qualities

Space Quality Components	Quality Parameters	Researchers
Social interaction	Available physical environment for social interaction  Contain different activities  Access to all kinds of social classes  Suitable areas for recreation	Whyte, 1985, 2000; Gehl, 2010; PPS 2000 Whyte, 2000; Gehl, 2010 Gehl, 2010 Whyte, 1985; PPS, 2000; Carr,1992
Physical characteristics	Accessible  Human scale	Lynch, 1984; Danisworo,1989; Carr,1992; Rivlin, 1994; PPS,2000; Whyte, 2000, Gehl, 1987-2011 Shirvani, 1985
	Physiological needs	Rapoport, 1982; Lang, 1994; Whyte, 2000; Gehl, 1987-2011
Physical comfort & safety	Safety and security	Lang, 1994; Gehl, 1987-2011
	Feeling comfortable and free in the space	Gehl, 1987-2011

Observing how the park is used and measuring people's perceptions of the park are important in determining what changes can be made to make a park a successful place. Good park designs should provide different activities for the users to participate in (activities and uses), access to the park should be easy (accessibility), safe, well-maintained and attractive (comfort and image), give people the opportunity to be with other people (sociability) (PPS, 2000).

In this thesis, the quality criteria were determined as access and linkages (sub criterion: accessibility, connectivity, readability and continuity), uses and activities (sub criterion: activity diversity and function ability), sociability (sub criterion: sustainability of social activities, welcoming and interactivity) and comfort and image (sub criterion: attractivity, scale and physical conditions).

#### 2.4.1. Access & Linkages

There are two important topics when evaluating an urban park in terms of access and linkages. The first is its connection with the city where it is located and secondly, its connections between spaces within itself. When examining the connections of the parks with the city, it is necessary to examine the relationship between the city and the city, its location, the use of the surrounding area. In order to understand the connections within the park itself, the entrances and exits, the roads in the park and how these roads connect the spaces should be analyzed.

An urban park with many activities will not attract the attention of users if it is badly located; parks are fed by their immediate surroundings. The variety of residential and commercial areas situated around a park will appeal to its users with different daily routines. If the environment of the park does is not seen as a potential resource for its users, it will be weak and not attract the attention of the users. Le Corbusier (1973) states that even if the parks are of sufficient size, they cannot have enough users unless they are positioned correctly. He goes on to further clarify the importance for the lines of the location, and states connection to schools, youth centers, playgrounds and residential areas must be closely positioned to each other (Le Corbusier, 1973). In support of this view, Jacobs (1961) also includes housing, pharmacy, music school, art club, cultural association, vacant lot, etc. around Rittenhouse Square Park in Philadelphia. He mentions that the buildings can attract a mixed group of users who use the park at different hours and have different daily routines because they serve various uses (Jacobs, 1961).

#### 2.4.1.1. Accessibility

Providing access to urban parks by different means of transportation such as pedestrians, private vehicles, bicycles or buses is important and necessary in terms of providing accessibility to users (Yücel, 2005).

As in usage and activities, having different options in transportation types will increase the use of the park by appealing to different user groups. In addition, accessible public spaces should be accessible by public transport (Place Making Chicago, 2016). For this reason, the location of public transport stops also matters for the users who prefer the visited park. If it encourages the use of public spaces, both the use of public transport will increase and the use of parks will increase (PPS, 2016). For example, Clapham where is an area in the Borough of Lambeth in London, to the south of central Clapham and west of Brixton, is shaped by detached, 2-storey houses located around green areas for communal use (Garvin, 1997). Clapham Common (Figure 2.3) was used as a common area in the 1700s, but today it is an easily accessible urban park.



Figure 2.3. Location of Clapham Urban Park. Source: (http://wheretoruninlondon.co.uk/clapham-common/)

#### 2.4.1.2. Connectivity

It is important for the pedestrian crossings, sidewalks, streets and avenues to appeal to the users of the parks. Because crossing the street and walking on the street should be an easy and comfortable activity. Having a problematic road on the way to the park negatively affects the park user (PPS, 2016). If the park connections are dangerous for the passage of the elderly and children, the use of the park is negatively affected by these two groups (Schwartz, 2003)

#### 2.4.1.3. Readability

Access and linkages of a park are pretty related to its relationship between the environment physically and visually. If a successful public space is easily noticed from a distance, it will be easy to get there. The perceivable remote is an important factor affecting transportation as well as physical properties. For example, Letná Park in Prague can be given as an example. The park has the 22-meter-tall metronome which is called Stalin Monument (the most people call it the Metronome), has become one of the most iconic images of in Prague (source: https://en.wikipedia.org/wiki/Stalin\_Monument). It is visible from the edge of Old Town Square, looking down Pařížská Street, across Čechův most, and on top of the plinth where the statue of Stalin used to stand (Figure 2.4).



Figure 2.4. Bird's eye view to Metronome and the city of Prague. Source: (https://www.prague.eu/en/object/places/3003/metronome)

The quality of the surrounding areas is as important as the design and management of the parks. High walls cut the relationship with the street and create a bad image. Therefore, empty walls or dead spaces around the park will also affect the functional usage of the park (PPS, 2000). Additionally, dark or narrow entrances will not be inviting to people, so poor entrances and visually difficult to reach areas will not encourage users (PPS, 2000). For example, walking down a street full of rows of shops is more interesting and generally safer than walking down a street full of undesigned facades. Studies have shown that people feel more secure where there is visible transportation (Altman, 1989).

#### 2.4.1.4. Continuity

When determining if the park is readily accessible, it is important that entrances and exits are clearly markted and the paths are legible. The ease of transportation is closely related to the connection patterns of the roads in the park (Baljon, 1992). Connections within and around the park are necessary to create a functional union between the inside and outside of the park. If these criteria are met, correct guidance increases continuity and increases opportunities (Lynch, 1984).

Pedestrian paths leading to the entrances of recreational structures should be well lit to encourage the use of the park. Bridges that allow shortcuts in a park also help to ensure continuity in circulation (Yücel, 2005). It can be foreseen that a legible and sufficient circulation system will make it easier to use and will positively affect people's use. Paths that are not easily understood by the user cause dead areas where unwanted activities can occur. The interior roads of the parks, as seen in many examples, have unnecessary curves and shapes with an aesthetic and geometric concern, but are captive of a certain geometry and can go in purposeless directions. The main purpose of a park's internal roads should be to bring people to where they want to go and to provide inter-location connections (PPS, 2016). If the user can easily understand the plan of the park, it will be easier to remember and use that area. Since the plans of the roads will also affect the usage decisions of the people, the interconnected road systems become more attractive and impressive.

#### 2.4.2. Uses and Activities

Activities are one of the foundations of public spaces and are the main drivers of parks. The variety of activities increases the tendency of people to use that place. Activities are the most important reason why people come to a venue, so what makes a park special and different from others is the kinds of activities there (PPS, 2000).

Diverse spaces have practical power to provide a natural, continuous flow of life and use (Jacobs, 1961). Besides, artist installations, exhibitions, occasional or short-term activities in a park bring vibrant energy to the life of parks.

Different parts of parks are used by different user groups, and different groups of people prefer parks with different characteristics (Rapaport, 1977). The needs of the settlement around the park and the demographic characteristics of the users are important factors in the diversification of the uses in the park areas. Studies on user groups in parks are important in determining the activities that users do and need in parks (Yücel, 2005).

#### 2.4.2.1. Activity Diversity

The importance of diversity has been understood by many social scientists and many studies have focused on the problems that arise in environments where there is no diversity and the negative effects of monotony. Unusual environments and diversity are stated as essential features for people's psychological development (Erkut, 1995). According to Rapoport and Kantor (1982), because complex environments are more diverse, they are preferred over simpler and possibly less diverse environments (Atabek, 2002).

It is very important to consider the different recreation preferences of different user groups in order to decide what activities will be in a park. The size of the park also plays an important role in deciding what activities will be in the park area. Parks should have both passive recreation areas such as sitting, chatting and sunbathing for different user groups, and active recreation areas such as sports, walking and playing games. At the same time, active recreation areas should not be allowed to disturb the silence of passive recreation areas. To increase the variety of use in the park, activity areas can be created for non-profit volunteer groups and activities can be encouraged. Offering tours that allow users to watch birds and stay

alone with nature, or opportunities such as storytelling and puppet shows, will encourage more widespread use of the park and increase positive use (Yücel, 2005).

At the same time, as Garvin stated, exercise activities were different 90 years ago, whereas today jogging and walking are among the most preferred activities in parks and green areas (Garvin, 2011). It is important for parks to adapt to the changing living conditions of the time in order to be successful in attracting and maintaining this.

#### 2.4.2.2. Function ability

Although the details used to emphasize the space in public spaces are visual, they increase the attractiveness and variety of use of the space when they are functional (PPS, 2000). Although the formal architectural differences in the designs of the parks seem to create diversity, this situation does not go beyond the appearance as long as they support different uses. However, the ability to create economic and social diversity gives parks a lively use (Jacobs, 1961).

Different usage patterns are seen in parks that appeal to different groups. Young user groups use the parks for physical activities, while older user groups use them for relaxation is effective in the formation of these usage patterns. Since the diversity of land use such as schools, workplaces and residences in the surrounding will create diversity in the user groups, the usage patterns also vary according to these groups. In this context, the formation of remarkable usage patterns shows that the users come to the park consciously for a purpose. For example, those who do sports in the park before going to work early in the morning, or the students in the surrounding area use the park during lunch break, etc. creates usage models.

#### 2.4.3. Sociability

As Lynch stated, non-compulsory activities in the public spaces are affected by physical and social environments (Lynch, 2010). The social ability of a park is highly influenced by the existence of these three criteria, but it is just as difficult to reach at the same time. Social activities occur in places where people are together, any passive and active interaction with other people is defined as social activity (Lynch, 1987).

According to Thompson, parks are places where people from different cultures and socio-economic classes come together and interact with nature (Thompson, 1998). Park areas are valuable not only as places where people meet nature and do physical activities, but also as places where social and cultural exchanges are made. According to Cranz (1989), they have been asked to create a mechanism for social integration since the emergence of urban parks (Yorulmaz, 2006). Parks are still able to bring together different social groups physically and intellectually by allowing people from different social classes to be in the same place. This situation allows different groups to get in touch with each other and undertakes an important task towards the cohesion of the society.

Although it is difficult to create a park environment where people of different ages and ethnic groups can spend time together, it has an important social impact (Cranz, 1989). Creating user diversity is necessary in order to increase the use of the park and to create a realistic cross-section of the diversity and unity of the social structure in the park areas.

#### 2.4.3.1. Sustainability of Social Activities

Although parks need recreation areas such as playgrounds, cafeterias, buffets, hiking trails in order to maintain their existence, they also need to provide opportunities for artistic activities, meetings or simply socializing with friends (PPS, 2016). In addition to providing people with physical activity opportunities, parks also offer social and cultural activity opportunities that enable people to connect with their environment with stronger feelings. Places where people routinely meet in urban areas, visit regularly when moving from one place to another, or come across by chance may have an important place in people's daily lives (Thwaites, 2001). When people prefer to spend time in a place rather than using it compulsively while going to work / school, the possibility of social activities to take place increases in direct proportion to the time they spend there (Lynch, 1981). For this reason, it is important whether the users use the park accidentally or consciously.

#### 2.4.3.2. Welcoming (Children, elderly people, disabled people)

According to Cranz (1989), urban parks are a mechanism that have the power to physically and intellectually unite people from different social classes (Yorulmaz, 2006). A city has the ability to enables children, young people and people of all ages from different social groups to spend time together. The coexistence of people with other people has a more psychological effect than being alone, and this positive experience plays an important role in the formation of urban identity (Özdemir, 2009). Urban parks can help reduce social isolation and increase social cohesion by contributing to a sense of ownership. As the sense of ownership increases, so will responsibility and concerns about the quality of the environment. Ownership can be real or symbolic (Altman, 1989). Real ownership is the legal ownership of the space by individuals or groups and increases control over the space. Symbolic ownership is a more common way in which users feel as part of the park (Yücel, 2005).

#### 2.4.3.3. Interactivity

Generally, the fact that both those who come alone and who spend time as a group are in the park indicates that there is more social life and entertainment in that park (PPS, 2000). Parks appeal to different activity needs of different groups, where parks are more inviting for users, and as mentioned in the usage section, they create liveliness and diversity in social relations. For instance, Letná Park is one of the larger parks in Prague with its winding paths, large open fields, tennis court, beer garden, and various public sculptures where Czechs, as well as foreign visitors and residents, go to rest, exercise, have picnics, take walks and generally appreciate the most outstanding views of the city (Figure 2.5).



Figure 2.5. General view of Letna Park. Source: (author's archieve, October 2020)

While some users prefer parks as meeting places with their friends, some people use these green spaces in the city because they are likely to meet with their acquaintances (Place Making Chicago, 2016). For example, parks are ideal places for elderly people in urban areas where they can relax and spend time socializing. Even if many elderly people go to parks alone and come back alone, it is pleasant for them to see other people like themselves around them (Yücel, 2005). According to Philips, older people communicate with other people and make new friends in parks (Philips, 1996). In addition to these, the potential of meeting new people and chatting is also the social appeal of a public space.

#### 2.4.4. Comfort and Image

Comfort and image are an important key to estimate whether a park will be successfully used or not. The attractiveness and character of a space are formed in the minds of people in the context of safety, cleaning, maintenance and the use of the surrounding buildings (Yücel, 2005). In structural, vegetative and climatic elements in park areas; the correct planning, choosing the right place, and regular maintenance will affect the shaping of comfort and image. The comfort of the seating areas is an example of this. The importance of enabling people to sit wherever they want is often underestimated (Place Making Chicago, 2016). Bryant Park (Figure 2.6) is an example of a park that users use extensively due to the comfortable use of seating elements (Goldberger, 1992).



Figure 2.6. Bryant Park. Source: (https://loving-newyork.com/bryant-park-in-new-york-city/)

In public spaces that do not provide a place to sit, people develop their own methods to adapt to the environment after a while, and as a result, they sometimes give up or use a suitable place as a seating element (PPS, 2016). Variable types of seating elements, their placement, and differentiation reveals different uses. Generally, seating areas when located immediately next to children's playgrounds – where other people and activities can be watched are the most popular and used. Seating areas on the sides of the road also provide users with opportunities to both relax and observe. As people walk through a park, many things stay in the background, people may miss the focal point yet when they pause and start really looking around, the background becomes the focus (Mikoleit & Moritz, 2011). For instance, when people sit and do nothing, they pay attention to the vegetation, birds, clouds, and even topography around them.

It is important to pay attention to environmental features when defining seating areas; Some seating elements should be open to the sun for winter use, others should be in the shade, so the microclimatic properties of the seating elements are very important.

The comfort and image reflect the individual experiences of the users in the parking spaces. Safety and maintenance issues are important in user perception of comfort and image. Although having security guards in the park is an important criterion, Jacobs argues that unwanted activities are not easy to occur in places where people use them heavily and that feeling insecure will disappear in this way (Jacobs, 1961). For safe public space environments, it is necessary to provide easy access to security personnel and open visibility areas within the park. In the maintenance of park areas, repair and renewal of park structures and equipment, collection of garbage, periodic maintenance of the vegetative landscape is important. Having personnel responsible for the maintenance of the park will prevent unwanted activities such as vandalism (Yücel, 2005).

The comfort of a park includes many details, from creating spaces suitable for climatic conditions to the ergonomic fit of the reinforcement elements used. The fact that women use the park more intensely than men is also an important detail in terms of perceived safety, because it is possible to say that women are more sensitive to the spaces they are in (PPS, 2016).

#### **CHAPTER 3: METHODOLOGY**

This chapter includes two main parts which are the overview of the methodological framework employed in this thesis research and general information about the study area. In the first part, previous methodologies are examined in order to give an overview related to similar aimed works. Also, the research method for the case study area is explained in detail. In the second part, the history of Izmir and Bornova is presented with a chronological review, then the study area and surroundings are explained in detail and demonstrated with mapping technique and finally, it is concluded space quality examination is analyzed on the study area based on four space quality components which were explained in Chapter 2.

#### 3.1. Previous Methodologies

The physical characteristics of parks and green areas can take shape according to the topography of each city, the width of the residential areas, the climate and geographical structure, and the population structure, and of course available space. The identity of the city, lifestyle, level of development is effective in planning the standards of city parks and determining their physical characteristics (Uyanık, 2016). The size criteria of city parks (Tümer, 1976); green space standards (Yıldızcı, 1982); their functionality (Aydemir, 2004) can be seen that park space is defined and classified according to location, facility, and activities (Uzun, 1993; Polat 2002). In addition to the classifications made both from an ecological and social perspective, besides providing the segregation of the parks, the service quality, facilities, landscape value, accessibility, and aesthetic value of the parks also determine the contribution of the parks to the quality of urban life (Emür and Onsekiz, 2007; Erduran and Kabaş, 2010).

Some studies on ecological evaluations of urban parks (Example: Burke and Ewan, 1999; Eşbah, 2006; Erduran and Kabaş, 2010) and some studies conducted on determining the quality criteria of urban parks (Example: Yücel and Yıldızcı, 2006; Mehta, 2014; Alpak et al.2018) are available. These studies determine various qualities by explaining their own evaluation criteria. For example, factors such as accessibility, security, and aesthetics are the leading spatial features that support physical activity (Çelik, 2018). According to some studies on quality indicators of public open spaces (Whyte, 1980; PPS, 2019), four features of a successful public space stand out: access and connection, use and activity, comfort and image, socialization. Therefore, it will be possible for a park to fulfill its functions of those doing the planning and design make the right decisions. Observing how a park is used and measuring

people's perception of the park is important in determining what changes can be made to make the park a successful and responsive place (Yücel and Yıldızcı, 2006; Erduran and Kabaş, 2010).

#### 3.2. Research Method for Case Study Area

Two methods were used in this assessment. The first is the comparison and analysis of literature information which contains different insights into the researchers and works that focus on usage and quality indicators of public spaces, and the second is survey studies based on the subjective preferences of users. The quality measurement indicators used are those established by Project for Public Space (PPS), which defines four key features of space quality in public spaces with a holistic approach, based on the indicators presented in detail in Table 2.1 under the heading "Approaches according to space qualities" has been handled within the framework of approach.

Based on the lighting of above explanation, the research of the case study consists of mainly two parts: data collection and data analysis. In the first part, data collection is described in detail. In the next part, methods for analyzing the space quality principles are described through statements, questions and research tools in order to explain how case study area is examined.

Data collection includes mainly four parts: literature review, site survey, interviews and questionnaires. Quantitative and qualitative data are used to understand the walkability and to examine the characteristics of Asik Veysel Recreation Area which has been highly preferred by the local people and also has a huge potential of developing in terms of four indicators which were explained in detail in previous chapters. Also, online resources and materials from the library are used for in-depth research. It is demonstrated in Figure 3.1.

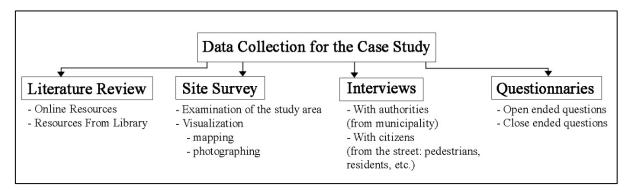


Figure 3.1. The scheme indicating the data collection

For the analysis of the case study, the thesis investigates and analyses walkability principles which are access and linkages, uses and activities, sociability, and finally comfort and image. Analysis of the data was made through a mapping technique, interpreting the results and comparing the literature findings and current situation of the case study area. Data collection and data analysis of walkability principles for the case of Asik Veysel Recreation Area are indicating in table 3.1.

Table 3.1. Data Collection and Data Analysis for Case Study Area

Formulation Principles	Data Collection	Data Analysis
Access and Linkages	<ul> <li>Literature review</li> <li>Photographing</li> <li>Observation</li> <li>Interview</li> <li>Questionnaires:     'How do you go to the park?)'     'What determines the quality of accessibility in reaching your favorite urban park?'</li> </ul>	<ul> <li>- Mapping</li> <li>- Parking plots in the park</li> <li>- Open &amp; green areas</li> <li>- Interpretation of the results of survey question</li> <li>- Comparison of findings from literature and current situation of the park</li> </ul>
Uses & Activities	- Literature review - Photographing - Observation - Interview  - Questionnaires:     'What is your purpose of using the park?'     'How often do you come to the park?'     'How much do you spend time in the park?'     'Would you like to add your comments about your perception of using urban parks after the COVID-19 pandemic?'	- Mapping - Land use map - Interpretation of the results of survey question - Comparison of findings from literature and current situation of the park

Sociability	- Literature review - Photographing - Observation - Interview - Questionnaires:  'Do you think urban parks are good gathering places for people?'  'How could urban parks become a better gathering place for people and why?'  'Do you meet with other people and spend time when you are in the park?'	- Interpretation of the results of survey question - Comparison of findings from literature and current situation of the boulevard
Comfort & Image	- Literature review - Photographing - Observation - Interview  - Questionnaires:     'What determines the quality of safety in urban parks?'     'Would presence of others in the park make you feel safer?'     'What determines the quality of materials used in the construction or design of urban parks?'     'How can the landscape design and vegetation in the study area be improved?'	- Interpretation of the results of survey question - Comparison of findings from literature and current situation of the boulevard

#### 3.3. General Information About Case Study Area

Asik Veysel Recreation Area is a park located in the Bornova district of Izmir, Turkiye. The park, named after the Turkish minstrel Asik Veysel, has a total area of 245,000 square meters. The park, the construction of which started in 2008, was put into service by the Izmir Metropolitan Municipality on September 25, 2010 (source: https://peyzax.com/asik-veysel-rekreasyon-alani/). Relative to many urban parks, this study site is relatively young in age and history.

#### 3.3.1. History of Izmir, Bornova

Since Bornova was founded on a collection of deposits formed by the accumulation of materials carried by the creeks and streams within its borders, Bornova means Birunabat - Burunova 'Outer city' (Oikonomos - Slaars, 2001). Also, Bornova has been home to many civilizations and cultures including the author of Iliad and Odyssey epics. This settlement in the northeast of Izmir, at the ends of Yamanlar Mountain, has been inhabited by Etiler (Hittites), Phrygians (2000 - 1200 BC), Kimris, Ionians (1200 - 610 BC), Lydians (610 - 546 BC), Iranians (546 BC - 333), Kingdom of Macedonia (333 - 323 BC), Kingdom of Asia (323 - 263 BC), Kingdom of Pergamon (263 - 130), Roman - Byzantine Empire (130 - 1076), Seljuk Turks (1076 - 1425), Ottoman Turks (1425 - 1919) and Greeks (1919 - 1922). Later, it continued its existence under the sovereignty of the Turkish state (Figure 3.2).

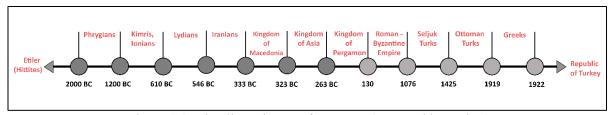


Figure 3.2. Timeline History of Bornova (prepared by author)

Bornova, which developed and became a popular settlement in the 19th century, was accelerated by the ease of transportation. In this period, there was a highway connection from Kemer, known as the Kervan Bridge, and a seaway connection via Bornova pier. In the second half of the 19th century, the establishment of a railway connection on the Izmir - Town 'Turgutlu' line made the settlement more attractive. This transportation network has caused Bornova to become a permanent settlement over time. Later, there was a development towards the environment.

Bornova, which became a municipality in 1881, is known as a French village, although it was a settlement where rich Levantines had their summer houses. These structures, which have been able to maintain their existence to a significant extent today, are described as mansions. In addition to this, Bornova is also known as "Ville d'eau" meaning 'Water City' (Arıcan, 2003: 60). Because, as mentioned above, Bornova is a colivial reservoir formed by the accumulation of the material brought by many streams and streams. The most important of

these streams is the Bornova Stream and its tributaries. While these waters add natural beauty to the settlement, they have been always important source for life.

#### 3.3.2. Location and Surroundings

Bornova, a district of Izmir Province, is located in the northeast of the city center. Bornova is adjacent to the Menemen, Karşıyaka, Bayraklı, Konak, and Kemalpaşa districts of Izmir, as well as Manisa Province, and for this reason, it is the junction point of the roads connecting Izmir to the Aegean Region and Central Anatolia (Figure 3.3). The Izmir-Istanbul road passes through Bornova and connects Izmir to Manisa, Balikesir, Bursa, and Istanbul. Bornova District is surrounded by mountains and was established on the slopes of Yamanlar Mountain and Bornova Plain. The area of the district center with its 29 neighborhoods is 37 km2, and the total area with its 12 villages is 205 km2.

Its population is 419,624 in the center; It is 426,490 in total, 6,866 in towns and villages. The total population, including the active daytime population, is around 1,000,000 due to its job and education opportunities and social position.

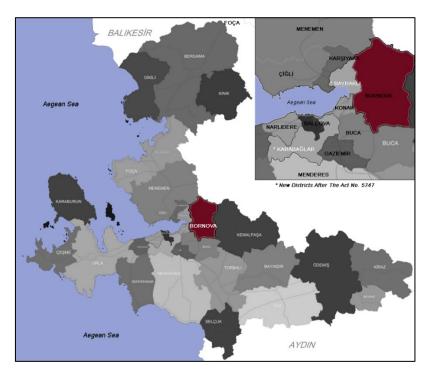


Figure 3.3. Geographical Location of Izmir, Bornova (Prepared by author)

The study area Asik Veysel Recreation Area which is located on the shores of Bornova Stream in Bornova, within the borders of Erzene district. Since the area is located in the central part of Bornova district, it can be easily accessed by either metro or public bus (Figure 3.4).

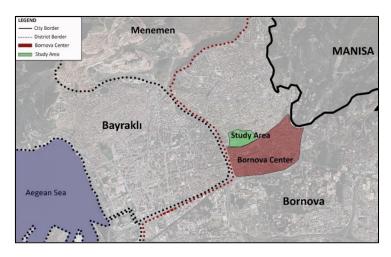


Figure 3.4. Geographical Location of Asik Veysel Recreation Area (Prepared by author)

#### 3.3.3. General Characteristics of the Study Area

Asik Veysel Recreation Area is a park located in the Bornova district of Izmir, Turkiye. The recreation area, the construction of which started in 2008, was put into service by the Izmir Metropolitan Municipality on September 25, 2010. The study area is located in a strategic area thanks to its location in the city center and its proximity to important public buildings (Figure 3.5).

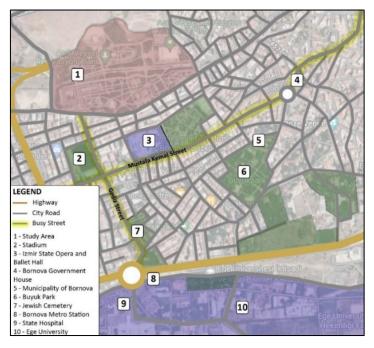


Figure 3.5. Land Use of Around Study Area / Bornova Center (Prepared author)

The park, named after the Turkish minstrel Asik Veysel, has a total area of 245,000 square meters. According to Izmir Metropolitan Municipality (2011) data, in Asik Veysel Recreation Area with a green area of 125,000 m2; there are 112.952 m2 grass area, 2.912 trees, 24.180 shrubs, 180,728 ground cover plants, 40,948 seasonal plants, 3.288 wrapping plants, 347 indoor plants.

The concepts of "green and blue", which are indispensable for the concept of recreation, have been used very efficiently in this space. The open green area of 125,000 m2 and the pond of 1,550 m2 are spread homogeneously throughout the space, and a large part of these areas can be actively used by users (Izmir Metropolitan Municipality, 2011). In addition, this recreational area, which was built on the shore of the Bornova Stream, offers the positive aspects of the moving water element along with incorporating the advantage of the river.

On the other side, at the entrance of the Asik Veysel Recreation Area, there is a statue symbolizing the minstrel (Figure 3.6). The sculpture, which is likened to the trunk of a tree, depicts the artist seeing the world with the eyes of the heart. The cultural structure and interaction of the cities can be understood from the parks. The parks become the mirror of the cities and provide information about the city to the visitors. The roots tightly wrapping the soil symbolize civilizations from the past to the present. The green part on the chest of the statue tells the society the importance of seeing the world with the eyes of the heart. In the evenings, with the lighting hitting the chest of the statue, the eye of the heart is open even in the dark.

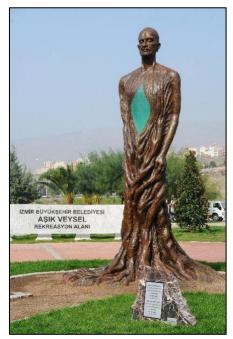


Figure 3.6. The Statue of Poet Asik Veysel (Author' achieve, January 2020)

#### 3.4. Space Quality Examination of Asik Veysel Recreation Area

In this part of the thesis, space quality principles explained in previous section are examined for Asik Veysel Recreation Area in detail. Photographing and mapping techniques through examination and observation of the study area are used by defining the physical characteristics and user perceptions of the field. Also, each principle of space quality is investigated in order to determine the user perception.

#### 3.4.1. Access and Linkages

While the Asik Veysel Recreation area has many advantages thanks to the large area it has, on the other hand, it had to be positioned at the north exit of the city center. However, it compensates for this situation thanks to its proximity to public transport and large car parks. Public buses in the study area pass through the axis of Gediz and Mustafa Kemal Streets. Therefore, it is within a short walking distance to the study area. Bornova Metro, located at the furthest location to the area, is a 15-minute walk away. There is also a taxi station at the main entrance of the area (Figure 3.5). In addition, there are parking spaces at the main entrance of the recreation area and in front of the swimming pool, with a total vehicle capacity of 641.

In the park, in terms of usage and connectivity of pedestrian axes, strong connections are observed. Although the walking and jogging areas are separated from each other by the use of materials within the area, 1.5 kilometers of bicycle path, walking paths provides an uninterrupted transportation opportunity to the visitors on the same axis. In addition, with the positioning of the Amphitheater on a high slope, a recreation area can be experienced from this region.

## 3.4.2. Usage and Activities

Asik Veysel recreation area offers different usage options to its users with its different indoor and outdoor areas. The area has 125.000 m2 green area, 641 car parking lot, two cafeterias of 352 m2 and 142 m2, shower and toilet buildings of 135 m2, three basketball courts with a total area of 2.079 m2, two tennis courts with a total area of 1089 m2, 1.215 m2 ' mini football field, three children's playgrounds of 180-220-350 m2, two fitness areas of 280 m2 in total, a pond of 1.550 m2, a 1.6 km long bicycle path and a 5,000-seat amphitheater with a total area of 7,693 m2 (Figure 3.7 / source: https://peyzax.com/asik-veysel-rekreasyon-alani/).

There is an ice rink of 12 thousand square meters in accordance with Olympic standards. International and national organizations are held in the ice rink, ice skating and ice hockey branches. The semi-Olympic swimming pool, which started to be built in the park in October 2019, was completed in October 2020 and opened in June 2021. In addition, solutions for disabled users were used throughout the Site (Izmir Metropolitan Municipality, 2011).

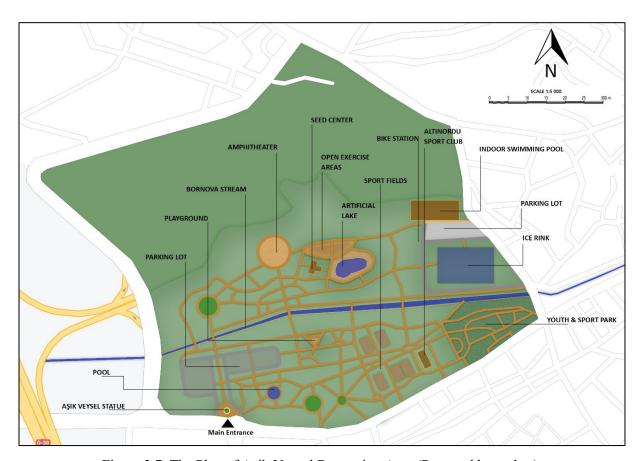


Figure 3.7. The Plan of Asik Veysel Recreation Area (Prepared by author)

#### 3.5.3. Sociability

As mentioned in previous section, Asik Veysel recreation area has various activity options in terms of cultural or natural experience. The amphitheater in the area also hosts free public concerts, festivals and activities of the Izmir Metropolitan Municipality (Figure 3.8). In addition to this, outdoor activities can be held in front of the ice rink in the park, by the pool and on the steps of the amphitheater. Since the area is close to the city center, there is not much commercial space in it. It has two small cafes where visitors can meet any urgent needs they may need.

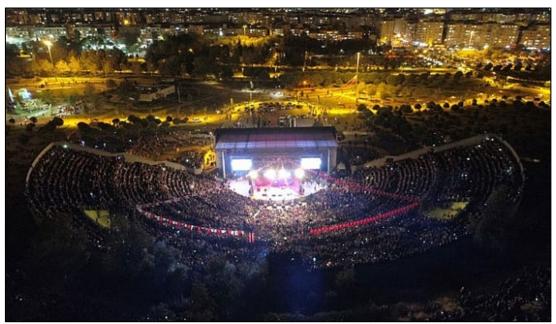


Figure 3.8. Celebration of Republic Day on 29<sup>th</sup> October, 2018 Source: (https://www.haberperi.com/cumhuriyet-asiklari-asik-veysel-e-sigmadi/309/)

On the other side, the park is not only used for cultural activities but also for its natural plantation in daily life by the public. Asik Veysel Recreation Area is among the ideal places to get away from the stress of the day, to relax and also to socialize. Also, the study area is used as a gathering place in case of emergencies. After an earthquake with a moment magnitude of 7.0 occurred on 30 October 2020 about 14 km northeast of the Greek island of Samos, Asik Veysel Recreation Area served the people of Izmir as a tent city (Figure 3.9).



Figure 3.9: The bird view to the study area after Izmir Earthquake in 2020. Source: (https://twitter.com/AFADBaskanlik/status/1324067518076669952/photo/1)

## 3.5.4. Comfort and Image

The concepts of "green and blue", which are indispensable for the concept of recreation, have been used very efficiently in this space. The open green area of 125,000 m2 and the pond of 1,550 m2 are spread homogeneously throughout the space and a large part of these areas can be actively used by users. In addition, this facility, which was built on the banks of the Bornova Stream, offers the positive aspects of the moving water element along with the still water, by incorporating the advantage of the river. The stream, which is full of water collected from the environment on rainy days, gives the visitors the feeling of being in the wild with its sound (Figure 3.10).

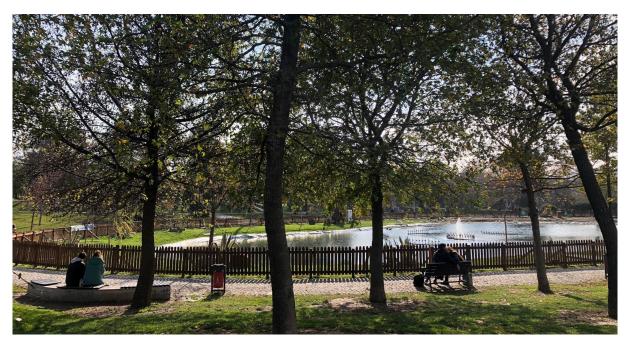


Figure 3.10. The general view to the recreation area. Source: (Author's achieve, January 2023)

On the other side, the presence of security cameras and good night lighting in certain parts of the park (around the sports courts and public buildings such as the Olympic pool, ice skating building) and the security personnel who patrol the area give the users a sense of security in this park.

#### **CHAPTER 4: RESULTS**

The purpose of this chapter is to provide information about how users perceive space quality indicators which were explained in Chapter 2 through survey questions. The first part of the chapter provides a detailed overview of the survey and participants. In the second part, survey results related to four space quality components, usage of the area, and user's perception comparatively (Before Covid 19 / After Covid 19) are presented. In-person surveys were conducted and Excel 2018 was used to provide diagrams for the data presented.

#### 4.1. Survey and Participants

In the survey studies, based on these criteria, in the context of urban space activity, questions were asked to the users about how often they use the space, for what purpose, how they feel in the area and the meaning that the space has for them. Survey respondents were identified as residents from Bornova, Izmir -Turkiye. It was aimed to compare the spatial and social parks and to make an evaluation by directing the residents in the same district by asking the same. While making this comparison, it is aimed to examine how the perceptions of users differentiate in today's changing environmental conditions by adding the options before and after Covid-19 in the questions.

In the questionnaires part, two types of questions are used: open-ended and close-ended (Appendix A). Open-ended questions are defined as free-form survey questions that allows a respondent to answer in open text format such that they can answer based on their complete knowledge, feelings, and understanding which means that response to this question is not limited to set of options offered (Urša Reja et al., 2003). On the other hand, close-ended questions and statements that leave survey responses limited and narrow to the given options are formed as Likert-type scale and multiple-choice questions in this thesis. Respondents were asked whether they agree or disagree with a statement regarding Likert-type scale questions. Options are separated into three parts as agree, neither agree nor disagree, and disagree which can be used to analyze results (Joshi et.al., 2015). With the Likert-type scale and multiple-choice questions, it is aimed to get clear answers from participants about the specific questions.

For the analysis of the survey questions, Microsoft Excel is used for the evaluation and demonstration of the close-ended questions results. In detailed, visualized and distinguished results prepared by Microsoft Excel program are shown in the following sections.

The survey consists of 62 survey questionnaires that were selected from different users in terms of age, gender, education and occupation to create variety in the study area. 6 main age intervals were determined; people between 16-24 years old, 25-34 years, 35-44 years, 45 to 54 years, 55 to 64 years and older than 65 years old. Most of the survey questionnaires were conducted during the weekend; only 16 of them was conducted during the working days. Also, the time interval for questionnaires was chosen during the day when daily activities are as usual in and around the park (see Table 4.1).

Table 4.1. Time schedule of questionnaires

Number of Questionnaires	Date	Day	Time Interval
5	19.01.2023	Thursday	12:00- 16:30
7	20.01.2023	Friday	14:00 – 18:00
12	21.01.2023	Saturday	11:30 – 17:30
10	22.01.2023	Sunday	12:30 – 17:30
16	28.01.2023	Saturday	11:30 – 18:30
8	29.01.2023	Sunday	12:30 – 17:30
4	03.02.2023	Friday	14:00 – 18:00

Table 4.2 shows the respondent's distribution according to the age, gender and the reason for being in the park analyze the results in different views. As seen in Table 4.2, 34 questionnaires were conducted with males and 28 questionnaires were conducted with females.

Among these people, people who are between 16 and 30 years, generally visit the park for meeting and exercise purpose; people who are between 31 and 60 years, use the park with 68% percentage for resting and spending some time; and people who are 60 and over years, visit the park to spend some time in the greenery area (see Table 4.2).

Table 4.2. Respondent profile

		16-30	31-60	61 +	Number	Percentage (%)
	Female	8	14	6	28	45%
Gender	Male	6	18	10	34	55%
Ğ	Total	14	32	16	62	100%
_	Primary School	-	1	3	4	6%
Education	High School	4	14	8	26	42%
duca	University or Higher	10	17	5	32	52%
	Total	14	32	16	62	100%
	To rest and spend some time	2	15	5	22	35%
ing	To attend activities	2	3	-	5	8%
Visit	To do exercise	4	6	4	14	23%
for	To spend time in the greenery area	-	2	5	7	11%
Reason for Visiting	To meet with friends	6	6	2	14	23%
Rea	Other	-	-	-	0	-
	Total	14	32	16	62	100%

Also, the usage frequency of the boulevard is analyzed according to post and pre Covid-19 era. Although there is no dramatic change in the usage of the park between those periods, usage frequency has been slightly increased on daily visiting and users mostly prefer to visit the park once in two weeks. (Figure 4.1).

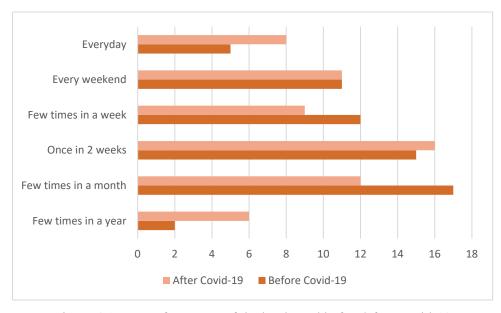


Figure 4.1. Usage frequency of the boulevard before/after Covid-19

#### 4.2. Space Quality Components Results

The four main space quality components (access and linkages, uses and activities, sociability and comfort and image), which were theoretically researched in Chapter 2 and examined on the study area in Chapter 3, are presented in this section according to the results of the survey study. In the following part, the results of the survey is given over these subheadings, and holistic survey studies is presented in the last part.

#### Access and Linkages

For the assessment of 'access and linkages', one related question 'How do you go to the park before/after Covid-19?' was asked to the respondents. Regarding this question, most respondents state they go by walking before and after the Covid-19 period.

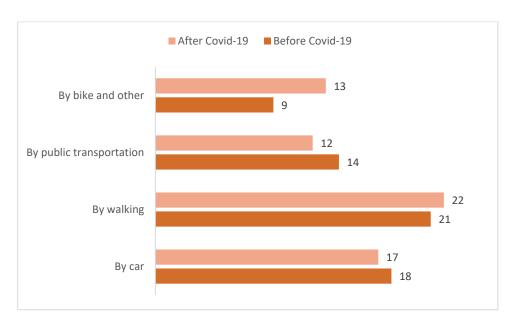


Figure 4.2. The distribution of the results for the question that 'how do you go to the park before/after Covid-19?'

On the other side, another question related to the topic was asked of the respondents to understand their accessibility criteria in general (aside from the study area). That question was 'What determines the quality of accessibility in reaching your favorite urban park?' and most of the respondents with %65 percentage pointed out the importance of reaching the park by walking.

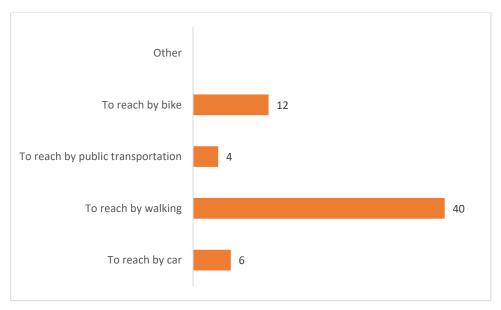


Figure 4.3. The distribution of the results for the question that 'What determines the quality of accessibility in reaching your favorite urban park?'

## Usage and activities

Three related questions were asked to the respondents in order to analyze usage and activities of the park. The questions are following:

- 'What is your purpose of using the park?'
- 'How often do you come to the park?'
- 'How much do you spend time in the park?'

The first two questions above are already analyzed in the first section (see section 4.1. 'Survey and Participants') of this chapter while interpreting the respondent's profile. Regarding the last question which is 'How much do you spend time in the park?', most respondents stated that 1-2 hours is/was enough for them both before and after the Covid-19 period, so significant change is observed accordingly.

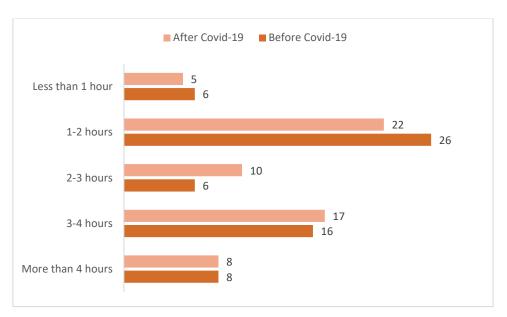


Figure 4.4. The distribution of the results for the question that 'How much do you spend time in the park?'

In this subject, one general question was asked to understand how users' perception has been changed after post Covid period. Regarding the open question 'Would you like to add your comments about your perception of using urban parks after the COVID-19 pandemic?', users generally mentioned that public open spaces are more attractive to them economically, socially and psychologically. Also, the majority of the participants stated that the use of parks has increased during the pandemic since the parks offer users the opportunity to spend time in nature/open green areas, and their tendency to use park areas has increased in line with the needs emerging in those needs (large-scale parks, distance sitting areas, walking tracks, etc.).

## Sociability

Three related questions were asked of the respondents in order to understand the social perceptions of the parks. The first one was 'Do you think urban parks are good gathering places for people?' and the majority of them strongly agreed that urban parks are good gathering places no matter what the period is.

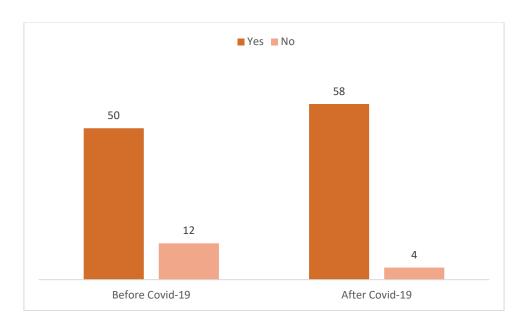


Figure 4.5. The distribution of the results for the question that 'Do you think urban parks are good gathering places for people?'

With the second question 'Do you meet with other people and spend time when you are in the park?', social interactions of the users were aimed to be analyzed. As seen in figure 4.6, most of the respondents do not prefer to meet with foreigners/new people in the park but this preference has slightly changed to a positive direction for the answers After the Covid-19 period.

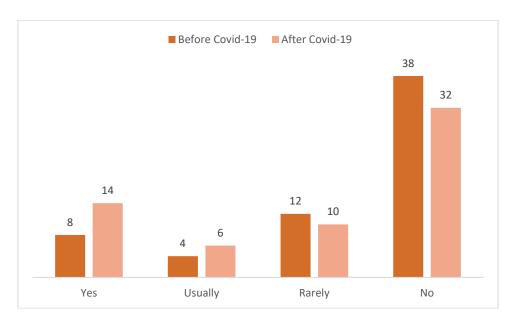


Figure 4.6. The distribution of the results for the question that 'Do you meet with other people and spend time when you are in the park?'

Finally, for the last and open question 'How could urban parks become a better gathering place for people and why?', users mentioned that the time to gather collectively and spend time together could increase with more public organizations and activities in the park. They also that it is important to provide diversity in physical appearances, activities and users in the park.

## Comfort and image

According to this section, four related questions were asked of the respondents in order to examine the comfort and image of the park. The first question was 'What determines the quality of safety in urban parks?' and many of the answers were split between two options which are monitories of the camera system and the existence of the security personnel in the park. None of the users preferred the security units.

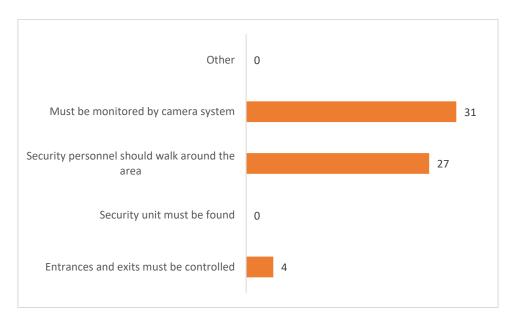


Figure 4.7. The distribution of the results for the question that 'What determines the quality of safety in urban parks?'

The other question which is related to safety was 'Would the presence of others in the park make you feel safer?'. Although the majority agreed to the effect of the presence of others, the answer to this question is closely distributed among the other choices.

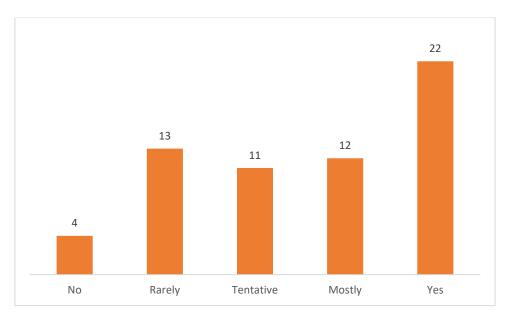


Figure 4.8. The distribution of the results for the question that 'Would the presence of others in the park make you feel safer?'

The last two questions of this part focus on quality indicators of the image of the park. Accordingly, the third question was 'What determines the quality of materials used in the construction or design of urban parks?' and users mostly concentrated on two options which are having no harmful substances and ergonomic and comfort of materials.

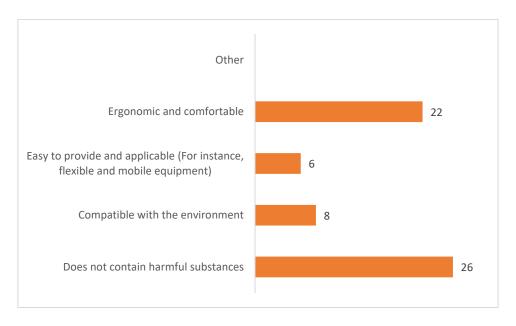


Figure 4.9. The distribution of the results for the question that 'What determines the quality of materials used in the construction or design of urban parks?'

Finally, the last question of this part was 'How can the landscape design and vegetation in the study area be improved?'. Based on the order, seems that most of the respondents confirmed their satisfaction with the landscape elements of the park by choosing the option, its

shape, and texture should be preserved. Aside from that, 27 percent of the users pointed out the need for more shaded areas.

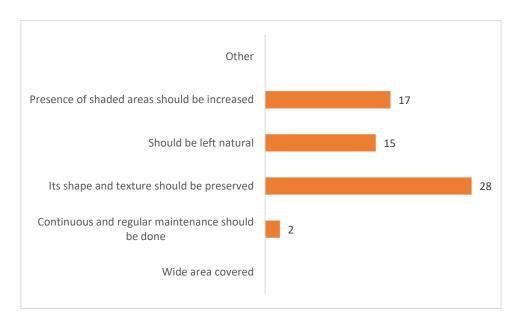


Figure 4.10. The distribution of the results for the question that 'How can the landscape design and vegetation in the study area be improved?'

## 3.5.5. Holistic Evaluation of the Survey Results

In this part of the chapter, survey questions are analyzed in a holistic approach by combining the space quality components in the scale of the general approach to the urban parks and specifically to the study area. four questions were asked to the respondents; three of them is directly related with the study area, the last one is about perception of the users for urban parks in general. For the following questions, a Likert scale method which provides a rating question that is from 1 point (strongly disagree) to 5 points (strongly agree), was used to get a general view of people's opinions and their level of agreement.

The first rating question was 'Please rank the following in order of importance of features of Asik Veysel Recreation Area from 1 to 5'. Although more than half of the respondents rated either 4 or 5 for 'the location of the park', 'vegetation of the park' and 'the atmosphere of the park'; 'activities in the park', 'night lighting of the park' and 'location of the park' were received the least rates.

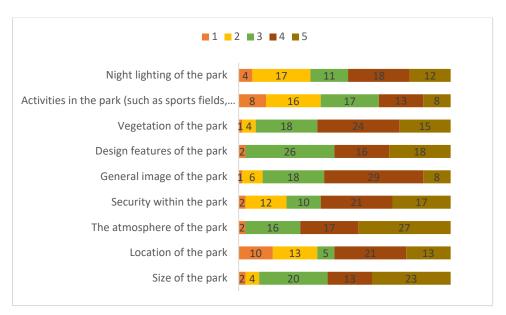


Figure 4.11. The distribution of the results for the question that 'Please rank the following in order of importance of features of Asik Veysel Recreation Area from 1 to 5'

The first rating question was 'Please rank the following in order of determining the quality of the design in Asik Veysel Recreation Area from 1 to 5'. For most users 'access and linkages and 'safety' determine the quality of the design. On the other side, 'comfort and image' and 'sociability/with the others' do not have really high impact on these criteria as seen in aggregation for rate 3 and rate 1.

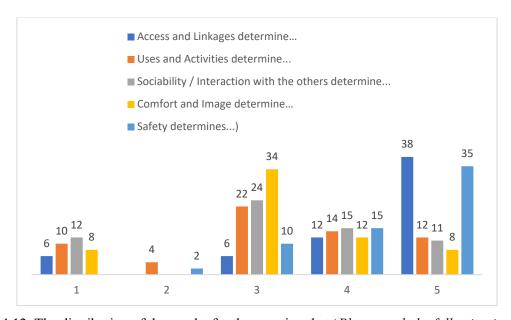


Figure 4.12. The distribution of the results for the question that 'Please rank the following in order of determining the quality of the design in Asik Veysel Recreation Area from 1 to 5'

The third direct question was 'What would be the reason if you weren't coming to Asik Veysel Recreation Area?'. The majority of the respondents (24 people) stated 'the accessibility issue', then 'safety issue' was chosen as the second most preferable answer. Aside from that, 15 respondents positively found 'no reason' to not visit the park.

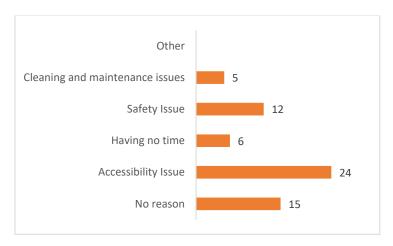


Figure 4.13. The distribution of the results for the question that 'What would be the reason if you weren't coming to Asik Veysel Recreation Area?'

The last and general question about the urban parks was 'Please rank the following in order of factors that will negatively affect the quality of urban parks from 1 to 5'. Most of the answers were pulled in 'accessibility issue' and 'not being well maintained and clean'. As was also seen in previous answers, the 'comfort issue' hasn't taken a significant place either positively or negatively.

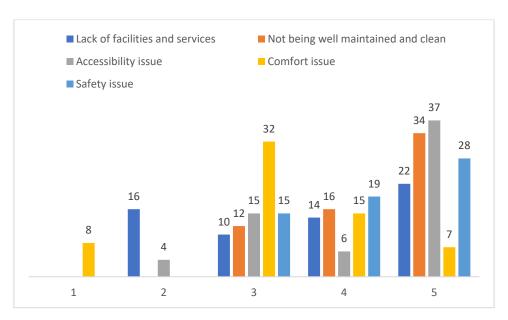


Figure 4.14. The distribution of the results for the question that 'Please rank the following in order of factors that will negatively affect the quality of urban parks from 1 to 5'

## **CHAPTER 5: DISCUSSION**

As mentioned by many social scientists and designers such as William Whyte (1980), Clare Cooper Marcus and Carolyn Francis (1998), Kevin Lynch (1960), Jan Gehl (1996), Loise Mozingo (1989), Lyn Lofland (1998) who have been working or have worked on public spaces in different periods and how these spaces can become more used and living spaces; the fundamental condition of a good public space is that the space is used. In other words, successful public spaces that is defined as spaces that meet the needs of users, offer equal accessibility to everyone, and are meant for a large part of society.

When designing public spaces or open and green spaces, it can be said that the basic criteria and basic design requirements that affect usage density and user satisfaction are common. In this part of the study, the Asik Veysel Recreation Area, which was chosen as a case study of this thesis, was evaluated according to the components in the reviewed literature (Table 2.1). The basic design criteria, which are common to the design and effective use of public spaces and open and green spaces, have been dealt with in articles and tried to be associated with user satisfaction.

Within the scope of this study, four main components (access and linkages, uses and activities, sociability and comfort and image) described in the first chapter and developed by Project for Public Space (2000) were evaluated. In this sense, the relationship between these components and the study area has been evaluated through observations, evaluations, and survey interviews.

Regarding the first component, Access, and Linkages, users were asked how often they use the park. Although there is no dramatic change before and after Covid-19, there is usually a slight increase. In addition to this, it was stated that the decrease of daily users by half is because the users stopped working from home. While users were more inclined to spend time in open areas due to restrictions (before Covid-19), a slight decrease has been observed in daily park visits (after Covid-19) due to a lack of time and alternatives by returning to normal routine (based on the survey results, daily visitors reduced to 5 from 8). Accordingly, the other question was about how users reach the park. Although there is no big difference between the two periods, more than half of the users stated that they reach the park by walking, by bicycle, or by alternative (clean transportation: scooter, etc.) methods. This number also seemed to have increased after the Covid-19 period. Relatively, 83% percent of the responses stated that 'to

reach by bike' and 'to reach by walking' to the favorite parks determine the quality of accessibility (Figure 4.3). The balanced distribution of green areas within accessible distances provides significant contributions to the urban ecosystem by meeting recreational needs (Bilen, Cig, & Sahin, 2011). In this context, in order for green areas to fulfill their functions, they must show a balanced distribution within walking distance. On the other hand, the reason why users prefer public transportation the least is that the park is slightly far from the transportation connections of the center. Issues such as the fact that the area is not designed to be integrated with public transportation and bicycle networks, the abundance of unqualified areas and the lack of lighting, the security concerns caused by the users not paying enough attention to environmental cleaning and the insufficiency of periodic cleaning services negatively affect the active use potential of the area.

The Uses and Activity is another important component that affects the users' preferences on the public/open spaces. According to Havighurst (1963), quality of life includes internal factors that include subjective thoughts about one's life and external factors that include measurable behaviors such as social contact and social activities. In this context, and under normal circumstances, people tend to gravitate towards areas where there is movement and attraction and may want to spend a longer time there. Although Asik Veysel Recreation Area, which has a very large open green space capacity, hosts different activities in every season of the year. It is documented that the general purpose of the use is for both sports and sightseeing. Although there are physical facilities in many parts of the city for these activities; the natural environment, fresh air, and the feeling of being away from the city for a while attract users to the Asik Veysel Recreation Area. This to be associated might also be associated with one of the survey questions which is 'how much do you spend time in the park?'. Because it is seen that most of the users spend 1-2 hours in the park, and this time goes up to 3-4 on weekends, but there is no dramatic change before and after Covid-19 (see Figure 4.4). For these reasons and better use of the potential capacity of the park, the frequency and diversification of activities should be increased to have more attractiveness of the park.

Regarding Sociability, the respondents clearly see urban parks as good gathering places without any Covid-19 period differentiation (see Figure 4.5). However, users do not tend to meet and spend time with new people in the park (see Figure 4.6). The reason is mostly that the users do not have the interaction possibilities to share the activity together. Integrating social, cultural, and sports activities with recreation areas provides great advantages in attracting users to the area and creating a constant living space. Although the ice rink, amphitheater and sports

fields identified with the Asik Veysel Recreation Area partially constitute this advantage, they are not sufficient. According to Bucher (1974), recreation is activities that are rewarding in essence but are non-profit activities, in which people get rid of the boringness of daily life and gain a social personality by participating in social, cultural, and sports activities that are suitable for their own self and enjoy doing. Nor can it be anti-social by nature. As it is understood from the interviews as well, the necessity of holding more social, cultural, and sportive activities in the Asik Veysel Recreation Area arises in the climate conditions of Izmir, where approximately 8 months of the year are suitable for outdoor activities.

Finally, Comfort and Image is the last but not least component of the criteria. Regarding safety matters, the users were asked if the presence of others in the park makes them feel safer, and the answer was positive for the majority of respondents (see Figure 4.7). This result may refer to "eyes on the street" and a sense of social trust, both of which can be supported by features that encourage activities in public spaces (Jacobs J., 1961). If users feel safer, more people visit more often and communities benefit in multiple ways. In this way, perceived safety can be increased which helps crime prevention and public safety (L. Wood et al., 2010). Despite the fact of the benefit of social interactions, users still expect the support of individuals in technology and uniforms. As indicated in Figure 4.8, most of the users (except 4 respondents out of 62) said that the presence of the camera system and security personnel will determine the security quality of the parks.

On the other side, the data obtained from the observations made in the area and the survey study show that the recreation areas close to the city center and integrated with nature are used intensively by large user masses, regardless of their quality. The most important factor that distinguishes Asik Veysel Recreation Area from other recreation areas in the city is that it is located on both sides of the Bornova Stream. Considering the aesthetic, microclimatic, and psychological effects of water on users, the importance of recreational areas established on the shores of reclaimed water emerges once again.

Taking everything into account, as can be also seen in the observations, and survey results of the study, there are specific factors that cause dissatisfaction among users. As details mentioned above, the most obvious of these factors are transportation, security, and maintenance of the area. On the other hand, users are most satisfied with the natural landscape cover, interaction with the river, and the width of the area. This result gives happiness in a way that all negative criteria can be improved and corrected over time, as long as nature is preserved.

## **CHAPTER 6: CONCLUSION**

Especially in metropolitan cities; having open public spaces are significantly needed to spend free time, do various sports activities in open/closed places, and live the longing for natural life in open green areas. The first formal parks designed in the 19th century, as in the example of Central Park in New York, were planned as passive and beautiful areas in contrast to the density and pollution of urban life. Later they became important gathering places. The sailing pool in Central Park is a good example of both enjoying nature and attracting people to this area. Later they were planned as interconnected and larger "open space systems" that included parks, squares, plazas, greenways, and other disparate spaces. This situation has been an indicator of the understanding of the benefits of open spaces to the city. Although the facilities built for these needs have many deficiencies in terms of both ecological and functional aspects, they are quickly adopted by the users and become the attraction center of the city.

On the other side, the emergence of the Covid-19 pandemic also has reminded us once again of the issue of accessibility to green spaces. With the pandemic, the demand for parking areas that people can easily access by leaving their homes is increasing. Accordingly, it has become important to plan park areas within walking distance of residences in cities. The holistic planning of parks will provide convenience and motivation to users, taking into account the neighborhood units where walking distances can be controlled as well as population and area sizes in cities. In this context; Observation, land analysis, and survey studies were conducted on the Asik Veysel Recreation Area, which is the main material of the research, in order to reveal its positive and negative aspects, to determine and evaluate user needs in general.

- As a result of the evaluation of the research findings, data will contribute to the professional discipline of landscape planning regarding the design of recreational areas to be built and the improvement of the current ones. Although the quality and necessity of urban parks vary according to their physical, geographic, cultural, and social differences, there are general strategies and regulations that should be implemented at all scales in order to increase the quality of life and urban park quality. These recommendations are listed based on literature findings and the result of case study research as follows:
- The first step in the design of park areas is to determine the needs and demands of the community to be addressed. It is then decided how the community's features will be

- used to improve park planning and landscaping. All this will enable the community to develop their views of the park.
- The choice of location for the park will significantly affect the success of the park. Even a beautiful park with lots of activities can be empty or unused if it is poorly located. Parks feed on their immediate surroundings. The diversity of residential and commercial areas around the park will attract many different users who come to the park at different times of the day. If the park's environment does not provide a source of potential users, they may not be able to maintain their potential value. As Jacobs (1961) mentioned that where there are parks there are no people, and where there are people there are no parks. What Jacobs means is that site selection for different uses is an important factor in the park's success. Observing how the park is used and making measurable how people think about the park are also important in understanding what changes can be made to make the park a successful place.
- The transportation from the parking area to the park and the usage patterns of the roads in the park are important. An active and visible parking boundary will increase the accessibility of the park for different user groups. The park environment and connections within it should create a functional unity between the inside and outside of the park. Parking areas should be accessible on foot and by various means of transport such as private cars, bicycles or buses.
- Activities are one of the most important factors that makes a park attractive to people.
   Various active and passive activity opportunities offered to the users in the park areas will positively affect the use of the park areas and increase the quality of the park. It is important to provide diversity in physical appearances, activities and users in the park.
- The communication between different groups of people taking part in various activities in the park turns the park areas into social spaces. If there are pigeons or other attentiongetting pets in the park, there will also be people feeding and watching them. If there is heavy pedestrian traffic in the park, there will be people observing people on the benches along the road. It should not be forgotten that in order to provide the psychological comfort of individuals living in the community, there may be a need for personal spaces as well as public spaces where social relations will be experienced.
- The safety of the urban parks is an important factor in the perception of the comfort and image of the park by the users. Safety starts around the park. Feeling that there is control over the area, being able to see the area, being able to escape easily in case of danger

and getting support from the environment makes that place feel safer. Safe environments require the provision of security personnel, telephone access and first aid units. The presence of open viewing areas in the park is also effective in the perception of security. Open fields of view help identify the presence of people who may pose a threat to users. With the right planting and adequate lighting, it can contribute to the creation of open viewing areas. Thus, safer environments can be created for users by reducing the isolated areas where criminal activities can occur.

- Structural, vegetative and climatic design of the area is important in creating more comfortable environments in urban parks. Correct planning of the structural, vegetative and climatic elements in the park areas, choosing the right location and regular maintenance will affect the shaping of comfort and image.
- The maintenance, comfort and image of the park areas is another important factor in the perception of the users. In the maintenance of park areas, repair or renewal of park structures and equipment, removal of garbage, periodic maintenance of vegetative landscape is important. Providing a staff member in charge of maintaining the park will prevent unwanted user-centered activities such as vandalism and defamation.

To sum up, good park designs should provide users with a variety of activities to participate in, offering a variety of activities for use by different age groups and different types of people (activities and uses). Access to the park should be easy and related to surrounding settlements (accessibility). It should be safe, well-maintained and attractive, there should be places to sit in the park (comfort and image). The park should give people the opportunity to be with other people (sociability). By choosing the right place, right planning, right design, right application and achieving the right maintenance standards, quality urban park environments that can be used by urban people will be created.

#### **CHAPTER 6: REFERENCES**

Alexander, C. (1977) A Pattern Language: Towns, Buildings, Construction, New York, Oxford University Press.

Altman, I., Zube Irvin (1989). Public Places and Spaces. Human Behavior and Environment Series: Vol. 10, New York: Plenum Press.

Alpak E, Düzenli T, Yılmaz S. (2018) Kamusal açık mekânların kalitesi ve sosyal etkileşim üzerindeki etkileri. Journal of History Culture and Art Research.

Appleton, J., (1975), The Experience of Landscape. John Wiley & Sons.

Arican, Hasan (2003). Bornova Mansions, Travelers and Memories, Tepekule Yay., İzmir.

Atabek, E. (2002). Quality in Public Spaces: Quality Assessment Based on User Views in Yıldız Technical University Campus. (Master's thesis). Istanbul Technical University, Institute of Science, Istanbul.

Atanur, G., (2017), Kent Parklarını Yeniden Düşünmek. Kentli Dergisi.

Aydemir, S. (2004) Kentsel açık ve yeşil alanlar "Rekreasyon", Kentsel Alanların Planlanması ve Tasarımı. KTÜ yayınları, Trabzon.

Baljon, L. (1992). Designing Parks: Examination of Contemporary Approaches to Design in Landscape Architecture. Amsterdam: Architectura& Natura Press.

Bilgili, C. Çig A. & Sahin, K. (2011). Van Kenti Kamusal Yeşil Alanlarının Yeterliliğinin Ulaşılabilirlik Yönünden Değerlendirilmesi, Yüzüncü Yıl Üniversitesi Tarım Bilimleri Dergisi.

Bucher, A., Richard, C., Bucher, D., (1974), Recreation for Today-s Society, New Jersey, Prentice-Hall, Inc.

Das, D. (2008) "Urban Quality of Life: A Case Study of Guwahati", Social Indicator Research Journal, Vol. 88.

Emür SH, Onsekiz D. (2007) Kentsel yaşam kalitesi bileşenleri açısından açık yeşil alanların önemi: Kayseri/Kocasinan ilçesi park alanları analizi. Erciyes Üniversitesi Sosyal Bilimler Enstitüsü Dergisi.

Erduran F, Kabaş S. (2010) Parklarda ekolojik koşullarla dengeli, işlevsel ve estetik bitkilendirme ilkelerinin Çanakkale halk bahçesi örneğinde irdelenmesi. Ekoloji.

Erkut, G. (1995). Urban Space and Quality of Life. Symposium on Quality Search in Architecture and Urban Environment, Istanbul Technical University: Istanbul.

Garvin, A., (1997). Urban parks and open space. Washington, DC: Urban Land Institute.

Gehl, J. (2010), Cities for People. Washington: Island Press.

Gehl, J. (1987), Life Between Buildings: Using Public Space. Copenhagen: Arkitektens Forlag.

Gehl, J. (1996), Life Between Buildings. Washington: Island Press.

Garvin, A. (2011). The Public Parks: The Key to Livable Communities. New York, W.W.: Norton & Company.

Goldberger, P., (1992). Bryant park, New York. Great City Parks.

Havighurst, R. J. (1953). Human development and education. New York: Longmans, Green and Co.

Jacobs, J. (1961). The Death and Life of Great American Cities (Vol. 241). New York: Random House.

PPS (Project for Public Space) (2000), How to Turn a Place Around: A Handbook of Creating Successful Public Spaces. New York.

Jacobs, J. (1961). The Death and Life of Great American Cities. New York: Random House

Lang, J. (1987), Creating Architectural Theory, The Role of Behavioral Sciences in Environmental Design. New York: Van Nostrand Reinhold.

Le Corbusier (1973), The Athens Charter, trans. A. Eardley, New York, Grossman

Lofland, L. (1998) The Public Realm: Exploring the City's Quintessential Social Territory, Aldine de Gruyter, Transaction Publication, New York.

Lynch, K. (1972) Openness of Open Space, Ed.: T. Banerjee and M. Southworth (editors), City Sense and City Design: Writing and Projects of Kevin Lynch, Cambridge, MA: MIT Press.

Lynch, K. (1959). Good City Form. Cambridge, MA: MIT Press.

Lynch, K. (1960). The Image of the City. Cambridge, MA: MIT Press.

Marcus, C. C., Francis, C. (1998) People Places: Design Guidelines for Urban Open Space, 2nd ed., New York.

Mehta, V. (2014). Evaluating public space. Journal of Urban Design, 19(1).

Mozingo, L. (1989) "Women and Downtown Open Spaces", Places, vol:6, No:1, Fall.

Norberg-Schulz, Christian. (1988). Architecture: Meaning and Place. New York: Electa/Rizzoli

Özdemir, A. (2009). Katılımcı Kentli Kimliğinin Oluşumunda Kamusal Yeşil Alanların Rolü: Ankara Kent Parkları Örneği. Süleyman Demirel Üniversitesi Orman Fakültesi Dergisi.

Özdil, T., (2017). Kent parkları için yer kazanmak: Dallas'ta bir kent parkı hikâyesi. Kentli Dergisi.

Philips, L. E. (1996). Park: Design and Management. New York, NY.: McGrawHill.

Place Making Chicago. (2016). Four key qualities of a successful place. Accessed on 4 December 2020 (http://www.placemakingchicago.com/about/qualities.asp).

Project for Public Spaces. (2000). How to Turn a Place Around: A Handbook for Creating Successful Public Spaces. New York: PPS.

Project for Public Spaces. (2016). Creating great urban parks. Accessed on 4 December 2020, (http://www.pps.org/reference/creating-great-urban-parks/).

Rapaport, A. (1969), House Form and Culture. New Jersey: Engle Wood Cliffs.

Rapaport, A. (1977). Human Aspects of Urban Form: Towards a Man-Environment Approach to Urban Form and Design. Oxford: Pergamon Press.

Ribeiro FL, Perc M and Ribeiro HV (2022) Editorial: The Physics of Cities. Front. Phys.

Schwartz, A. (2003). Parks as Places: What's on Our Bookshelves, Places, A Forum of Environmental Design, Vol. 15.

Sennett, R. (1977) The Fall of Public Man.

- Sennett, R. (1999) Conscience of the Eye: Design of the City and Social Life, Trans. S. Sertabiboğlu and C. Kurultay, Istanbul, Details Publications.
- Shirvani, H. (1985), The Urban Design Process. New York: Van Nostrand Reinhold Company.
- Slaars, B.F.; Ikonomos (2002). Jacob Spon's İzmir (October 1675), İzmir Urban Culture Magazine, February 2002, Issue 5, İzmir.
- Slaars, B.F.; Ikonomos (2002). Pagus (Velvet Mountain) Ancient Ruins and Izmir's Old Closed Harbor, Izmir Journal of Urban Culture, February 2002, Issue 5, Izmir.
- Thwaites, K. (2001). Experiential Landscape Place: an exploration of space and experience in neighbourhood landscape architecture, Landscape Research, Vol. 26.
- Tümer, S. (1976) Rekreasyon alan ve ölçütleri. T.T.B. Planlama Dairesi Bakanlığı, Ankara.
- Uyanık, HN. (2016) Yeni kent kurgusunda rekreatif yeşil alanlar ve parklar üzerine sosyolojik bir araştırma. Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Yüksek Lisans Tezi, Konya.
- Whyte, W. H. (1980) "The Social Life of Small Urban Spaces", Common Ground Readings and Reflections on Public Space, Ed.: A.M. Orum and Z.P. Neal (editors), New York, Routledge.
- Wiggershaus., (1998). Günümüz Bahçe ve Parkları. Ed: Hans Sarkowicz. Bahçelerin ve Parkların Tarihi, Dost Kitapevi.
- Wood L., Frank L. D., Giles-Corti B. (2010). Sense of community and its relationship with walking and neighborhood design. Social Science & Medicine.
- Yıldızcı, AC. (1982) Kentsel yeşil alan planlaması ve İstanbul örneği. İ.T.Ü. Mimarlık Fakültesi Basılmamış Doçentlik Tezi, İstanbul.
- Yorulmaz, A. (2006). Harikalar Diyarı Parkı'nın Kullanıcı Profili ve Beklentilerinin Belirlenmesi. (Master Thesis). Ankara Üniversitesi Fen Bilimleri Enstitüsü, Ankara.
- Yücel, G. F. (2005). Setting Quality Criterias In City Parks. (Ph.D. Thesis). Istanbul Technical University, Institute of Science, Istanbul.

## **CHAPTER 7: APPENDIX**

# The Questionnaire of The Case Study of Asik Veysel Recreation Area

Survey	Number:		Date:	Date:					
Α.	General Info	rmation							
1.	Gender		Woman M		lan				
2.	Age								
3.	3. Level of Education		High school U		Undergraduate		Graduate degree		degree
			graduate deg		degree	egree			
4.	Job								
5.	Where do yo	u live?							
В.	Land Use								
6.	How often do	you visit the park?							
B.C.	Few times in a year	Few times in a month	Once in 2 weeks		ew times a week	Every weekend	1	Everyday	
A.C.	Few times in a year	Few times in a month	Once in 2 weeks		ew times a week	Every Every weekend		Eve	ryday
7.	How much de	o you spend time in	the park?						
B.C.	More than 4 hours	3-4 hours	2-3 hours 1-		-2 hours	Less than 1 hour			
A.C.	More than 4 hours	3-4 hours	2-3 hours	1-	-2 hours	Less than 1 hour			
8.	What is your	purpose of using th	e park?						
To rest some tin	and spend ne	To attend activities	To do exercise	1		To meet with friends			Other
9.	What would	be the reason if you	weren't co	ming	to this pa	rk?			
No reason		Accessibility Issue	Having no time		afety sue	Cleaning and maintenance issues			Other
10.	How do you	come to the park?							
B.C.	By car	By walking	By public transportation		By bike and other				
A.C.	By car	By walking	By public	public transportation		By bike and other			

11. Wha	at dete	rmi	nes the quali	ty of a	accessibility in	reac	hing yo	ur favorite ur	ban p	ark?	
To reach by car	To re	ach	by walking	publ	each by ic portation	To	reach by				
12. Plea	se ran	k th	e following i			ce of	feature	es of Asik Veys	el		
Reci	reation	n Ar	ea from 1 to	5							
			1		2		3	4		5	
Size of the p	ark										
Location of t	the par	·k									
The atmosph	ere of										
the park											
Security with	nin the										
park											
General imag	ge of tl	he									
park											
Design featu	res of										
the park											
Vegetation o	f the										
park											
Activities in	the pa	rk									
(such as spor	rts										
fields, perfor	mance										
stages, buffe											
Night lightin	g of th	ne									
park											
13. Wha	at dete	rmi	nes the quali	ty of s	safety in urbar	ı par	ks?				
Entrances an	d exits	5	Security un	it	Security pers	onne	1	Must be		Other	
must be cont	rolled		must be fou	nd	should walk	aroun	d the	monitored by			
					area			camera system	n		
14. Wou	ıld pro	esen	ce of others i	n the	park make yo	u fee	l safer?				
(1)			(2)		(3)	(4)		(4)		(5)	
15. Wha	at dete	rmi	nes the quali	ty of 1	materials used	in th	ie const	ruction or desi	ign of	urban	
parl	ks?										
Does not cor	ntain		Compatible v	vith	Easy to provi	de ar	nd	Ergonomic an	ıd	Other	
harmful subs	stances	,	the environm	ent	applicable (E	x., fl	exible	comfortable	omfortable		
					and mobile e	quipr	ment)				

16. H	low c	an the lan	dscape des	sign aı	nd vegetation	on in the stud	y area be i	mproved?		
<b>A:</b>										
Wide area	a C	Continuous	and	Its sl	nape and	Should be	Presence	of shaded	Other	
covered regular main		ntenance	textu	re should	left natural	ft natural areas show				
	should be done be preserved increa					increased				
17. D	o you	u think url	oan parks	are go	od gatheri	ng places for	people?			
B.C.	Yes	Yes No								
A.C.	Yes				No					
18. H	low c	ould urba	n parks be	come	a better ga	thering place	for people	and why?		
A:										
19. D	o you	u meet wit	h other pe	ople a	nd spend ti	ime when you	are in the	park?		
B.C.	Ye	es	Usually			Rarely		No		
A.C.	Ye	es	Usually			Rarely		No		
20. P	lease	rank the f	following i	n orde	er of qualit	y of your favo	orite park f	from 1 to 5		
User com	fort	(1)	(2	)	(3)	(	4)	(5)		
is										
User		(1)	(2	)	(3)	(	4)	(5	)	
satisfaction	on									
is										
Functiona	ality	(1)	(2	)	(3)	(	4)	(5	)	
of the par	·k									
is										
21. P	lease	rank the f	following i	n orde	er of factor	s that will neg	gatively aff	ect the qua	lity of	
u	rban	parks from	m 1 to 5							
Lack of		(1)	(2	2)	(3)	(	(4)	(5	)	
facilities a	and									
services										
Not being	Not being		(2	2)	(3)	(	(4)		)	
well										
maintaine										
and clean										
Accessibi	ility	(1)	(2	2)	(3)	(	(4)		)	
issue										
Comfort i		(1)	(2	2)	(3)	(	(4)	(5)		
Safety iss	sue	(1)	(2	2)	(3)	(	(4)		(5)	

		owing in orde		g the quality of th	e design in Asik
Access and	(1)	(2)	(3)	(4)	(5)
Linkages					
determine					
Uses and	(1)	(2)	(3)	(4)	(5)
Activities					
determine					
Sociability /	(1)	(2)	(3)	(4)	(5)
Interaction					
with the					
others					
determine					
Comfort and	(1)	(2)	(3)	(4)	(5)
Image					
determine					
Safety	(1)	(2)	(3)	(4)	(5)
determines					
23. Would	you like to a	dd your comi	ments about you	ır perception of u	sing urban parks
after th	e COVID-19	9 pandemic			
A:					