

## User Surveys of Erzincan' S Urban Parks

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**Abstract:** User surveys are important sources of data to aid the planning, design and management processes of urban parks. This paper focuses on three parks in Erzincan for survey and evaluation purposes. To analyse the use of the parks, a literature survey and a questionnaire survey were carried out together. The former describes the distributional structure of the parks whereas the latter makes assessments by exploring the characteristics of park users, user satisfaction, reported problems and requirements. As a result, recommendations for future planning are suggested. Ideal urban parks were offered and with regard to public's expectations, information about what to do is given to the local authorities.

**Key Words:** Park Use, User Surveys, Landscape Planning, Urban Park

### Introduction

Unlike western European countries, Turkey did not have a park tradition prior to the Republican Period. Although the palace gardens existed in Istanbul, these places were only for the Sultan's use. The ordinary public, on the other hand, fulfilled their recreational needs by visiting private gardens, orchards and promenades that had attractive natural features. The establishment of urban parks, as we understand them today, is considered to have started with the Republican Period which provided public spaces as part of the Republican project to construct a modern society (Oguz, 2001). The first urban park to be planned for recreation and public use was the İsmet İnönü Park in Erzincan.

All the city center and its around was collapsed by earthquake in many times. For the reason parks were established after in 1992. The green space ratio per person 1.34 m<sup>2</sup> and the distribution of green areas over the city is not homogenous (Zengin and Yılmaz, 2001)

Cities have gradually been filled up by the investors as places commercially and economic income to be supplied; and it is a very fast developing process. Authorities of the area have not been very effective in the developing usage of the open spaces and they have been unwilling or insufficient to take the responsibility for governing the public areas. Need for open spaces have changed in many ways in the last decade (Eymirli, 1994). People have been spending their increasing spare time in such a social medium including television, video, computer games, irregular shopping ways, internet and untrustful streets etc. These form the important subjects have should respond to today's parks and the design of open spaces (Covan, 1998).

In Turkey, local authorities generally neglect urban parks in order to provide economic income. Instead of this, residences and business centers which supply income are of priority. Previous researches showed that plants used public places positively affected on human psychology Hodge (1995) reported that people lived in cities with insufficient green areas felt more stressed, anxious and worried than people lived in villages and areas covered by forests Erzincan city had very strong earthquakes at different times was extremely destroyed. Every time the earthquakes caused economic and social life to be completely off

and also caused the economic activities of people supporting their lives by stock farming in rural areas to be interrupted on a significant level. Psychological and negative effects of the earthquakes on people were determined and had been solved as soon as possible time. Then, industrial districts had quickly been founded for the development of the city, residences according to earthquake postulates have been built and the destructed foundations and institutions have been re-built. The objective of this study was to determine the qualities and deficiencies of urban parks with regard to modern landscapes that would help increasing the serviceable use of these parks for urban population to in Erzincan, Turkey.

### Materials and Methods

The most important urban parks of Erzincan, Atatürk Park, İsmet İnönü Park and Barış Manço Park were selected for the study. Atatürk Park is the only large park that placed far away from the city centre. Atatürk Park is situated in the southern district of the city center where lowest income groups live. İsmet İnönü ve Barış Manço, located in the north, lies between upper income housing areas and it can be reached from every part of the city in a short period of time. User's questionnaires were applied in totally 11.85 ha. urban park areas. The three urban parks located in the city is given in Fig. 1.

All three parks are on the same transportation line and it is possible to reach each one by the same means of transport. Each of the three parks has distinctive and original characteristics (Table 1).

İsmet İnönü Park, by being the first and the only urban park of Erzincan for a long time, has experienced a transformation in terms of the existing units and facilities. During the 1985s the park had lost its original features. The quality of service in these places has also rapidly deteriorated. The park includes trees and lawns, sitting areas, a playground a funfair that is mostly of interest to young people and children.

Atatürk Park, the largest park of Erzincan, which was established in 1995 with a great deal of investment, has miscellaneous service facilities such as an exhibition and fair center, a wedding salon, open-air theatre, cafes and restaurant, a lake. The Barış Manço Park includes a playground, cafes and restaurant, pool.

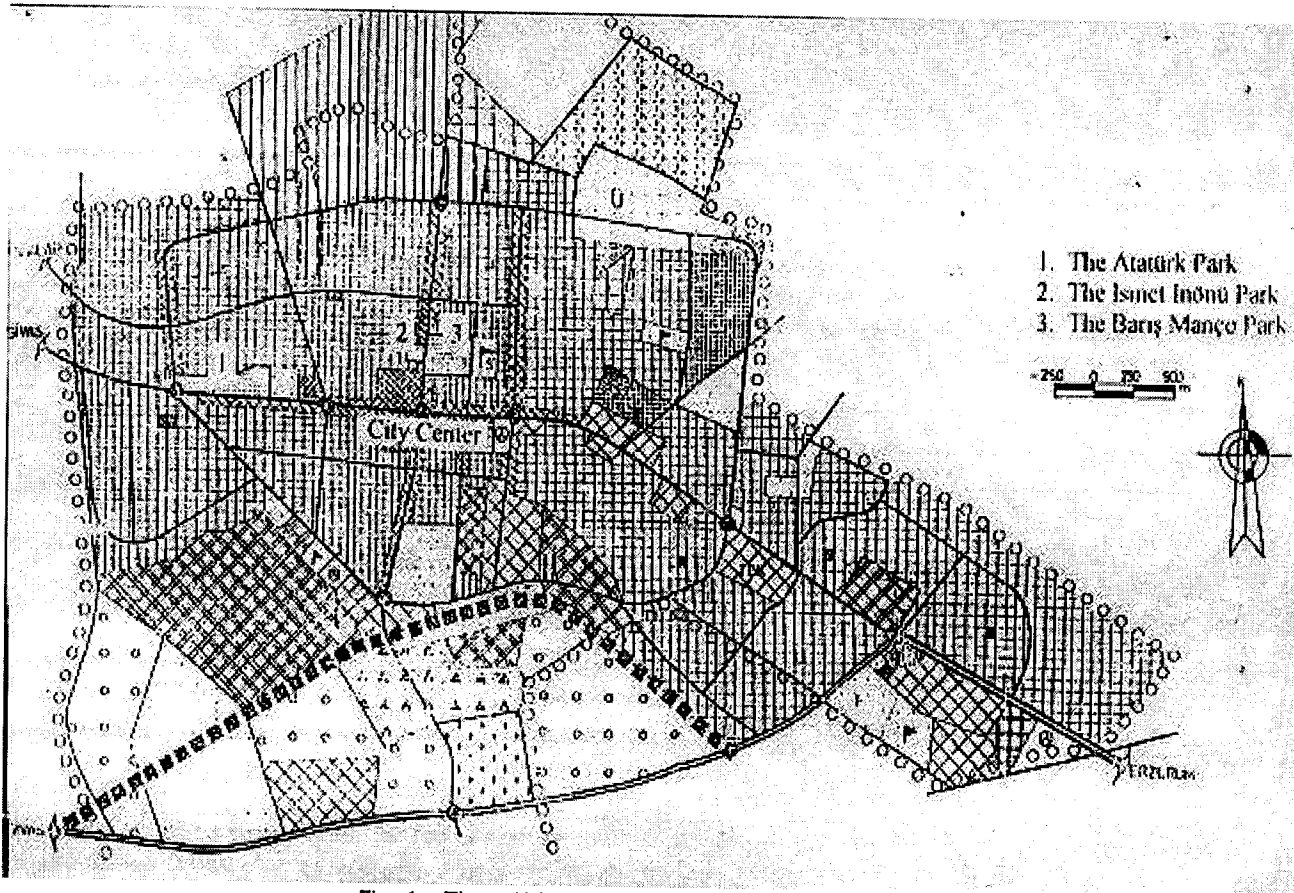


Fig. 1: Three Urban Parks of Erzincan

Table 1: Characteristics of Selected Three Parks

Name of the Park	Open-Green Space and Fields	Distance From City Centre	Equipments	Name of Parish
Atatürk Park	9.20 ha.	1.075 km	Sufficient	Bahçelievler
İsmet İnönü Park	0.80 ha.	Centre	Insufficient	İnönü
Barış Manço Park	1.85 ha.	Centre	Insufficient	Atatürk
Total	11.85 ha.			

In the research, the sample size for each parks was determined at 150 persons. With the purpose of determining the positive effects of urban parks in the process of fast urbanisation after the earthquake in 1993. This sample size was obtained according to the Erzincan Municipality numerical records and based upon 10% of the number of people visiting a park in 1 day in summer. The questionnaire was applied by random sampling in every region of the parks. This subject questionnaire was held throughout the summer month of 1999-2000 (July and August), in which the parks were most intensively used. In total 38 questions were asked to user. The first 8 of them were to find out the user profile; the following 15 questions were to determine the users' recreational habits and finally the remaining questions were to comprehend

the level of user satisfaction. Data analyses were carried out using cross tables, which enable the comparison of the variables. In line with this, a chi-square ( $X^2$ ) test was carried out.

### Results and Discussion

Questionnaire which was applied in order to determine the level of sufficiency and the qualities of the Atatürk Park, the İsmet İnönü Park and the Barış Manço Park was closely related with the city public and was done through interviews. By the questionnaire which was done in order to reflect the place and the contribution of green spaces and open fields in the city life, the need of people for such areas was determined and the necessary equipments for such areas and lacking urban equipments were found out.

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In total 150 persons, of whom 97 were males and 53 females, participated in the survey. The user characteristics of the three parks can be summarised as follows: gender does not affect park preferences. In all three parks, males users were counted more than female users (Table 2).

Table 2: Breakdown of Park Users in Selected Parks of Erzincan According to Gender

Park	Male	Female	Row sum
Atatürk Park			
N	32	19	51
N (%)	32.9	35.8	
Ismet İnönü Park			
N	18	12	30
N (%)	18.6	22.6	
Barıp Manço Park			
N	47	22	69
N (%)	48.5	41.6	
Column sum	97	53	150
Column sum (%)	64.7	35.3	100
$\chi^2$ - Test ( park x gender) , $p=0.69501 > 0.05$			

The variables of park preference and marital status are related variables. The percentages of married users who preferred the Atatürk Park, Ismet İnönü Park and Barış Manco Park are 55.8, 20.9 and 23.3 %, respectively. A comparison between all users shows that single users (71.3 %) visit parks more than married users (28.7) (Table3).

Table 3: The Relation between Park Use and Marital Status

Park	Married	Single	Row sum
Atatürk Park			
n	24	29	53
n (%)	55.8	27.1	
Ismet İnönü Park			
n	9	34	43
n (%)	20.9	31.8	
Barıp Manço Park			
n	10	44	54
n (%)	23.3	41.1	
Column sum	43	107	150
Column sum (%)	28.7	71.3	100
$\chi^2$ - Test ( park x marital status), $p=0.00382 < 0.01$			

A relationship exists between the park usage and age groups of the users. People in the age group of 25-44 years (36.0%) and 19-24 years (31.3%) use the park most. The 12-18 and 19-24 year age groups mostly prefer Ismet İnönü Park. The 56 year and over group mostly prefers the Atatürk Park and Barıp Manco Park (Table 4).

Another significant relationship can be found between park preference and education level of the users.

People who have had primary school as their only education mostly prefer the Ismet İnönü Park (63.2%). High school graduates mostly prefer the Atatürk Park (44.8%), whereas university graduates mostly prefer the Ismet İnönü Park (63.2%) (Table 5).

Park preference and income groups of users also have a dependent relationship. The largest number of park users is in the 65-175 USD income group and 176-350 USD income group (40.7%) ( Table 6).

When the participants were asked about their preferred activities in the parks, the most frequently provided response by the users were sitting on a bench and watching the world go by, walking and running and using the dining facilities. The main objectives of park use are stated as to spend time in the open air, to rest and contemplate by water and green areas, to meet and chat with friends and to get rid of the pressures of urban life. The to meet and chat with friends response is mostly given by Ismet İnönü Park and Barıp Manco Park users. When users were asked about how satisfied they were with their parks, 70.2% responded that they were satisfied to a certain degree. 49.4% of the users who responded that they were completely satisfied with the park were visitors of the Atatürk Park, whereas 50.1 of the users who responded that they were completely dissatisfied were found in the Ismet İnönü Park. Seventy-six percent of all visitors, however, recommend the park they use to other people, which suggests a general degree of satisfaction. The majority of users of Erzincan urban parks ask for programmed cultural activities, such as organised display, zoo and botanical gardens, respectively.

Since Erzincan city is located on the first degree seismic waves, all the planning attempts should be arranged leading to this factor. After an earthquake empty spaces which are kept as open and green spaces are the fields which have the most functional use. After disastrous open and green spaces are useful places where people can gather where all kinds of aid including healthcare can be applied and where tents can be pitched for sheltering. Results of the questionnaire show that 92 % of people have used parks and open-green places in the city for sheltering during and after an earthquake.

The urban parks contribute to the formation of a modern life-style as public recreational areas. Although it was expected that the parks are equally used by the two gender groups, according to the questionnaire results male users visit the parks in greater numbers than female ones. This result shows the following traditional gender rules within the society. Single users use the parks more than the others due to their age groups. The preference of the young age groups for the Ismet İnönü Park than others can be quick arrive at there. The older age group of 24-25 seems to prefer the Atatürk park for its catering services and because of its natural environment.

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**Table 4: User Characteristics by Age**

Park	12-18 Years	19-24 Years	25-44 Years	45-55 Years	56 Years and Above	Row Sum
<b>Atatürk Park</b>						
n	9.0	13.0	27	2.0	4.0	55
n (%)	27.2	27.7	50	28.6	44.4	
<b>Ismet İnönü Park</b>						
n	19.0	24.0	7.0	3.0	1.0	54
n (%)	57.6	51.1	12.9	42.8	11.1	
<b>Barýp Manço Park</b>						
n	5.0	10.0	20.0	2.0	4.0	41
n (%)	15.2	21.2	37.1	28.6	44.4	
Column sum	33.0	47.0	54.0	7.0	9.0	150
Column sum (%)	22.0	31.3	36.0	4.7	6.0	100

$X^2 - \text{Test ( park x age groups) , } p= 0.00000 < 0.01$

**Table 5: Park Use and Education Level**

Park	Literate	Primary School Graduate	High School Graduate	University Graduate	Row Sum
<b>Atatürk Park</b>					
N	3.0	20.0	30.0	2.0	55
n (%)	42.8	35.1	44.8	10.5	
<b>Ismet İnönü Park</b>					
N	2.0	20.0	8.0	12.0	42
n (%)	28.6	<-TD> 35.1	11.9	63.2	
<b>Barýp Manço Park</b>					
N	2.0	17.0	29.0	5.0	53
n (%)	28.6	29.8	43.3	26.3	
Column sum	7.0	57.0	67.0	19.0	150
Column sum (%)	4.7	38.0	44.7	12.6	100

$X^2 - \text{Test ( park x education level) , } p= 0.00092 < 0.01$

**Table 6: Park Use and Income Groups**

Park	\$65-175	\$176-350	\$351-590	\$591-825	\$826 and above	Row sum
<b>Atatürk Park</b>						
N	18	17	7	15	1	58
n (%)	36	27.8	38.9	79.0	50	
<b>Ismet İnönü Park</b>						
N	14	17	8	2	0	41
n (%)	28	27.8	4.4	10.5	0	
<b>Barýp Manço Park</b>						
N	18	27	3	2	1	51
n (%)	36	44.2	16.7	10.5	50	
Column sum	50	61	18	19	2	150
Column sum (%)	33.3	40.7	12	12.7	1.3	100

$X^2 - \text{Test ( park x income groups) , } p= 0.00665 < 0.01$

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The education level of the users of each park seems to be in line with the inhabitants of the district where the parks are located. This leads us to the result that the users of each park are mostly inhabitants of this specific district. Not only the educational level but also the socio-economic level of the users is parallel with the user's preference of the parks. The socio-economic structure of the settlement areas lies right at the heart of this preference pattern. Due to the above-mentioned preference criteria of these parks, the income level of the users is also crucial. Atatürk Park has the highest user satisfaction level due to its well-maintained and structured natural landscape. It was pointed out that there are 2.40m<sup>2</sup> sport areas, 1.34m<sup>2</sup> park areas, 0.50m<sup>2</sup> playgrounds and 1.20m<sup>2</sup> parking areas, per person in Erzincan actively. It was determined by the results of the questionnaire that parks are insufficient and 89 % of the public want these areas to be increased in number. 59 % of the public have pointed the lack of plants of parks out. After the earthquake that have caused loss of many lives when!we take into consideration that 34 % of people who visit parks in this reconstructed city are the students who seem to enjoy sports and games and tend to do so in groups. The recreational behaviours in parks are both related to the condition and level of service provision and individual choice. According to the result the users have not an average satisfaction of the parks in general. The satisfaction for three parks are the lowest because of its low service quality. For all of the users, the main factor for recreation is the natural landscape of each specific park.

### Conclusion

In all cities of Turkey especially in the big cities parks are not sufficient with proportion to the population. During the time, park areas which aren't paralleled the development of urban population are under the established standards per person. The cause of this problem is that local authorities do not try to build new parks besides the growing population. With the questionnaire the recreational tendencies of the public were evaluated and presented to the local authorities as it may enlighten their works.

In Erzincan city which is away from the sea and where the continental climate dominates people have a great longing for the sea. 85 % of the people have answered the questionnaire that they want the number of the waters in parks to be increased. For this reasons, it is pointed out that water should be given priority in

designing the parks. The importance of the water usage in the cities is once more proved since 78 % of public prefer water sides to wander and relax. Projects for the parks in Erzincan city centre should be made and applications should be carried out within this frame. However existing parks should be revised to have a better looking. Especially the equipments in the playgrounds, sportsgrounds and parks, which have lost their functions should be renewed. Hence small parks, playgrounds and sportsgrounds, which seem to lose their features can be included in the system of open-green spaces of the city. Attention must be paid while choosing the types of plants instead of generally used plants, types of plants planted the parks and city's ecological conditions should be chosen. İsmet İnönü and Barış Manço Park might need a new master plan, which would incorporate and reinterpret the historical character of the park. A new structure plan with a comprehensive perspective needs to be elaborated by the authority of open areas and green spaces. The new structure must aim to create new open-green spaces for whole of Erzincan. Three parks must adopt a scientific approach for the interpretation of recreational behaviour of urban population when providing urban parks for their use. For Erzincan Public to be established very importance too large open-green area because of earthquake.

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