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The Importance of Sociocultural Habits in Park Design, Leisure Behaviour and User Satisfaction. A Comparative Study on Two Parks in İzmir, Turkey

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ABSTRACT

The purpose of this study is to understand whether the types of park usage and satisfaction levels of park users vary depending on park designs in relation to sociocultural habits and leisure behaviour. We examined two parks in Izmir, Turkey's third largest metropolis, from a different cultural perspective. One of the parks, Buyukpark was designed in a modern style within the city centre whereas the other Hasanaga Park was converted from a traditional garden located on the periphery. Both parks offer different capabilities in terms of location, size, activities, landscapes and maintenance. We anticipated differences between the selected parks in terms of their use, satisfaction and requests. Responses were comparatively examined by a structured questionnaire conducted on total 442 people in both parks in April and May 2010. The manicured and modernly designed Buyukpark was generally found more satisfactory. However, Hasanaga Park was found more satisfactory in terms of picnicking and sportive facilities fact that proves the collectivist cultural leisure behaviour in Turkey. The findings of the study put forward the need to introduce designs that stem from the social needs which would also improve the physical conditions of urban parks. At the end of the study the hypothesis that sociocultural habits are important in determining park design using forms and user satisfaction were confirmed.

1. INTRODUCTION

Public open spaces are areas meeting multipurpose needs of individuals and the public and safeguarding basic human rights. On the other hand, urban green spaces are the areas that determine the quality of the physical and social environment, which allow entire public to use these kinds of spaces for educational, cultural and recreational purposes. Among urban green spaces, the areas where the public takes part in the public life at the highest level are the urban parks by all means. With reference to urban parks, Madanipour (1992) has defined parks as spaces where people from differing socio-economic classes come together to commune with nature [1], whereas Kostof (1992) described parks as the means that smoothed the differences between the classes of a society being an informal educational environment, starting with the Renaissance [2]. In developing countries, rapid growth and spatial transformations generate adverse effects on public open spaces just as on many other functions of public spaces. Parks, which are one of the most important means for relaxation for the public, fail to fulfil their real functions and turn into leftover spaces. Attendance of urban people to these open spaces would only be ensured through determining of the priorities depending on the sociocultural habits that influence types of use, paying attention to types of occupancy, determining the priorities for the coefficients thereof and, although indirectly, increasing user satisfaction. In this study, we compared two significant urban parks of the multi-cultural and multi-layered province of İzmir, designed with different physical features depending on traditional and modern design approaches, in terms of

using types and user satisfaction. The main purpose of this study is to understand whether the form of use and adequacy evaluations vary depending on the socio-cultural habits and leisure behaviour.

2. THEORY AND METHODOLOGY

2.1. Factors specifying use and user satisfaction for parks

Assuming that each designed venue bears certain criteria of satisfaction on the user, it would be appropriate to indicate that urban parks which are considered the primary elements of public open spaces are communal areas where occupant satisfaction is much heeded. The primary factors determining the types of use of parks and satisfaction levels of users may display a variety of leisure behaviour habits differing on the basis of benefits obtained from parks, their physical properties and cultural differences. Scientists have often tried to study how to increase levels of satisfaction considering the types of occupancy of parks, based on the benefits obtained from them. In this sense, we mention some of the issues they approached: benefits of parks relevant to physical health (Godbey et al., 2005; Kaplan, 1995), benefits relevant to ecological environment (Purcell & Lamb 1998), benefits relevant to socialization (Tester & Baker 2009) and their psychological benefits (Thompson, 2002; Chiesura, 2004; Ozguner & Kendle, 2006; Knez et al., 2008, Grahn & Stigsdotter, 2010). It is mentioned that, as urban parks are places where metaphysical dimension of nature is observed, by experiencing the park would decrease the level of stress and enable people to obtain much psychological benefit through passive involvement with nature.

Another important factor in terms of types of use of parks and satisfaction of their users is the physical properties which may differ depending upon criteria such as: design, size and natural aspects. Studying this subject in the past literature, we see that Francis (2003) and Herzele et al. (2003) have expressed that the level of satisfaction with reference to the design of a park is dependent upon the diversity of activities offered, comfort, appropriateness for socialization and maintenance [12], [13]. Likewise in their studies, Coeterier (1996) for Dutch landscapes and Grahn (1991) for Swedish parks, have presented eight park characteristics that affect satisfaction in common, which are: unity, use, naturalness, spatiality, development, sport oriented facilities, rich variety of species and play inspiring [14], [15]. Several studies have shown that parks of different sizes are utilized for different purposes. Giles-Corti et al. (2005) and Kaczynski et al. (2008) have shown that utilization demands for green spaces that are of different characteristics may differ on account of their size and the facilities they encompass [16], [17]. According to Herzele & Wiedemann (2003) while an urban centre is occupied for recreational purposes during the weekends, the smaller scale parks of the city are influential in strengthening the local ties in the daily life [13]. On the other hand, by grouping parks into two categories, as active and passive recreation areas in terms of intended occupancy, Thompson (2002) expresses that the level of satisfaction increases through active and passive involvement of people [7]. Taking cognizance of the passive experiences in parks, Thompson (2002) considers therefore the park as a visual resource in this sense [7]. Similarly, Kaplan (1995) and Francis (2003) indicate that passive activities that allow for informal socialization in public spaces provide possibilities for sedentary behaviour, as much as physical activities [4], [12]. It is important that parks are designed to be suitable for passive recreational use where users would watch nature and get fresh air, besides active recreational purposes such as using playgrounds and carry out sports activities. Meanwhile, Olmstead (1999) and Francis (2003) indicate that, as the diversity of physical and social activities increase, the ratio of preference for open air public spaces also increases [12], [18]. It is acknowledged that natural properties such as trees, gardens, water elements and botanical landscapes included in the design of a park increase positively the experiences [5]. Spatial equipment and maintenance are also factors that increase the utilization ratio of a park.

All of the physical properties and the benefits obtained from parks as defined above may in fact change along with the sociocultural functions ascribed to parks. This is because parks are built over social ideological objectives and cultural needs originating from the geography of the space they are located in. Thus, the social culture cultivating the physical properties of parks may be cited as the most important factor in terms of park design, types of use and user satisfaction. Within this framework, it would be possible to grasp how fickle user satisfaction may be, looking at the formations of urban parks in various societies.

2.2. Urban parks under the influence of the social culture

Since the Victoria Park in England, which is the world's first public park, dated 1842, political and social developments have assigned different meanings to parks in western societies, which were reflected upon the understanding of landscaping, as well. How lifestyles of cultures and their perspectives towards nature can change the utilization of green spaces has been referred to in several studies. In this regard, Coeterier (1996), Peters, Elands & Buijs (2010) and

Sasidharan et al. (2005) have expressed that cultural continuity is reflected upon landscape design and, as such, diversity in the social structure brings about evident changes in terms of utilization of green spaces [14], [20], [21]. They have particularly drawn attention to the fact that traditional forms of expression of the existing cultural structure prevailed in the sociocultural habits and landscape designs of the local parks. Among non-western societies, green spaces have always been important in the Turkish society. The design of housings, integrated with gardens and on the account of the habit of being in touch with nature like spending time in recreation spaces, are significant elements of its cultural history. Nevertheless, introverted lifestyles delimiting public life deriving from the Islamic culture has constrained the utilization of public venues and thereby of green spaces for quite a long period [22], [23]. In traditional Turkish quarters, green spaces existed as inner gardens of residences whereas public venues were left as natural landscapes. The concept of public parks was introduced to the Ottoman Empire only at the end of the 18th century and parks have been utilized as promenade and picnic sites for the people. In these open spaces, closed and restricted promenade areas where social ties are protected were preferred rather than creating a wilder environment. It is known that these habits continue in western societies inhabited by Muslim immigrants (Buijs et al., 2009) [21] Peters & Elands (2010) have compared park utilization habits of Moroccans, Turks and Dutch in a study [24]. They characterized leisure behaviours of Muslims as collectivistic in nature, with strong family ties, and the Turkish community as very closely knit --implying that going to natural spots especially with families is a part of Turkish culture. Similarly, Tinsley et al. (2002) has made determinations about individualistic and collectivist cultural orientations [25]. They defined North American park culture as individualistic and mobile, whereas Hispanic and Asian park cultures as collectivist.

Currently in Turkey, a social lifestyle as foreseen by the modernization project brought about by the Republican regime is heeded. Within this framework, urban parks as vectors of the modern society were designed to set an example for public life and teach them how modern life is [23]. In this context, parks that were similar to their western examples were built in developed urban centres of Turkey, which provided for a social life style through merging of genders, entertainment together with the family and participation of urban people in various active and passive leisure interests. These elements were supported by physical properties such as good maintenance and landscape designing. In parks trimmed with types of utilization that do not overlap with traditional culture, physical characteristics were developed accordingly. Looking at Turkey today, we see many urban parks built in line with the modernization project or converted from recreation venues. There are also many parks which are currently inefficient qualitatively and quantitatively in terms of physical characteristics. There are serious problems in satisfying park users because of the fact that modern parks fail to support traditional habits and also because spaces converted into parks from recreation venues keep aloof from new utilization styles. Failure of several parks being utilized effectively due to such inefficiencies forms the definition of the problem in this survey. In this framework, the hypothesis of the survey is structured as follows:

Leisure behaviour habits differing by cultural variances are the most important factor in terms of user satisfaction, being also the determinants of the varying physical characteristics (size, design, landscaping, activities offered, spatial possibilities, accessibility, etc.) thereof. The purpose of the survey is to compare two biggest and most popular parks of İzmir, Turkey's third largest province, in terms of utilization adequacy. One of these parks is the Hasanağa Park which has a physical structure deriving from social culture and which was converted from a garden. The other one is Büyük Park which is completely independent from social culture, literally a symbol of modern living. User profiles of both parks are similar, yet the activities they offer and their modes of utilization are different. It is expected that there would be differences between the two parks in terms both of adequacy evaluations and of types of use. The question of which activities are encouraged, discouraged or made impossible by the existing designs is sorted out. Additional attributes recorded such as the users' demographic features are not the primary focus but they give additional details of this relationship.

2.3. Properties of the sample

In the survey, two parks with different characteristics in terms of location, size, and amenities offered, landscape properties and maintenance issues have been selected with respect to the above-mentioned purposes.

The first one, Büyük Park, is located in Bornova, third largest town of İzmir situated in the northeast, with a population 396,770. The park with a total area of 38,150 square meters is Bornova's largest and İzmir's third largest park. Walking distance to the park from the streets and avenues in the settlement centre it is located ranges between 5 to 10 minutes. Being surrounded by settlement areas belonging to medium income level and being located on the shopping axis in the town centre, the park has a rather diversified occupant profile and is crowded at all hours of the day. It is at a walking distance of 10 minutes to the Ege University, which is İzmir's biggest university.

Fig. 1. Two Parks on İzmir City Map.

Fig. 2. Site Plan of Büyük Park.

Fig. 3. Büyük Park – children play areas.

Built in 1934 as the public space representation of the Republican era ideology, the park has a well-arranged layout. Through the axes structured around a central square, it encompasses a cultural centre, an amphitheatre, three cafeterias, one playground, one basketball court and open air seating areas. Being the 'only real green space' in the town square of Bornova, Büyük Park is a centre of attraction for link up and recreation for occupants of all age groups thanks to its easily accessible location and its socio-cultural venues.

Fig. 4. Büyük Park – maintenance and cleaning.

Fig. 5. Site Plan of Hasanağa Park.

The second park studied in the survey is the historical Hasanağa Park located in the boundaries of the town of Buca, with a population of 450,010, situated in the southeast of İzmir. Buca's largest and İzmir's second largest park, Hasanağa Park was built as a private garden in 1810 in Buca, a very old settlement centre of İzmir. Following the proclamation of the Republic, this private garden was opened to public and converted into a park. Located near the shanty town rehabilitation area in the perimeter of Buca town centre, the park is circumscribed by the settlement centres of lower and medium income groups and some of the schools of Dokuz Eylül University. Since its institution, new utilizations have been added to Hasanağa Park in line with the conditions of the era, and some were discontinued. Established on a total area of 100,000 square meters, the Park bears an organic plan. Circulation axes were formed by making use of the various kinds of centennial trees in different sections of

the park, which serves as a recreation spot for the people of Buca. It encompasses 1 artificial fountain, 2 basketball courts, 1 running track, 1 walking track, an open parking lot and an indoor gymnasium, which is the only covered space of the park. The park has lost its appeal as the required maintenance of several of its units was neglected and required functions were not provided.

Fig. 6. Hasanağa Park – picnic areas.

Fig. 7. Hasanağa Park – sportive facilities.

If we are to summarize the principal differences between the parks; while Bornova Büyükpark is located in the city centre, Hasanağa Park is situated in the perimeter. Compared to Bornova Büyük Park, Hasanağa Park is larger and greener, while it is disadvantaged in terms of activities, maintenance and reinforcement facilities. While Hasanağa Park is a more natural park, embracing traces of organic agriculture traces, Büyük Park is a more formal and organized park, designed with an understanding of modernist planning during the Post-Republican Period.

2.4. Instrumentation of the study

Within the scope of this study, a survey has been implemented by interviews with the purpose of determining occupation purposes and satisfaction levels of the parks. The same measurement tools were used at both parks. The interviews were conducted both during the week days and the weekend at various hours so as to be able to equally access individuals from different genders, ages, professions, educational levels and income groups and hear their reactions towards the parks. At Büyük Park, 220 individuals participated in the survey and 180 individuals refused to do so. At Hasanağa Park, 222 participated and 61 refused. In total, 442 individuals were accessed and 54% returns were obtained with 240 refusals. The survey was conducted in the April - May 2010 timeframe.

The first section of the survey consisted of questions on age, gender, marital status, profession, educational level and income group, aimed at drawing the participant profile. In the second section, a list of intended purposes for utilization of the parks was provided and participants were asked to state their principal intentions of arriving at the park. The third and final section of the survey included questions aimed at determining the levels of satisfaction of the users, as well as their demands. This section involved evaluation of efficiencies of the parks, comparison of these with occupant characteristics and explicit designation of users' demands concerning the parks. The 5 point Likert scale has been used in the evaluation of the satisfaction levels of the parks. In this scale, 1 represents "not satisfactory at all" and 5 represents "completely very satisfactory". Initially, the physical features that make up the park have been observed so as to determine satisfaction levels of the parks. Instead of evaluating these factors one by one, the method of grouping the 24 factors in 5 categories over the parameters of Use (principal elements of parks) and park design (complementary elements of parks) was preferred as a more practical method. Principal elements of parks were defined as open and closed spatial uses, and complementary elements as natural features, environmental equipments, maintenance & cleaning. Mean scores of each category were utilized in statistical analyses. The park satisfaction items which consider these 24 factors are as follows:

Park design as complementary elements of parks: Natural features: landscaping, quantity and quality of green spaces, provision of natural living spaces for pets. Environmental equipments: quantity of lighting units, quantity and quality of benches, fountains. Maintenance and cleaning: garbage collection, maintenance of benches, maintenance of playground and sports areas, maintenance of greenery.

Park usage types as principal elements of parks: Closed spatial uses: indoor gymnasium, cafeteria and social centre availability. Open spatial uses: quantity and quality of playgrounds, quantity and quality of concourses, quantity and quality of sports areas, quantity and quality of outdoor sports

equipment. User demands related to park design of the parks were obtained through open ended questions and again grouped under five categories. Demands related to spatial occupation cover the spatial functions that are not available or otherwise deficient in the park. Demands related to spatial equipment cover the increase of lighting and sitting units, fountains, orientation and signage units in the parks. Demands related to natural features cover the increase of green spaces, rearranging of landscaping and improvement of natural living spaces. Demands related to security issues cover the increase of security conditions available in the parks. Demands related to maintenance and cleaning cover the increase of the quantities of benches and waste bins and maintenance of sports areas.

In statistical analyses user profiles, satisfaction levels and user demands were compared and contrasted both on general terms and separately. Frequencies for evaluations on user profile and park usage purposes were obtained and examined with the chi square test. Similarly, the relation between the variables of gender, age, marital status, occupation and educational level and park usage purposes were again examined with the chi square tests.

The relation between the mean values of the satisfaction levels grouped in 5 categories and the independent variables of the study was examined with the Man- Whitney U and Kruskal-Wallis tests. In this study, the independent variable is the type of park that reflects different sociocultural habits of park users in terms of their leisure behaviour. Additionally, the two parks which are subjects of the study differ from each other with their park design. Dependent variables, on the other hand, are park usage and user satisfaction.

3. RESULTS AND DISCUSSION

3.1. Demographical analysis

As there was not any significant difference in the variables of gender, marital status and income level, which play an effective role in terms of park utilization and that similar reactions emerged in values considered important, although there were significant differences in the variables of age, educational level and occupation, it has been concluded that there was not any significant difference in the users of the two parks in terms of demographic features.

Table 1. Demographic character of the respondents in Büyük Park & Hasanağa Park.

	Büyük Park		Hasanağa Park		x^2-Test
	N	(%)	N	(%)	p
Respondents	220	49.8	222	50.2	
Gender					
Women	93	42.3	94	42.3	0.532
Men	127	57.7	128	57.7	
Age					
Young between 15-24	71	32.3	102	45.9	
Adults between 25-44	72	32.7	68	30.6	***0.003***
Adults between 45-65	54	24.5	44	19.8	
People over 65	23	10.5	8	3.6	
Marital Status					
Married	112	50.9	94	42.3	0.135
Bachelor	96	43.6	118	53.2	
Divorced	12	5.5	10	4.5	
Education					
Primary Education	58	26.4	46	20.8	
High School	71	32.3	39	17.6	***0.000***
Higher education and above	91	41.4	136	61.5	
Occupancy					
Workers (employee, tradesman)	69	31.4	66	29.7	
Retired	52	23.6	23	10.4	***0.001***
Student (High school- university)	69	31.4	97	43.7	
Housewives-Unemployed	30	13.6	36	16.2	
Income level					
<1000 USD (Low income)	132	60.0	141	63.5	0.364
1000–2000 USD(Middle income)	70	31.8	58	26.1	
>2000 USD (High income)	18	8.2	23	10.4	

It has been observed that, for both parks, men (57.7%) use parks more than women (42.3%). As for the variable of marital status, bachelor users were in majority in both Büyük Park (50.9%) and Hasanağa Park (42.3%). In terms of the outcome variable, people from the low income group are dominant both in Büyük Park (60.0%) and Hasanağa Park (63.5%). The parks were similar in terms of the variable of age.

Nevertheless, in Büyük Park, the majority (40.8%) of users was between 15 and 24 years of age. Meanwhile, although there was a significant difference between the two parks in terms of educational level, the fact that university graduates and higher constituted the majority of the users of both Büyük Park (41.4%) and Hasanağa Park (61.5%) In terms of the variable of occupation, while there was a significant difference between the parks, it had to be disregarded since university and high school students constituted the majority of the users in both Büyük Park (31.4%) and Hasanağa Park (43.7%). Similarly, it is striking that the housewives were represented at rather low levels in both Büyük Park (16.2%) and Hasanağa Park (13.6%) among users. As Büyük Park was used the least by unemployed people (13.6%) and Hasanağa Park was used the least by retired people (10.4%), there was a significant difference only in the groups that use the parks the least, making the variable of occupation negligible for this study.

3.2. Park use aims

In terms of the overall users of Büyük Park and Hasanağa Park (N=442), it has been determined that both parks were used for getting fresh air and relaxing, with percentages that are very close to each other. This result is compatible with the recent studies conducted. As Chiesura states that the Amsterdam Urban Park was used mostly for relaxing and discovering nature[8], Mowen et.al has reported that majority of users in Cleveland Metropolitan Parks have defined relaxing as their primary activity [26]. The fact that park use aims of playground and sports have low percentages among users of Büyük Park and Hasanağa Park (N=442) is incompatible with recent literature. For example, Hutchison who has recorded 3000 observations on 18000 activity groups in 13 Chicago parks stated that 41% of the park users were walking-biking-jogging [27]. Similarly, it has been stated that 45% of users occupied Chicago parks for jogging purposes and 23% for team sports. Again, Scottet.al stated that 44% of users occupied Cleveland metro parks for walking and climbing [28]. As for the use for playground purposes, Ries and Veitch et.al state that parks are popular settings for physical activity behaviour and socializing among children [29], [30]. The fact that the play equipment is scarce despite the ample space especially in Hasanağa Park is a result of a feature of the Turkish society that children prefer collective recreational activities conducted together with the family members rather than singular alternatives. Whereas in Western societies, parks are primarily used for sportive purposes and as playgrounds for kids as spaces where individuals can act freely and, as such, play equipment has developed in parallel to this. In this regard McGormick et.al,Ferre et.al and Veitch et.al have pointed out that age-appropriate and maintained play equipment is important for encouraging park use [30], [31], [32]. The fact that use of Büyük Park for playground purposes is significantly higher compared to Hasanağa Park and that use for sportive purposes is lower reveals that equipment provided in parks plays an important role in park use.

Among the important factors that determine park use, the characteristics of the physical environment have differed significantly with regard to the facilities offered and certain park use aims came to the foreground more than others. In terms of the variable of parks, eating and drinking activities affected park use significantly more than Büyük Park at the statistical level. This is relevant to the fact that Hasanağa Park is the largest open space in the county. This park is highly suitable for passive recreational activities preferred by users in the county. The size of Hasanağa Park has integrated with the traditional habit of picnicking, which is the most common recreational activity performed in open green areas in Turkish culture. This mode of behaviour of users is compatible with previous literature. As Elands et.al has pointed out that passive forms of activities like meeting other people, hanging around, relaxing and active forms of activities like having a picnic and social gathering with relatives are much more important for Turks than Dutch people, whereas walking and cycling are less important for these groups[21]. As such, the traditional utilization mode of Hasanağa Park as a recreational spot has affected the cafeteria in Hasanağa Park to be demolished in time.

With reference to the environmental variables of park, the park that enables sportive activities have probably affected park use aims at a significantly higher level at the statistical scale in Hasanağa Park. The size of Hasanağa Park offers opportunities of taking long walks and the indoor gymnasium it contains offer the possibility to perform sportive activities. On the other hand, lack of open and closed spaces and equipment has lowered the ratio of other park use aims. At Büyük Park, on the other hand, getting fresh air and spending leisure time have the highest ratio among park use aims. The diversity of spatial use for social and cultural purposes inside the park has increased ratio of use. Meanwhile, physically Büyük Park is smaller than Hasanağa Park. The fact that open spaces for picnicking and strolling are rather limited has somewhat restricted park use for such purposes. Thus, in this study, the hypothesis that physical conditions influence park use aims has been verified. It is striking that the indirect park use for trespassing purposes is valued in both parks in general. It may be associated with people's wish to include parks in daily living. The fact that this ratio is high for Büyük Park signifies an environment with mixed use aims. These results support previous literature. In this context, Ferre et.al and Tablot et.al

state that parks are used as a regular passageway to be used as playground on the way to and from school and for temporary relaxation purposes to escape from the hectic daily agenda [32], [33]. Francis also associated ideal public spaces and their environments and stated that they should enable use as passageway [12].

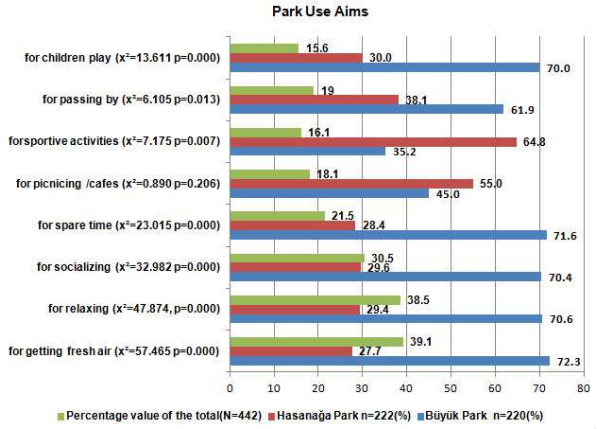

Fig. 8. Park use aims in Büyük Park & Hasanağa Park.

3.3. Park user satisfactions and demands

Mean values of satisfaction levels of the items grouped in five categories were compared by types of parks with Man Whitney U and Kruskal Wallis tests. When mean values of the reactions towards the scale used in user satisfaction are compared in relation to the parks, on overall total and for each category, Büyük Park has been found more satisfactory than Hasanağa Park. The fact that there were significant differences between the two parks in terms of satisfaction may be associated with Büyük Park's physical conditions and the activity opportunities it offers. This result has shown parallelism with the relevant literature. Özgüner et.al (2006) have stated previously public interest in formal, manicured landscapes has always been high [9]. Also Ribe (1994) who had completed a survey by 196 participants have determined that 10 % of park users preferred natural areas while the rest preferred designed park areas [34]. Büyük Park has a smaller area and less natural features than Hasanağa, but it has been evaluated as more satisfactory in terms of manicured and designed landscape features.

The fact that natural features were evaluated as the most satisfactory category signifies that expectations of park users are associated with how they perceive and interpret their surroundings. In this context, Purcell & Lamb (1998) from past literature argue that ecological naturalness and perceived naturalness are related but not equivalent [5]. With relation to such perception difference, as Özgüner & Kendle (2006); Purcell &Lamb (1998) and Kaplan (1995) previously stated, people are selective about what they see as natural, and nature means different things to different categories of people as widely assumed [4], [5], [9]. This may affect people's experiences in a particular type of landscape. Thus, park users today prefer both natural and designed landscapes and benefit from both in different or similar ways. On the other hand, park users' expectations are affected from the cultural inheritance of that particular society. Park users continue to expect services extended from traditional leisure habits, as the consciousness of occupation of urban and public green spaces other than gardens and recreational spots has been shaped together with the Republican era in the Turkish society.

Although Büyük Park covers less space compared to Hasanağa Park, its central location in downtown, the several open and closed spatial use opportunities it encompasses, as well as its regular up keeping has caused it to be perceived more satisfactory. Accordingly, demands for spatial use have been limited. On the other hand, diversity of spatial use has remained limited at Hasanağa Park on account both of the fact that it has remained in the periphery of the county of Buca and that it has been converted into a park from a historical garden and that it is still used as picnic area. The demands of park users for closed spatial use have increased in time due to the fact that the only recreational unit the park encompasses is its gymnasium. This result is compatible with previous literature.

As it was stated by Kaczyinski et al. (2008), Giles-Corti et al. (2005), Godbey et al (2005), Ries et al (2009) and Cohen et al. (2010) in previous studies, the total number of features and amenities are influential in satisfaction relevant to recreational facilities [3] [16] [17], [29], [35]. While outdoor spatial activities are very limited at Hasanağa Park, it is striking that park users have evaluated this park as satisfactory in terms of demands for open spatial use and that there is no significant difference between the two parks in terms of open spatial use. This may be a reflection of rather passive recreational activities such as getting fresh air / relaxing, picnicking and barbecuing, which correspond to the collectivist cultural leisure behaviour in the Turkish social structure. With respect to Hasanağa Park, user satisfaction despite numerous spatial use inadequacies with its spatial size being the largest park of the county and with its natural beauty embracing century old trees may be interpreted as a reflection of the passion for the nature and the natural. These results are compatible with past literature. As stated by Cohen et. al. (2010) previously, the magnitude of the park affects park use and satisfaction positively and larger parks are regarded as more satisfying [35]. On the other hand, as reported by Kaplan et al. (1995) and Purcell & Lamb (1998) in their previous studies, people prefer natural over built landscapes [4], [5]. Similarly, Özgüner & Kendle (2006) determined that 83% of park users prefer more 'natural looking', 76% prefer

'informal', 70.8% prefer 'undulating' and 66.5% prefer 'natural growing' landscape, which indicates a desire for a change towards a more naturalistic landscape [9].

Fig. 9. Park use satisfaction levels in Büyük Park & Hasanağa Park.

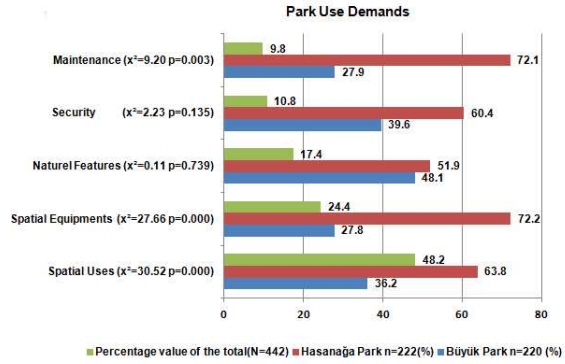

Fig. 10. Park use demands in Büyük Park & Hasanağa Park.

Looking at the percentile distribution of user demands for both parks, it is observed that spatial uses and spatial equipment cover the first two rows. The fact that spatial uses are demanded at a higher level compared to park maintenance and security probably derives from the insufficient level of physical spatial opportunities offered by the parks. As regards Hasanağa Park, the reason for demands related to the categories of spatial use, equipment and maintenance to be triple those for Büyük Park derives from the inadequacies in these categories. This also verifies the poor physical conditions of Hasanağa Park. These results are compatible with recent literature on this aspect. Özgüner & Kendle (2006), Talbot & Kaplan (1984) and Gearin & Kahle (2006) have stated in their previous work that, in general, well maintained and pleasing arrangements of natural features are preferred, whereas disorderliness is not appreciated [9], [33]. Thus, well-kept and orderly parks influence the level of satisfaction. Also, low levels of greenery and other signs of physical disorder, such as graffiti, littering, and untamed natural areas are an adverse factor in park use by parents [36]. Also according to Golicnik & Thompson (2010), quality is an important factor of park satisfaction [19]. They have founded out that lack of facilities is the most important complaint by 50% of unsatisfied users. In the light of this information, it is possible to conclude that physical conditions of parks affect user demands.

The fact that security units existed in both parks has resulted with a very low demand for security by park users. Also, as people in Asian and Muslim cultures use parks in the form of crowded groups due to collectivist leisure behaviour unlike individualistic use of parks in western societies, no security concern arises in this regard. Nevertheless, the fact that Hasanağa Park has received twice the security demand for Büyük Park has resulted from its uninhabited condition due to its peripheral location and its unbounded magnitude. Lack of adequate number of spatial functions has limited the liveliness in the park, too. Lack of adequate lighting and lack of sufficient maintenance have also affected the increase in the demand for security. On the other hand, the multifunctional closed spatial uses of Büyük Park have provided for a more secure environment for both daytime and night time activities.

4. CONCLUSIONS

In this study, it has been noticed how user satisfaction changes due to using types, and indirectly, user satisfaction levels of two parks with similar user profiles but different designs. The fact that park uses for parks located in the same city can diversify has pointed out that the facilities offered for park users should also be diversified. Park users perceive park environments inadequate when their social needs brought about by the relevant cultural environment were disregarded. Elimination of these inadequacies through refurbishment efforts performed in line with requirements of park users is also very important in terms of ensuring the agreement between the designer and the user. The solution of the problem at this point is to support modern parks with amenities that would embrace traditional habits through compromising participatory policies and with proper equipment compatible with new park use aims in open spaces converted into parks from recreational spots. Since lack of awareness of park programs is an important barrier to park use, park services should be programmed appropriately and increase willingness to use public parks. There is also a need to introduce alternative designs that will stem from social needs for improving the physical conditions of the parks. They must be based on a spatial concept that meets the different interests of various user groups and offer a variety of spaces and possibilities. The vicinity of a cafeteria means an increasing number of people passing through the park as a pleasant route or using it as a place for brief rests in passing by. In order to ensure a fair distribution of space, the design must be an open space

with a versatile, multi-purpose area. In this way, utilization of larger parks that allows traditional habits for park use such as Hasanağa Park can be increased to a higher quality. In addition, studies should also be conducted on non-users with the purpose of determining why they do not prefer the parks in question and ensuring their frequenting these public areas so as to be able to guarantee that parks are used at a more efficient and frequent manner in the future.

REFERENCES

[1] **Madanipour, A.** (1992), *Design of Urban Space: An Inquiry into a Socio-Spatial Process*. Wiley. West Sussex.

[2] **Kostof, S.** (1992), *The City Assembled. The Elements of Urban Form through History*. Bulfinch. Boston.

[3] **Godbey, G. C.,** et al (2005), *Contributions of leisure studies and recreation and park management research to the active living agenda,* Preventive Medicine, vol. 28, Issue 2, pp. 150–158.

[4] **Kaplan, S.** (1995), *The restorative benefits of nature: toward and integrative framework*. Journal of Environmental Psychology, 15, pp. 169–182.

[5] **Purcell, A. T.,** et al (1998), *Preference and naturalness,* An ecological approach Landscape and Urban Planning, Vol. 42, Issue 1, 24 July, pp. 57–66.

[6] **Tester, J. Baker** (2009), *Making the playfields even: evaluating the impact of an environmental intervention on park use and physical activity,* Preventive Medicine Vol 48, Issue 4, pp. 316–320.

[7] **Thompson, C. W.** (2002), *Urban open space in the 21st century*. Landscape and Urban Planning. (60), pp. 59–72.

[8] **Chiesura, A.** (2004), *The role of urban parks for the sustainable city*. Landscape and Urban Planning. 68(1), pp. 129–38.

[9] **Özgüner, H.** et al (2006), *Public attitudes towards naturalistic versus designed landscapes in the city of Sheffield (UK),* Landscape and Urban Planning.

[10] **Knez, I.** et al (2008), *Thermal, emotional and perceptual evaluations of a park: Cross-cultural and environmental attitude comparisons,* Building and Environment, Vol. 43, Issue 9, pp. 1483–1490.

[11] **Grahn, P.** et al (2010), *The relation between perceived sensory dimensions of urban green space and stress restoration,* Landscape and Urban Planning, Vol. 94, Issues 3–4, pp. 264–275.

[12] **Francis, M.** (2003), *Urban Open Space: Designing for User Needs*. Landscape Architecture Foundation, Washington, DC: Island Press.

[13] **Herzele, A.** et al (2003), *A monitoring tool for the provision of accesible and attractive urban green spaces*. Landscape and Urban Planning (63), pp. 109-126.

[14] **Coeterier, J. F.** (1996), *Dominant attributes in the perception and evaluation of the Dutch landscape*. Landscape and Urban Planning. (34), pp. 27–44.

[15] **Grahn, P.** (1991), *Om parkers' betydelse. The meaning and significance of urban parks*[Dissertation, partly in English/Swedish, and summary in English] Swedish University of Agricultural Sciences, Department of Landscape Planning Alnarp: Stad and Land 93.

[16] **Giles-Corti, B.** et al (2005), *Increasing Walking: How Important is Distance to, Attractiveness, and Size of Public Open Space?* American Journal of Preventive Medicine. 28(2S2), pp. 169–76.

[17] **Kaczynski, A.** et al (2008), *Association of Park Size, Distance, and Features with Physical Activity in Neighborhood Parks*. American Journal of Public Health. 98(8), pp. 1451–1456.

[18] **Olmstead, F.** (1999), *Public parks and the enlargement of towns,* in: LeGates RT, Stout F, (Eds), The City Reader. 2nd ed. Routledge, London, pp. 314–320.

[19] **Golicnik, B.,** et al (2010), *Emerging relationships between design and use of urban park spaces,* Landscape and Urban Planning. vol. 94, Issue 1, pp. 38–53.

[20] **Sasidharan,** et al (2005), *Cultural differences in urban recreation patterns: An examination of park usage and activity participation across six population subgroups*. Managing Leisure. Vol. 10, Issue 1, 2005. pg. 19-38.

[21] **Peters, K.** et al (2010), *Social interactions in urban parks: Stimulating social cohesion?* Urban Forestry&Greening. Vol. 9, Issue 2, pp. 93–100.

[22] **Gürallar, Yeşilkaya, N.** (2009), Public; Public Space, Public Places, A Terminology Critique Before and After Modernity: Architecture pp. 52-55.

[23] **Bozdoğan. S.,** et al (1999), Modernization and National Identity in Turkey. *History Foundation Nation Press* 2nd Press, İstanbul. pg. 104-105.

[24] **Buijs, A. E.,** et al (2009), *No wilderness for immigrants: cultural differences in images of nature and landscape preferences*. Landscape and Urban Design. (91), pg. 113–23.

[25] **Tinsley, H. E. A.** et al (2002), *Park usage, social milieu, and psychological benefits of park use reported by older urban park users from four ethnic groups,* Leisure Sciences, 24(2), pp. 199-218.

[26] **Mowen, A.,** et al (2007). *The role of park proximity and social support in shaping park visitation, daily physical activity, and perceived health among older adults*. Journal of Physical Activity and Health. 21(2), pg. 167-179.

[27] **Hutchison, R.** (1987), *Ethnicity and urban recreation: whites, blacks and Hispanics in Chicago's public parks*. Journal of Leisure Research 19, pp. 205–22.

[28] **Scott, C.** et al (1994), *Perceived constraints to park usage among individuals with low incomes*. Journal of Park and Recreation Administration, Vol. 12 /4 pg. 79-96.

[29] **Ries, A. V.** et al (2009), *A quantitative examination of park characteristics related to park use and physical activity among urban youth*. Journal of Adolescent Health 45, pp. 64–70.

[30] **Veitch, J.,** et al (2007), *Children's perceptions of the use of public open spaces for active free-play*. Children's Geographies 5, pp. 409–422.
[31] **McGormack, G. R.,** et al (2010), *Characteristics of urban parks associated with park use and physical activity: a review of qualitative research*. Health & Place (16), pg712-726.
[32] **Ferre, B. M.** et al (2006), *Children and Playgrounds in Mediterranean Cities,* Children's Geographies. 4(2), pp. 173–83.
[33] **Talbot, J.,** et al (1984), *Needs and fears: The response to trees and nature in the inner city*. Journal of Arboriculture.10(8): pp. 258-263.
[34] **Ribe, R.** (1994), *Scenic Beauty Perceptions Along the ROS,* Journal of Environmental Management, Vol. 42, Issue 3, November, pp. 199–221.
[35] **Cohen. D. A.** et al (2010), *Parks and Physical activity: why some parks are used more than others?* American Journal of Preventive Medicine, vol. 50, pp. 9-12.
[36] **Matsuoka, R.** et al (2008), *Review*. *People needs in the urban landscape,* Analysis of contributions Landscape and Urban Planning. (84), pp. 7–19.