

# Evaluation of Japanese Kyoto Park in Terms of User Satisfaction

Ruhugül Özge Gemici

**Abstract**—The need for open space, which is an important problem especially since the 19th century, has become more important in today's conditions. The most important factor in increasing the livability of cities is the open and green areas. Parks are the most important of the urban open and green space elements that provide the most benefit to users. In this context, the user satisfaction of the Japanese Kyoto Park, which is the subject of the research, was evaluated in the light of the questionnaires. With this analysis, the satisfaction level of the user using the park was determined. Suggestions have been developed for the park to be handled and regulated according to the user requests and requirements changing over time.

**Keywords**—Japanese park, landscape, landscape design, open and green areas.

## I. INTRODUCTION

THE necessity of open and green spaces in urban life is an undeniable fact. The open and green spaces, which are perceived individually as concrete, form the open and green space system of the city when they are planned in a continuous array and functional structure. Open and green spaces can only fulfill the functions expected from them with a multipurpose and systematic planning. At the same time, it is very important that the created system is in the space dimension [1].

Open-green areas are accepted as an indicator of civilization and quality of life and the importance of these areas in the urban environment is increasing day by day. Green spaces have many benefits for people mentally, physically and socially. In addition, aesthetics, recreational, psychological aspects, and many benefits in terms of health, urban open-green spaces are very important for the quality of life of the urban people [1].

Parking spaces are both an urban element and a social space in terms of creating and maintaining the green system in the city. They are the focal points where the accumulation of urban culture is reflected and social communication takes place. Parks are divided into various classes according to their functions, service areas and locations. This classification, both ecologically and socially, determines the segregation of parks, as well as the quality of service, equipment, landscape value, accessibility and aesthetic value of parks, and their contribution to the quality of urban life. The fact that the concept of green also exhibits the quality side of urban life in addition to its connotation of naturalness reveals both ecological and social impact on the quality of urban life [2].

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Japanese gardens are a piece of nature made by the human hand. The garden is a kind of reflection of Japanese landscape [3]. Artificial hills, rocks, lakes, stream beds and cascades are copied from the outstanding properties of various landscapes in the country [4]. Japanese gardens show an intertwined connection of the concepts of landscape, religion and culture which are peculiar to Japan and make sense to Japanese people. However, the thing which is important here is to show the proficiency of making a huge world formally fit into small places [5]. With their wisdoms, slender compositions, calm and profound atmosphere, Japanese gardens attract a great deal of attention worldwide. Therefore, they are built in other countries as well. It is possible to see examples of Japanese gardens being built every year in various countries. Today, there are approximately 690 Japanese-style gardens outside of Japan [6].

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## II. AREA OF RESEARCH

It is determined that Konya and its surrounding were one of the most significant centers of population even during the 8th millennium BC. As far as can be understood from Çatalhöyük excavations, the first settlement, domestic architecture and the first sacred structure in Anatolia were established on this territory [8]. Additionally, the tomb of Mevlana, the ancient city of Klistra, numerous madrasas, mosques and tombs are located within the boundaries of Konya. The city is located near the southern side of Middle Anatolia, at 1 020 m above sea level, at the foot of a huge hill. Konya's Japanese garden, which was designed and applied on an approximately 30 000 m<sup>2</sup> area by Konya Metropolitan Municipality in the Province of Konya, District of Selçuklu, constitutes the research area. This garden is in terms of area the biggest of all Japanese gardens in Turkey [8].

### A. Japanese Kyoto Park in Konya, Turkey

It was opened for service in 2010 by Konya Metropolitan Municipality on an area of 36.000 m<sup>2</sup> on Veysel Karani Street in Selcuklu District. "Fellow City" protocol was signed in order to develop the relations between Konya Metropolitan Municipality and Japan's Kyoto Municipality. Konya Japanese Park was built with the aim of developing brotherhood

relations between Konya and Kyoto. Ponds, landscaping, stone and wooden bridges, Japanese plants, bamboo water games were designed in the park, which was built in accordance with Japanese architecture. In addition, the 500 m<sup>2</sup> pagoda in the park is used as a cafeteria. It is open daily from 8am to 11pm. [9].

### III. METHODS

Within the scope of this study, the user satisfaction of the Japanese Kyoto Park was measured through surveys. Firstly, literature review has been done. Then, 100 face-to-face questionnaires were conducted by going to the study area. Necessary photographs were taken from the area and used in the study. The aim of this study is to determine the satisfaction of the park users. Suggestions have been developed for reconsideration and reorganization of the park according to changing user requests.

#### A. Preparation of Survey Form

The questionnaire form was compiled from the previous studies and examples in the books. The data obtained through the survey were examined in two groups. These are user information and information about the user's use of green space. User information: The aim was to determine the demographic and socio-economic characteristics of the sample by means of variables in this group. Information about the user's use of green space: The aim was to determine the frequency of arrival to the park, the time spent in the park, the use of the park in terms of preferred activity, to investigate the qualitative characteristics and to determine their views on satisfaction levels.

#### B. Sample Model

The data analyzed in this study were obtained by completing a total of 100 questionnaires conducted on users of the Japanese Kyoto Park in Konya. The survey was conducted in May 2019 as a period. The questionnaires, which were created in order to determine the user needs and preferences in detail, consist of 26 questions. All the data obtained are supported by tables and graphics created in Microsoft Excel and Word programs.

### IV. RESEARCH RESULTS AND CONCLUSION

The distribution of the participants according to their demographic characteristics is given in Figs. 1-5. Accordingly, 40% of the participants using the Japanese Kyoto Park are men and 60% are women. When we look at the marital status of the surveyed users, it is seen that 34% are single and 66% are married.

In the surveys conducted in the Kyoto Park of Japan, the results of the questionnaires regarding the safety and maintenance of the participants are given in Table I. Accordingly, approximately 62% of the participants feel safe in the park and 1% does not feel safe at all. Looking at the cleanliness and maintenance of the park, 53% of the users found the park well maintained and clean, 2% found the park very neglected and dirty.

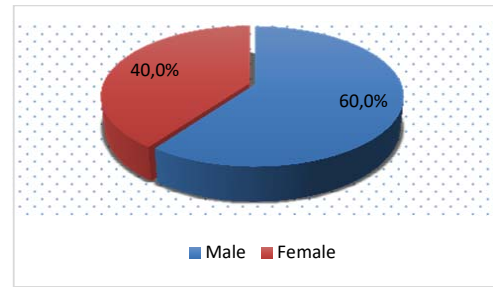


Fig. 1 Gender

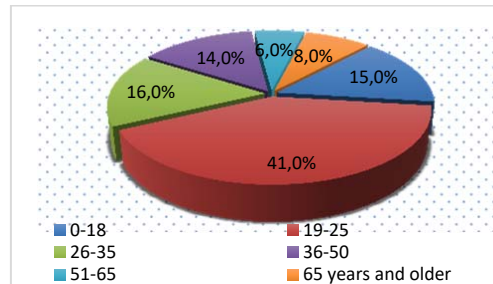


Fig. 2 Age

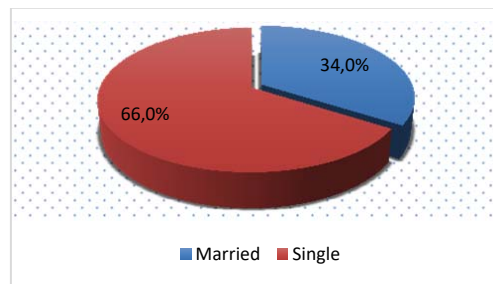


Fig. 3 Civil Status

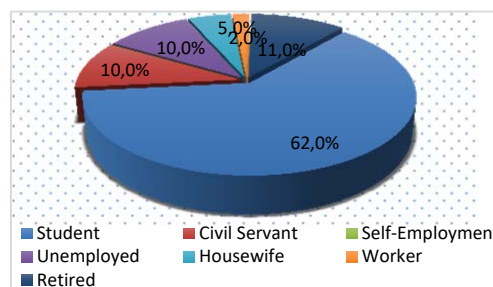


Fig. 4 Jobs

When the design-based results were examined in the survey, 51% of the participants stated that the density of green spaces in the park was sufficient and 2% said that they were inadequate. 45% of the users who came to the area with their own cars answered no when asked if parking is sufficient. "Is the physical design and landscape of the Japanese Kyoto Park suitable for evening use of the park?" In response to the question, 46% of the respondents said they were undecided and 12% said they were very appropriate. 42% of the users

said that the entrances and exits of the park are sufficient. 24% of the users said that the entrances and exits of the park are insufficient. While 37% of the first users of the park found the plan open, 25% did not. Are children, the elderly and the disabled taken into account in constructional and vegetative applications in the Japanese Kyoto Park? 24% of the respondents were undecided and 37% answered yes. 44% of respondents said it was a suitable place to take photographs, while 21% of the respondents were undecided. Looking at the transportation preferences of the users coming to the park, 46% prefer public transportation, 23% come by car, 15% come by walk, 8% come by bike, 5% come by motorcycle and 3% prefers to arrive by taxi.

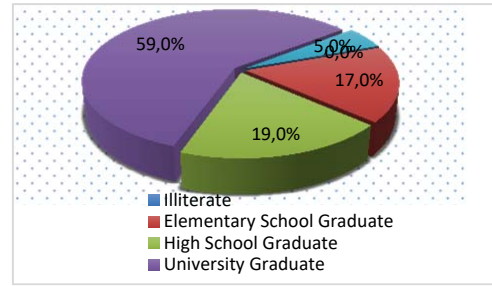


Fig. 5 Literacy

TABLE I  
THE RESULTS OF THE QUESTIONNAIRES REGARDING THE SAFETY AND MAINTENANCE OF THE PARTICIPANTS

	<b>I feel very safe</b>	<b>I feel safe</b>	<b>Undecided</b>	<b>I don't feel safe</b>	<b>I never feel safe</b>	<b>Total</b>
Do you feel safe in Japanese Kyoto Park?	%17,00 17	%62,00 62	%18,00 18	%2,00 2	%1,00 1	%100 100
	<b>Very well maintained and clean</b>	<b>Well maintained and clean</b>	<b>Undecided</b>	<b>Neglected and dirty</b>	<b>Very neglected and dirty</b>	<b>Total</b>
Do you find the Japanese Kyoto Park well maintained and clean?	%18,00 18	%53,00 53	%18,00 18	%9,00 9	%2,00 2	%100 100

TABLE II  
QUESTIONNAIRES RESULTS

	<b>Very sufficient</b>	<b>Sufficient</b>	<b>Undecided</b>	<b>Insufficient</b>	<b>Very insufficient</b>	<b>Total</b>	
Do you find the Japanese Kyoto Park sufficient in terms of green area density?	%17,00 17	%51,00 51	%20,00 20	%10,00 10	%2,00 2	%100 100	
	<b>Absolutely</b>	<b>Yes</b>	<b>Undecided</b>	<b>No</b>	<b>Absolutely not</b>	<b>Total</b>	
Is there enough parking space for users coming to Japanese Kyoto Park by car?	%1,00 1	%17,00 17	%23,00 23	%45,00 45	%14,00 14	%100 100	
	<b>Very Suitable</b>	<b>Suitable</b>	<b>Undecided</b>	<b>Unsuitable</b>	<b>Very Unsuitable</b>	<b>Total</b>	
Is the physical design and landscape of the Japanese Kyoto Park suitable for evening use of the park?	%3,00 3	%24,00 24	%46,00 46	%15,00 15	%12,00 12	%100 100	
	<b>Very sufficient</b>	<b>Sufficient</b>	<b>Undecided</b>	<b>Insufficient</b>	<b>Very insufficient</b>	<b>Total</b>	
Are the entrances and exits of the Japanese Kyoto Park enough?	%5,00 5	%42,00 42	%23,00 23	%24,00 24	%6,00 6	%100 100	
	<b>Very clear</b>	<b>Clear</b>	<b>Undecided</b>	<b>Unclear</b>	<b>Very Unclear</b>	<b>Total</b>	
Is the plan of the Japanese Kyoto Park clear enough for first-time users?	%7,00 7	%37,00 37	%24,00 24	%25,00 25	%7,00 7	%100 100	
	<b>Absolutely</b>	<b>Yes</b>	<b>Undecided</b>	<b>No</b>	<b>Absolutely not</b>	<b>Total</b>	
Have children, the elderly and the disabled been taken into account in structural and vegetative practices within the Japanese Kyoto Park?	%7,00 7	%37,00 37	%24,00 24	%25,00 25	%7,00 7	%100 100	
	<b>Absolutely</b>	<b>Yes</b>	<b>Undecided</b>	<b>No</b>	<b>Absolutely not</b>	<b>Total</b>	
Do you think there are suitable areas for taking photos in Japanese Kyoto Park?	%17,00 17	%44,00 44	%21,00 21	%8,00 8	%10,00 10	%100 100	
	<b>By walk</b>	<b>By bicycle</b>	<b>By motorcycles</b>	<b>By public transport</b>	<b>By taxi</b>	<b>By car</b>	<b>Total</b>
Which mode of transportation would you prefer to go to the Japanese Kyoto Park?	%15,00 15	%8,00 8	%5,00 5	%46,00 46	%3,00 3	%23,00 23	%100 100
	<b>Benches</b>	<b>Gazebos</b>	<b>Trash bins</b>	<b>Lighting elements</b>	<b>Flower pots</b>	<b>Information signs</b>	<b>Total</b>
Which reinforcements in Japanese Kyoto Park do you think are insufficient?	%20,00 20	%15,00 15	%5,00 5	%15,00 15	%25,00 25	%20,00 20	%100 100

When park users were asked about the frequency of going to the park, 7% said they went several times a year, while 35% said they went several times a month. While 55% of the visitors prefer to go to the park at the weekend, 17% prefer to go on weekdays. 33% of Japanese Kyoto Park users prefer to use the park in the afternoon and 16% prefer it in the noon.

31% of the participants prefer to go to the park in spring and 28% in summer. While 70% of the park users spend 1-3 hours in the park, 23% spend 3-5 hours in the park. When they go to the park, 35% of them go with their friends and 46% with their family. Approximately 23% of the participants come to the park to meet their friends, while 15% prefer to use the park to

relax and 11% to feel peaceful. 25% of Japanese Kyoto Park users prefer to spend their time in seating areas, 15% of users prefer to spend in the cafes/restaurants and 25% of users in the artificial lake surroundings. 5% of the respondents answered the question "Would you like to come back to the Japanese Park again?" And 70% of the respondents answered yes. 72% of the participants stated that they would recommend the park to their acquaintances and 20% would not.

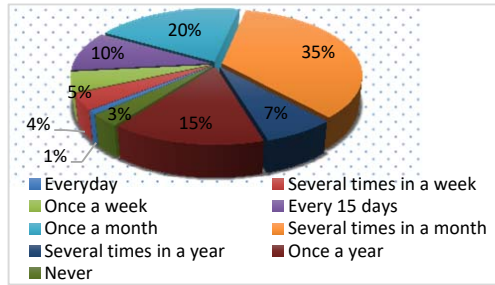


Fig. 6 How often do you go to Japanese Kyoto Park?

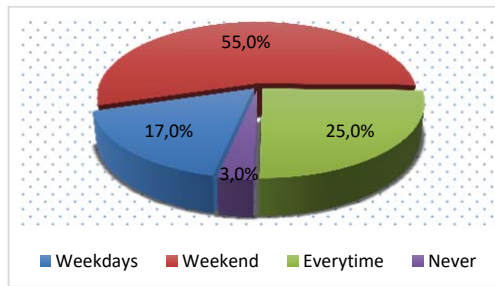


Fig. 7 On which days would you prefer to go to the Japanese Kyoto Park?

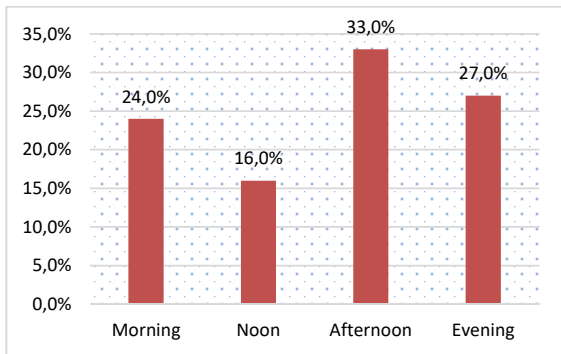


Fig. 8 At what time of day would you prefer to go to Japanese Kyoto Park?

V.SUGGESTIONS

The importance of green areas in terms of quality is as great as their spatial importance. The value of green spaces is gradually increasing due to the positive effects of the human being on the physical and mental structure, as well as the functions of micro-conditioning, air conditioning, filtering dust and reducing noise. Green areas are divided into active recreation green and non-active green. Active green areas are

designated as children's playgrounds, park areas and sports areas. Green areas that are not actively used are open areas which are not used for recreation, entertainment and sports purposes but are covered by the functional areas [10].

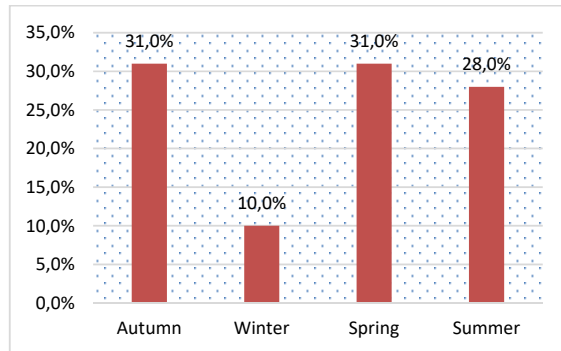


Fig. 9 In what season would you prefer to go to the Japanese Kyoto Park?

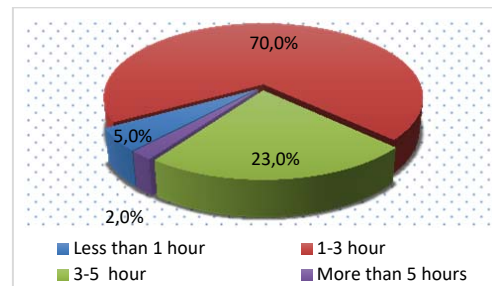


Fig. 10 How much time do you spend in Japanese Kyoto Park?

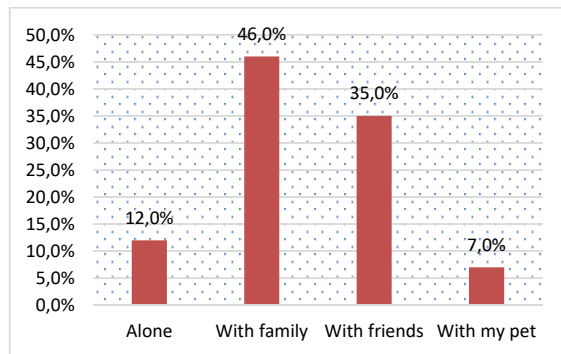


Fig. 11 Who do you prefer to go to Japanese Kyoto Park?

Green spaces that meet the needs and demands of the users will have the task of combining functionality with nature. In this way, the parks, which are evaluated at the level of ecological standard square meters, will gain effective roles in human and urban life depending on the functions they occupy by going beyond the occupancy and vacancy ratio [11].

The creation of parking spaces by considering only the presence of green spaces and depending solely on site selection processes can be used to create a balanced distribution in urban areas. However, these processes are not considered sufficient when it comes to the functions of

parking spaces in social life. Parks should be functionalized and evaluated in order to produce results appropriate to the socio-cultural level of the citizen [11].

The organization of the park itself is very important for the satisfaction of the user. Activities in the parking area should be classified in a system. In this classification, food and beverage needs, entertainment, recreation, sports or cultural-artistic activities should be organized areas.

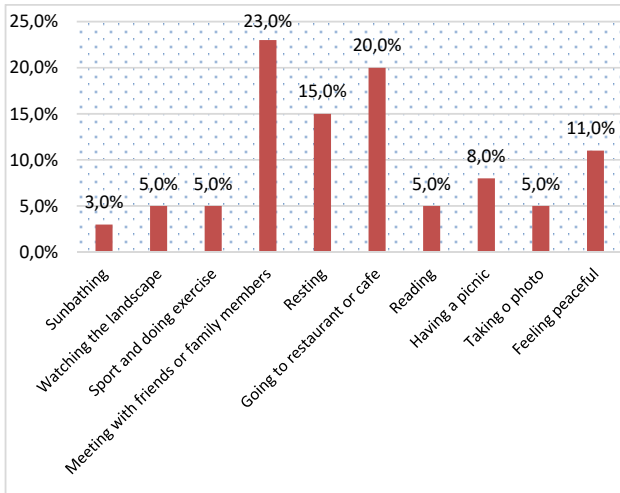


Fig. 12 For what purpose do you prefer to use the Japanese Kyoto Park?

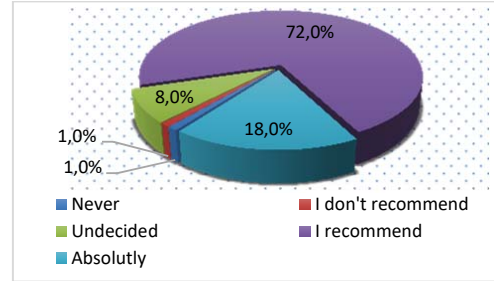


Fig. 15 Would you recommend the Japanese Kyoto Park to your acquaintances?

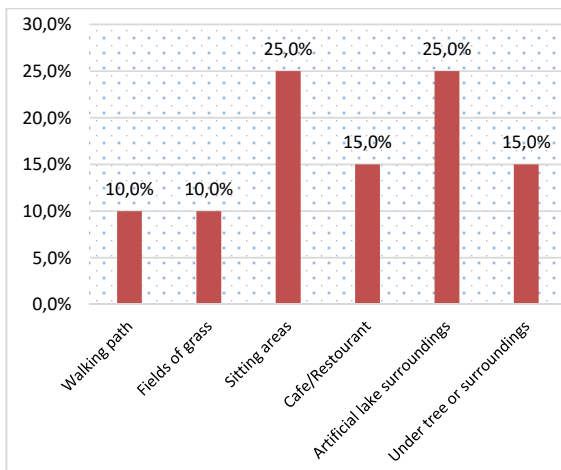


Fig. 13 Which areas do you prefer to spend time in Japanese Kyoto Park?

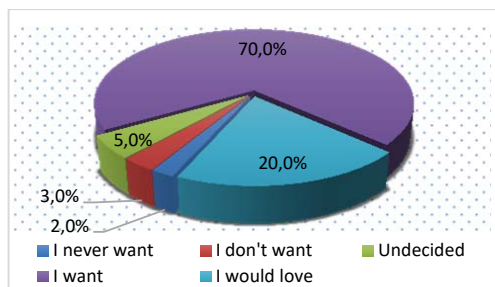


Fig. 14 Would you like to come to Japanese Kyoto Park again?

The following recommendations were developed by evaluating the research results for the Japanese Kyoto Park:

In order to meet the changing needs of the users, it is very important to maintain the continuity and live of the park. If the continuity of the park is ensured, the viability of the park is maintained. Thus, more people can come to the park.

Considering that children, the elderly and the disabled also come to the park, new designs should be developed for these people to walk around the park comfortably.

Japanese Kyoto Park users reported that the parking area is insufficient. Based on this result, the parking area of the park should be expanded.

Park users stated that some structural elements in the park were insufficient. Adding inadequate structural elements to the park will satisfy the people who come to the park.

The lack of guidance and information signs in the park is a problem for the first time visitors to the park. This should be corrected immediately.

ACKNOWLEDGMENT

The author would like to thank Hüzeyma Tosun and Gülşah Önal for their contribution to the study.

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