

## KENT PARKLARININ EVRENSEL KALİTE KRİTERLERİNE GÖRE DEĞERLENDİRİLMESİ; DİYARBAKIR ÖRNEĞİ<sup>1</sup>

### ASSESSMENT OF CITY PARKS IN ACCORDANCE WITH UNIVERSAL QUALITY CRITERIA; A CASE OF DIYARBAKIR

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**Öz:** Kentsel yaşam kalitesinin artırılabilmesi için kentsel çevreler içerisinde insanlara kullanabilecekleri çeşitli aktif ve pasif rekreasyon olanaklarının sunulması önemlidir. Bu olanaklarını içinde barındıran kent parkları, kentsel yaşam kalitesinin artırılması çabalarına katkıda bulunmaktadır. Kaliteli kent parkı çevreleri, planlamada, tasarımda, uygulamada kalitenin sağlanması ile gerçekleştirilebilir. Çalışmada amaç; kent parklarında kullanıcılar için kaliteli ve ergonomik bir yaşam çevresi oluşturmada etkin olan kalite kriterlerinin belirlenerek, seçilen alanlarda bu kriterlere uygun öneriler sunmaktır. Bu temel yaklaşım kapsamında, Diyarbakır'da bulunan 2 farklı kent parkı değerlendirilmiştir. Değerlendirme kapsamında; ele alınan parkların mevcut durumları, kullanıcı nitelikleri ile kullanıcı memnuniyetleri belirlenmiştir. Belirlemeler evrensel kalite kriterleri ile karşılaştırılarak, kalite artırımına yönelik öneriler sunulmuştur.

**Anahtar Kelimeler:** Kent Parkları, Kullanıcı Memnuniyeti, Tasarım Kriterleri

**Abstract:** It is important to provide people various active and passive recreation opportunities which can be used in urban environments in order to improve urban life quality. City parks which involve these opportunities, make contributions to efforts for increasing life quality in cities. Qualified city park environments are achieved by providing quality in planning, designing, practising. The aim of the study was to determine quality criteria effective in creating qualified and ergonomic life environments in city parks for users and provide suggestions for the chosen fields in harmonisation with these criteria. Within the scope of this basic approach, 2 different city parks located in Diyarbakır were evaluated. Under this evaluation; the current situations of the relevant parks, their users' characteristics and their users' satisfaction were determined. By comparing the determinations with universal quality criteria, suggestions were made for improving quality.

**Key Words:** City Parks, User Satisfaction, Design Criteria

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## INTRODUCTION

Nowadays the understanding of physically, socially and visually developed, high-quality outdoor arrangement has started to take place in time. The most important one of these types of locations is city parks with many recreation opportunities and facilities (Polat, 2001: 68)

City parks are urban green areas which give services with its psycho-social functions for people to escape from the stress of city life and entertain, represent comfort and peace. These fields are highly substantial fields which reduce environmental noise, clean air, present microclimate effects. (Lam, Ng, Hui, Chan, 2005; Wong, Domroes, 2005: 55-73).

Even though the benefits of city parks have been known well, several problems have been faced in planning and maintaining these important fields. This issue underlies budget limitations in municipalities concerning these fields. This situation is a fundamental reason of having designs which do not appeal to eyes and follow each other. Also, not providing maintenance, repair and cleanup works of current parks in regular ways because of budget deficit causes visual pollution in these parks.

In designing parks; not considering the ecological quality parameters has been increasingly reduced the benefits of such valuable fields to city environments. A liveable city en-

vironment may be created with improvements in these fields.

## CLASSIFICATION of CITY PARKS and DESCRIPTION of GREEN AREA

City parks are green areas which have functions and equipments at different scales and towards several aims in an urban green area system and give service to city as a whole (Kart, 2002: 1-8).

The concept of city park means open-green areas which each age group is benefited from, involving recreation opportunities, having influence areas of 400 decare or larger magnitude in general, located on a walking distance for 30-60 minutes (Yorulmaz, 2006; 8). Within complex urban organization, they are public service areas which are responsible for very substantial and various functions in re-establishing broken relationship between nature and human, depending on urbanization (Kızılaslan, 2007: 13-15).

According to Dil (2004), city parks must be between 40-400 hectares, including 1 decare for every 100 persons, pursuant to the magnitude of population. The influence area of city parks is between 3.200-4.000 m. Being close to or far away from urban settlement areas for these parks is not an important design measurement. These fields must be 2-4 km at least, at a walking distance for 30-60 minutes, directly and easily available with public trans-



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portation system and at a distance of 5-20 km (Dil, 2004: 20).

In accordance with the requirements of the current settlement areas, city parks are grouped in the following ones. These are; botanical gardens, zoos, amusement parks, art parks, historical parks and cultural parks.

Botanical gardens are areas where plants available and non-available in some regions are grown under specific conditions and presented to people. Here, plants are grown in groups, and with signboards introducing each one, it is explained what features, life, cultivation and care conditions of plants are, in which regions they grow up in normal conditions.

The purpose of zoos is to give information by presenting the kinds of animals non-available in that region.

Amusement parks pay children's attention and also allow elders spend their free time enjoyably.

Art parks are places in which works are shown in open fields and within the nature

Historical parks can be industrial-archeological fields from the Industrial Revolution and environments outstanding persons lived in early days, which include introductive and instructive purposes.

The word “Kültürpark”, may be called Cultural Parks in English language, is a terminological usage peculiar to Turkey. Cultural parks having great fields involve various activities such as entertainment, exhibition, art, training, etc. in their body as well as the nature (Özdemir, 2009: 144-153)

### *Quality Criteria of City Parks*

Urban green areas can be also described as common usage fields organized by the city administration units, with a view for people to rest, go around, perform various recreational activities and provide approaches to the nature in cities.

Under the construction law, green areas are a total of playgrounds, child gardens, recreation, excursion, picnic, amusement and coast areas allocated for social benefits. Fairgrounds, botanical gardens and zoos on a metropolitan scale, and regional parks are included in these areas (Dil, 2004: 20). Quality criteria in city parks are divided into groups as followings (Gehl, j., and Svarre, B., 2000: 27-30).

- **activity and usage** (sub-criteria: variety),
- **availability** (sub-criteria: legibility),
- **comfort and image** (sub-criteria: security and maintenance)
- **socialization** (sub-criteria: feeling of tenure).



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## Activity and Usage

Activities are fundamental building stones of quality criteria. These are reasons which attract users into parks. The sub-criteria of activity and usage criteria is “*variety*”. It is important to have varieties in physical appearances, activities and users within any park. Different users comment on locations in several ways, attribute different meanings to locations due to different activities, forms and persons in their current environment (Bentley vd., 1993: 27). In the evaluation process of “activities and usage fields” associated with any park, the following parameters must be dealt in. These ones are:

- the opportunities to users for participating in different activities in,
- the existence of groups consisting of diverse users (partners, families, friends, etc.) in,
- the remarkability for visiting any park on different time of days and years,
- the physical design and arrangement of any park, park usage during the night,
- the management dimension of any park (Özkır, 2007: 16-20).

## Availability

About the availability of any park, convenient and easy access to the park is required at first. Access to the park can be achieved in pedestrian and various transportation vehicles such as private vehicles, bicycles or public transportation vehicles.

The second significant issue of availability is to have correct links of ways in the park and around the park. Easiness of transportation is related with linking models of ways within the park (Baljon, 1992: 65). Links around and within the park play important roles in creating a functional unity between inside and outside the park. Direct guiding increases availability and diversifies usage opportunities (Lynch, 1984: 134). In the evaluation process of “availability” criteria associated with any park, the following parameters must be taken into consideration (Gehl, j., and Svarre, B., 2000: 27-30):

- the clarity of the park plan to ones using the park for the first time,
- the visibility of the park field from outside,
- the clarity of entry and exit points at the park,
- the guideness of ways and footpaths in many ways,



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- the existence and feature of the sign system within the park,
- the separation of pedestrian pathways and cycling ways from each other for security and physical control,
- the availability for pedestrians,
- the usage of transportation choices such as bus, train, car, bicycle in order to access to the park,
- the existence of enough parking areas for users coming to the park with their own cars (Gehl, j., and Svarre, B., 2000: 27-30).

Within the availability criteria, the “*legibility*” sub-criterion becomes an issue. Legibility means how easily the plan of any current place is perceived. Legibility is affected by the physical plan of the park and the designs to be involved in the park (Bentley vd., 1993: 27). A certain depth, a well-defined place, uniform textures and distinctive items well-presented along the location will increase legibility. Legibility is very significant for an effective pedestrian circulation (Gehl, j., and Svarre, B., 2000: 27-30).

### ***Comfort and Image***

Comfort and image represent individual experiences when people use one location. Is-

sues such as security and maintenance are effective for shaping park comfort and image.

In the evaluation of “comfort and image” criteria regarding any park, the parameters to be analyzed are as follows (Gehl, j., and Svarre, B., 2000: 27-30):

- the first impression of the park on any person,
- the existence of opportunities for taking photos,
- the existence of appropriate materials in structural designs within the park field,
- the compliance of activity field designs with international standards,
- the existence of enough numbers of places to sit,
- the position of sitting places,
- the water item in the park field and its different usages,
- the existence of appropriate designs pertinent to various user groups such as children, old and disabled people at the park,
- the existence of protection opportunities from sun, shade and wind for users,
- the presence of relevant authorised ones about management or fields at the park,





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Within the comfort and image criteria, sub-criteria “*security*” and “*maintenance*” are matters of subject.

According to the results of research about the Central Park by Kornblum; ones from New York mostly stated that they did not use the Central Park because of security and pollution (Prospect Park Alliance and Central Park Conservancy, 1996: 17).

The second issue regarding security is control. Considering to have control of the location, being able to see inside it, going away easily, receiving help in case of danger on time will make that location more securable (Altman and Zube, 1989: 164-165). If the location is controlled by any group, even the controlling group does not participate in any negative activity, people will not visit there.

The other issue regarding security is activity. If there is not anything to do on that location, people will not have any reasons to go there, the location will not be safe as well.

- existence of human groups within the park,
- the conversation of people with each other within the park,
- the existence of persons smiling,
- the existence of persons having eye contacts with each other,

- the visibility of activity fields around the park,
- the existence of seats in each activity fields and at the park entrances,
- the existence of assembly points within the park,

Within the socialization criterion, the sub-criterion “*feeling of tenure*” are mentioned. Parks represent social and cultural activities which make communities depend on their current environments with their stronger bonds. Locations in which people gather routinely, pass from one place to another one regularly or meet with each other by chance, keep an important place in people’s daily lives (Thwaites, 2001: 248). City parks may help to reduce social isolation and increase social dependence by making contributions to the feeling of tenure. When the feeling of tenure enhances, responsibilities and concerns regarding the quality of environment will increase (Altman and Zube, 1989: 164-165).

## MATERIAL

Under the study, Park Orman and Sümer Park located in Diyarbakır were chosen as research areas. These fields are two samples available in new residential areas of the city, having excessive usage intensity and many criteria for being city parks.



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Park Orman was opened to service in Diyarbakır in 2007. As of its current residential area, it is a field presented to the usage of the population with 200 thousand ones approximately.

Sümer Park is a field which involves education, health, rehabilitation services, service centers performing sport and cultural activities and gives service to the population with 206 thousand ones approximately.

The study tries to respond to the research questions regarding testing criteria for these fields to be city parks and analyze users' satisfaction.

Criteria were dealt in universal dimensions. Based on these dimensions, the determination of users' satisfaction was measured with the assumptions that satisfaction perception could change in the users in accordance with availability, comfort, variety of social activity and image perceptions. With this aim, a questionnaire of 41 questions was applied among the users. The questionnaire was carried out at 09.00-12.00, 14.00-16.00 and 19.00-21.00 between October 5-18, 2015. The target for using different time intervals was to determine different user groups and their satisfaction. In the questionnaire, the socio-demographical characteristics of the population using park fields were researched at first and

then a general satisfaction evaluation for the assumptions was done.

### *Parks Involved in Work Fields*

Sümer Park, the greatest one of green areas in the city, was designed as a park field of 80.000 m<sup>2</sup> in total (Table 1). At this park, there are four different user groups including “Females, Children, Young People and Disabled Ones”. Improving life quality, solving problems and participating in social life are intended.

Within the park, there are cafes, training, health-rehabilitation services, service centers undertaking sport and cultural activities as well as multi-purpose halls, cinemas, courses and workshops for common usage (URL 1). Components and activities of Sümerpark social support center are as follows:

- Female Support Center
- Child Support Center
- Health Center
- Youth and Sport Center
- City Volunteers
- Professional Course Center
- Disabled Support Center (Diyarbakır Metropolitan Municipality).

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Table 1. Views from Sümer Park

Name of Park	Thematic Class of Park	Position of Sümer Park From Satellite
Sümerpark	Cultural Park	
Entrance of Park	Female Support Center	Sun House
		
Diyarbakır Metropolitan Municipality Press Center	City Library	Art Center
		
		Amphi-Theatre
		

Park Orman was designed as a green area of 72 000 m<sup>2</sup> (Table 2). At this park; there is a running and walking track with the length of 900 meter, sitting units, child playgrounds, a group of sport equipments, 1 tennis court, 1 basketball court where volleyball is played, 1 triple-basketball hoop, next to the Cegerxwin Culture Center, a grass field of 53 thousand meter square (URL 2).

Table 2. Views from Park Orman

Name Of Park	Thematic Class of Park	Position Of Park Orman From Satellite
Park Orman	Amusement Park	
Entrance of Park	Walking Tracks	Cafeteria
		
View from Park	Wiew from Park During Morning Sport	Sitting Places
		

## METHOD

Within the scope of the research, two separate city parks located in the province Diyarbakır, Sümer Park and Park Orman were evaluated based on universal quality criteria and sub-criteria.

Among the ones using both parks, the users' questionnaires are regarded as significant data resources to bridge over planning, designing and managing processes of the city parks since there are serious differences in terms of socio-economic structures (Oğuz, 2000).





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With a view to evaluating quality criteria in the chosen parks and analyzing the users' satisfaction, the questionnaire application was performed.

The questionnaire works in both parks were carried out by the users randomly chosen on different days and at several hours. 200 persons were applied to the questionnaire, including 100 persons in each park field. The results were conveyed in meaningful values with the SPSS 21.0 program, the quality criteria of parks were questioned.

By using the SPSS 21.0 package program, a statistical analysis program, the basic statistical proceedings related with data and analyses giving meaning to the relations between data were done.

The analysis work was conducted in two stages: In analysis 1, the perceptions concerning universal quality criteria were regarded as independent variables, general satisfaction as dependent variables as well, it was studied whether there were meaningful relations between the independent and dependent variables. In analysis 2, the socio-demographical characteristics such as age, gender, profession, etc. of the users in the park fields as independent variables and perceptions and general satisfaction in the park fields as de-

pendent variables were represented, it was also studied whether there were meaningful relations between the independent and dependent variables.

To correlate information from the questionnaires with universal standards, the relations between the variables at lower measurement levels were analyzed, the significance work was done with the chi square analysis method. With the chi square analysis method, observed frequency values and theoretically expected frequency values were compared. The rate regarding expected values was estimated. This value means the presence of a significant relation when it is smaller or bigger than the critical table value.

As a result of the analyses, “p” value was regarded to be significant when it was lower than 0.05.

### *Finding*

Among the ones using both parks, since there are critical differences in terms of socio-economic structures, the socio-demographical characteristics of users involved in the sample were firstly determined at this stage. The following results were obtained from the socio-demographical characteristics of users participated in the questionnaire (Table 3).



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**Table 3. Socio-Demographical Analysis**

	Sümer Park				Park Orman			
Gender	Male %68		Female %32		Male %72		Female %28	
Marital Status	Married %56		Single %44		Married %35		Single %65	
Age	Age Range, 17-25 %55		Over the Age of 26-55 %45		Age Range, 17-25 %52.5		Over the Age of 26-55 %47.5	
Education Background	Primary & Secondary School %36	High School %60	Higher Education %4		Primary & Secondary School %14	High School %64	Higher Education %22	
Income	Lower Income %72	Middle Income %25	Upper Income %3		Lower Income %36.5	Middle Income %48	Upper Income %15.5	
Profession	Student %20.5	Housewife %10.5	Worker %42	Retired Person %27	Student %15.5	Housewife %20	Worker %43	Retired Person %21.5

At the second stage, the questions about the relevant quality criteria were evaluated. From the users participating in the questionnaire,

the results related with the four main quality criteria and sub-criteria were as follows

**Table 4. Evaluation Analysis of Activity and Usage**

	Sümer Park									Park Orman														
Activity Capability	D. S.			S.			H. S.			D.S.			S.			H. S.								
Activity Variety	%5			%85			%10			%52			%46			%2								
Intended Purposes of Parks	D. S.			S.			H.S.			D.S.			S.			H. S.								
Capability Of Physical Conditions	%7.5			%86.5			%6			%58			%40			%2								
Who They Come to Park with	Resting			Doing Sport			Participating in Activity			Other			Resting			Doing Sport			Participating in Activity			Other		
	%30			%27.5			%37.5			%5			%35			%52			%10			%3		
	Child Playgrounds			Toilet			Equipments			Child Playgrounds			Toilet			Equipments								
Frequency of Arrival in Park	D.S.	S.	H.S.	D.S.	S.	H.S.	D.S.	S.	H.S.	D.S.	S.	H.S.	D.S.	S.	H.S.	D.S.	S.	H.S.						
	%30	%56.5	%13.5	%48	%46	%6	%58	%35	%7	%17	%60	%23	%52	%36	%2	%46	%32.5	%21.5						
Time Interval of Arrival in Park	Alone			With Family			With Friends			Alone			With Family			With Friends								
	%15			%37.5			%47.5			%12.5			%42.5			%45								
Day of Arrival in Park	2-3 times in month at least			1 time in week at least			Every Day			2-3 times in month at least			1 time in week at least			Every Day								
	%27			%52			%29			%18			%55			%27								
Time of Presence in Park	Morning			Afternoon			Evening			Morning			Afternoon			Evening								
	%14			%81.5			%4.5			%55			%28			%17								
Time of Presence in Park	Weekday			Weekend			Both Weekday and Weekend			Weekday			Weekend			Both Weekday and Weekend								
	%28.5			%20			%51.5			%20			%62			%18								
Time of Presence in Park	1-2 hours			2-4 hours			5 hours and over			1-2 hours			2-4 hours			5 hours and over								
	%71			%26			%3			%64			%34			%2								
* D. S. : Dissatisfactory ** S. : Satisfactory ** H. S. : Highly Satisfactory																								



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- There was a meaningful relation between age, activity and usage and the sub-criteria of activity variety about Park Orman (p=0.000). In particular, the users aged 17-25 considered activity variety as dissatisfactory.

Table 5. Evaluation Analysis of Availability Issue

	Sümer Park			Park Orman		
Capability of Ways	D.S.	S.	H. S.	D.S.	S.	H. S.
	%5	%79.5	%15.5	%2	%84	%14
Legibility of Ways	D.S.	S.	H. S.	D.S.	S.	H. S.
	%0	%96	%4	%0	%100	%0
Maps and Guiding Signs	D.S.	S.	H. S.	D.S.	S.	H. S.
	%37	%61	%2	%47	%49	%4
How Users Come to Park	As Pedestrians	With Public Transportation Vehicles	With Private Cars	As Pedestrians	With Public Transportation Vehicles	With Private Cars
	%86	%10	%4	%80	%5	%15
Capability of Parking Areas	D.S.	S.	H. S.	D.S.	S.	H. S.
	%76.5	%21	%2.5	%80	%18	%2
Access Time to Park	1 hour	30 min	Between 5-15 min	1 hour	30 min	Between 5-15 min
	%4.5	%30	%65.5	%3.5	%12	%84.5
Location of Park	Yenişehir District	Others		Peyas District	Huzurevleri District	Others
	%65	%35		%46.5	%12.5	%41
* D. S. : Dissatisfactory ** S. : Satisfactory ** H. S. : Highly Satisfactory						

- A meaningful relation was found between the education back ground and the availability values about Park Orman (p=0.027). The ones graduated from high schools and upper schools, using this park had better perceptions about the availability of park, better reading skills.
- Between the income level and the availability values about Sümer Park, there was a meaningful relation (p=0.023). The users involved in the lower income group had more dissatisfactory results from their perceptions and reading skills on these criteria.



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Table 6. Comfort and Image Evaluation

	Sümer Park				Park Orman			
Comfort in Park	H. B.	B.	G.	H. G.	H. B.	B.	G.	H. G.
	%20	%52.5	%20	%7.5	%12	%58	%25	%5
Image of Park	H. B.	B.	G.	H. G.	H. B.	B.	G.	H. G.
	%10	%78	%11	%1	%4	%20	%59	%17
Security of Park	H. U.	U.	S.	H. S.	H. U.	U.	S.	H. S.
	%14	%57.5	%12	%6.5	%2	%20	%62	%16
Time Interval When Users Feel Unsafe	Morning		Noon		Morning		Noon	
	%14		%4		%21		%6	
Reason of Users for Feeling Unsafe	Vagrants		Alcohol and Drug		Vagrants		Alcohol and Drug	
	%32		%45		%38.5		%28	
Security Demand for Access to Help	H. D.		D.		H. D.		D.	
	%13		%67		%7		%55	
Security Staff Demand for Help	Yes		No		Yes		No	
	%73.5		%26.5		%69.5		%30.5	
Capability of Park Lightening	H. D.	D.	S.	H. S.	H. D.	D.	S.	H. S.
	%12	%50	%32	%6	%2	%48	%34	%6
Maintenance of Parks	H. D.	D.	S.	H. S.	H. D.	D.	S.	H. S.
	%17	%78.5	%4.5	%0	%28	%64	%6	%2
Cleanliness of Parks	H. D.	D.	S.	H. S.	H. D.	D.	S.	H. S.
	%12	%86	%2	%0	%16	%78	%3	%1
Planting in Parks	H. D.	D.	S.	H. S.	H. D.	D.	S.	H. S.
	%10	%12.5	%56.5	%21	%4	%9	%62	%25
*H. B.: Highly Bad** H. U.:Highly Unsafe *** H. D.: Highly Difficult**** H. D.: Highly Dissatisfactory B : Bad U. : Unsafe D. : Difficult D. : Dissatisfactory G: Good S. : Safe E. : Easy S. : Satisfactory H. G. : Highly Good H. S. : Highly Safe H. E. : Highly Easy H. S. : Highly Satisfactory								

- A significant relation was found between the gender and security evaluations about Park Orman ( $p=0.01$ ). In particular, it was determined that the females using the park considered it dissatisfactory because of the reasons such as alcohol and drug users,

vagrants, etc. after the certain hours of the day. Also, there was a meaningful relation between the age and security evaluations ( $p=0.015$ ). The users aged 26-55 felt more unsafe. There was a significant relation between professions and security ( $p=0.005$ ).

The relevant housewives and students regarded security as dissatisfactory.

- A significant relation was also found between education background and image

about Sümer Park ( $p=0.035$ ). The relevant educated persons regarded the image of the park as more dissatisfactory, which results from that these relevant users' expectations were higher.

Table 7. Evaluations About Socialization

	Sümer Park				Park Orman			
Regarding Parks as Meeting Points	H. B.	B.	G.	H. G.	H. B.	B.	G.	H. G.
	%0	%2.5	%89.5	%8	%0	%8	%72.5	%19.5
Feeling of Tenure in Park	H. B.	B.	G.	H. G.	H. B.	B.	G.	H. G.
	%1.5	%20	%53.5	%25	%0	%4	%70	%26
Communication Demands of Users	H. L.	L.	M.	H. M.	H. L.	L.	M.	H. M.
	%6	%6	%76	%12	%8	%2	%82.5	%7.5
Communication Degrees of Users	H. D.	D.	E.	H. E.	H. D.	D.	E.	H. E.
	%13	%4.5	%72.5	%10	%3	%8	%79	%10
<p>*H. B.: Highly Bad      ** H. L.: Highly Little      *** H. D.: Highly Difficult  B : Bad      L. : Little      D. : Difficult  G: Good      M. : More      E. : Easy  H. G. : Highly Good      H. M. : Highly More      H. E. : Highly Easy</p>								

There was a significant relation between marital status and feeling of tenure ( $p=0.02$ ) about Sümer Park, between marital status and socialization ( $p=0.002$ ), feeling of tenure evaluations ( $p=0.01$ ) about Park Orman. Generally, as the single ones were better about socialization, the married ones had more feelings of tenure concerning these parks.

- And there were significant relations between age and feeling of tenure ( $p=0.023$ ), education background and feeling of tenure ( $p=0.000$ ), gender and feeling of ten-

ure ( $p=0.035$ ) about Sümer Park. Moreover, the female users, mostly aged 26-55, having higher education background felt that they belonged to the park, which results from their maternal structure.

- There was a significant relation between professions and feeling of tenure evaluations ( $p=0.041$ ) about Park Orman. Since both retired females and male ones spent their time at this park, their feelings of tenure were considered to be stronger.





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**Table 8. Evaluation of General Satisfaction**

	Sümer Park				Park Orman			
General Satisfaction for Park	Bad	Middle	Good		Bad	Middle	Good	
	%5	%20	%75		%2	%28	%70	
What They Like in Parks at most	Greenness	Coolness	Activities		Greenness	Coolness	Activities	
	%40	%30	%30		%62	%32	%6	
What They Like in Parks at least	Vagrants	Alcohol and Drug	Maintenance-Free	Cleanliness	Vagrants	Alcohol and Drug	Maintenance-Free	Cleanliness
	%34	%23	%25	%18	%27	%18	%34.5	%20.5
Descriptions of Park	Greenness	Peace	Coolness	Socialization	Greenness	Peace	Coolness	Socialization
	%38.5	%21.5	%29	%11	%30	%20	%45	%5

At the third stage, by using the questionnaires from Sümer Park and Park Orman chosen as sample fields, in order to check assumptions we determined before and see whether there were certain relations between activity capability, availability, legibility, comfort, image, security, maintenance, socialization and feeling of tenure concepts based on general satisfaction, the chi-square significance test was used. Considering the general satisfaction and the quality criteria of the users participated in the questionnaire, the results

from the chi-square analyses were given at Table 10. In accordance with the findings of the chi-square test used for checking our assumptions; we can think that comfort, image and socialization criteria are effective, important criteria for users to regard parks as qualified. Variety, security and maintenance from the sub-criteria were rejected at both parks. According to this result, we can say that variety, security and maintenance criteria do not affect their general satisfaction, their perceptions about parks as qualified ones.



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**Table 9. Chi-Square Analysis Results of Sümer Parkı and Park Orman**

	Sümer Park				Park Orman			
	Pearson Value	Chi-Square	Significance	Double-Sided	Pearson Value	Chi-Square	Significance	Double-Sided
<b>Activity and Usage</b>	23.570		0.000*		4.098		0.052	
➤ Variety	16.728		0.040*		2.754		0.185	
<b>Availability</b>	24.150		0.024*		30.120		0.000*	
➤ Legibility	17.210		0.021*		20.210		0.012*	
<b>Comfort</b>	12.254		0.055		9.254		0.067	
<b>Image</b>	10.137		0.060		20.137		0.000*	
➤ Security	0.295		0.776		1.284		0.175	
➤ Maintenance	3.276		0.084		4.276		0.076	
<b>Socialization</b>	25.386		0.000*		20.425		0.010*	
➤ Feeling of Tenure	17.542		0.025*		25.542		0.000*	

\* \*At the significance level of 0.05, differences were significant.

**Table 10. Analysis Results Concerning Quality Criteria**

	Sümer Park	Park Orman
<b>Hypothesis 1-Activity and Usage</b>	Accepted	Rejected
➤ Variety	Accepted	Rejected
<b>Hypothesis 2-Availability</b>	Accepted	Accepted
➤ Legibility	Accepted	Accepted
<b>Hypothesis 3- Comfort</b>	Rejected	Rejected
<b>Hypothesis 3-Image</b>	Rejected	Accepted
➤ Security	Rejected	Rejected
➤ Maintenance	Rejected	Rejected
<b>Hypothesis -4 Socialization</b>	Accepted	Accepted
➤ Feeling of Tenure	Accepted	Accepted

## RESULTS

The aim of this study was to determine quality criteria effective in creating qualified life environments for users in city parks. With this aim, four main quality criteria and sub-criteria related with these main criteria were determined. These were activity and usage (sub-

criteria: variety), availability (sub-criteria: legibility), comfort and image (sub-criteria: security and maintenance) and socialization (sub-criteria: feeling of tenure). When the research findings were generally evaluated, it was concluded that socio-demographical differentiations included in both parks did not affect the users' general satisfaction perceptions.



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For example; what they liked at most, what they liked at least and how they described the park, but affected their perceptions about quality criteria chosen for city parks.

## SUGGESTIONS

In this study, after the evaluation of the results, suggestions were offered for designing new possible city parks. It is required to;

- adjust physical design and arrangement of any park in order to use during the night,
- provide different activity opportunities to the diversified user groups,
- increase attraction to the parks for the visitors at different times of days and years,
- have a clear introduction of the park plan for the ones using the park for the first time and visibility from outside, increase how to perceive entry and exit points easily,
- have signs and signboards within the park which can guide to ways and pathways, and separate pedestrian and cycling ways from each other for security and physical control,
- provide availability for the park as pedestrians or transportation opportunities with vehicles such as bus, train, etc. and enough parking areas for the users coming to the park with their own vehicles,

- create places for photo-taking opportunities in order to have positive impressions of the park on the people,
- have reinforcement elements made of appropriate materials, correct positions of sitting places, at international standards, for each user and in enough numbers, within the park,
- provide protection opportunities from sun, shade and wind in both sitting fields and concourses within the park,
- increase numbers of people authorised for management, security or departments within the park,
- repair and maintain the equipments available in the park regularly, remove the equipments which cannot be used,
- prevent rubbish from piling up by taking cleanliness of the park into consideration
- keep landscape arrangement in correct and appropriate ways regularly,
- following the requirements included in other criteria, enhance socialization by providing meeting points in which people meet their friends or families, visit their neighbours and greet each other or even have easy relationships with foreign people.

In conclusion, within the scope of designing city parks as relaxation fields of cities, users'



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characteristics, variety of activities, availability and security showed that the park fields were locations designed as suitable for their purposes.

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