

*Full Length Research Paper*

# **An assessment of outdoor recreational behaviors and preferences of the residents in Istanbul**

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**The purpose of this study was to understand outdoor recreational behaviors and preferences of the residents in Istanbul. The findings of the study are based on a survey which was conducted among 1,400 residents in 32 districts of Istanbul in 2006 and 2007. As the study revealed, about one third of the residents participate in recreational activities in their spare time in Istanbul. Having a picnic, walking, and playing soccer and basketball are the most important outdoor recreational activities while playing tennis, hunting, skating, water skiing, and climbing are the least important activities among the residents. The majority of the residents in Istanbul do not think that they engage in outdoor recreational activities enough due to some constraints like lack of time, financial problems, inadequacy of outdoor recreational areas, lack of companion, and health problems.**

**Key words:** Recreational behaviors, recreational preferences, recreational constraints, Istanbul.

## **INTRODUCTION**

Recreation is described as the activity that people choose to engage in when at leisure, and it may be multifaceted, comprising physical, cognitive, emotional and social components (Broadhurst, 2001). Recreation involves activities that people do for enjoyment, usually to refresh the body and mind. Recreation, therefore, includes kinds of activities like visiting areas such as parks, wilderness areas, lakes, rivers, and forest as well as engaging in different exercises such as trekking, fishing, hunting, and camping. Participating in recreational activities is of great importance for maintaining mental and physical health of individuals, families, and communities (Neuvonen et al., 2007). As indicated in various studies, engaging in recreational activities two or three times a week or for half an hour a day is beneficial for human health (Pouta and Sievanen, 2001; Miilunpalo, 2001; Oja, 2000). A positive relationship was found between human health and green areas in recent studies whose findings support the idea that parks, green areas, and their facilities affect public health positively (Frumkin, 2003; Henderson and Bialeschki, 2005; Pretty, 2005).

Maintaining physical and mental health, strengthening relationships among family members, increasing perfor-

mances in business life, reducing crime rates, and making individuals more integrated with societies are among the benefits which are expected from engaging in recreational activities (Driver et al., 1991). A certain level of participation should be achieved in order to draw these benefits from recreational activities (Neuvonen et al., 2007). However, many people feel limited in participating in recreational activities due to various constraints. Recreational constraints are defined as factors preventing people from participating in recreational activities or reducing the benefit which is expected from recreational activities (Scott and Jackson, 1996; Johnson et al., 2001). By developing a hierarchical model, Crawford et al. (1987) classified recreational constraints into three groups as intrapersonal, interpersonal, and structural. Intrapersonal constraints are related to psychological conditions and characters of people such as personality, attitudes, moods, self-skill, kin and nonkin attitudes. Interpersonal constraints, however, include lack of time and money, family problems and not having friends to participate in recreational activities with. Structural constraints are about recreational areas, their facilities, and availability of access. Walker and Virden (2005) classified structural recreational constraints into four groups, namely natural environment, social environment, territorial, and institutional structural constraints.

Lack of knowledge, overcrowding, distance to recreational areas, family problems, and lack of money and

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companion were indicated as the most significant recreational constraints in many studies (Coyle and Kinney, 1990; Giddens, 1981; Kay and Jackson, 1991; Maher and Thompson, 1997; Samdahl and Jekubovich, 1997; Smith, 1995; Wilkinson, 1995). As indicated in other studies, fear of assault, lack of facility, gender, race, high entrance fee, lack of care and broken equipments are other factors affecting preferences and participation of people in recreational activities (Shaw et al., 1991; Shores et al., 2007; Stodolska, 1998; Walker and Virden, 2005). Being among the most significant recreational constraints, income plays a more important role on participation of people in recreational activities than gender, age, race, and educational level (Shores et al., 2007; Johnson et al., 2001). As Scott and Munson (1994) observed in their study, people in high income level visit parks more frequently than those in low income level. Searle and Jackson (1985) found a similar result when they investigated recreational constraints in Canada.

Gender has been found as an important constraint in many studies especially for females who are participating in recreational activities less frequently than males (Johnson et al., 2001; Henderson and Bilaeschki, 1991; Wearing and Wearing, 1988). According to the Australian Bureau of Statistics, males participate in recreational activities more than females at the same age in different age groups (ABS, 1998). The reasons behind this result has been indicated in some studies as females are having more responsibility than males for their families so they keep themselves busy with house works and they fear from assaults and being raped (Henderson, 1991; Hochschild and Manchung, 1990; Pittman et al., 1999; Riger and Gordon, 1981; Virden and Walker, 1999). Lack of money is another factor preventing females from participating in recreational activities. Being dependent on their spouse as a house-wife, it may be more difficult for females to find enough money to spend on recreational activities (Deem, 1986).

Health problems and aging are other constraints on participation of people in recreational activities. People with health problems are less interested in recreational activities than healthy people (Grahm and Stigsdotter, 2003). The Administration on Aging in the US has reported that 28.8% of the Americans between the ages of 65 and 74 participate in recreational activities less frequently than the rest of the same age group due to some chronic health problems (NSRE, 2003). As people get older, the number of constraints for their participation in recreational activities increases (Shores et al., 2007). As Jackson and Scott (1996) indicate, health problems, lack of companion, and fear of crime are the most significant recreational constraints for old people.

Design and facility characteristics of recreational areas are other significant factors affecting participation in recreational activities. People do not usually prefer recreational areas where facilities do not provide them with enough opportunities to engage in various activities (Bright, 2003; Neuvonen et al. 2007). Presence of picnic

tables alone in recreational areas increases participation rate almost two-and-a-half times (Samdahl and Christensen, 1985). Sometimes different facility characteristics are required for different groups of people. As Irwin et al. (1990) and Gobster (2002) indicate in their studies, facility characteristics of recreational areas affect Hispanic Americans' choice of participation because they usually participate in recreational activities as groups. Stodolska and Livengood (2003) have found a similar result in their studies when they examined participation of American Muslims in recreational activities in the US. As their study revealed, lack of suitable areas for worshiping and gathering especially for women restrict participation of American Muslims in recreational activities.

Distance to recreational areas is another factor affecting participation of people in recreational activities (Neuvonen et al., 2007). Recreational areas are visited more frequently if they are located near urban areas (Grahm and Stigsdotter 2003; Roovers et al., 2002). The distance between recreational areas and settlements was indicated in some studies. The distance between recreational areas and settlements should be at least one kilometer (Grahm and Stigsdotter, 2003). Nordic Council of Ministries, however, requires that areas for daily recreational activities should not be more than 250 - 300 meters away from settlements. According to the same Ministries, areas which are used for weekly recreational activities may be located at farther distances (Nordisk Ministerrad, 1996).

Participation in recreational activities has increased around the world since the World War II due to the increase in prosperity (Cordel et al., 1990; Clawson, 1990). A dramatic increase has been observed in participation of recreational activities especially after the third quarter of the 20th century mainly in developing countries (Douglass, 1999). According to NSRE (2003), nearly all Americans (97.6%) participate in at least one recreational activity in a year. Because the survey was conducted among adults aged over 16, the study indicates that 207.9 million American citizens engage in recreational activities at least once a year. The same study has also found that time people spent in recreational areas and the types of activities they engaged in during their stay have increased since 1990. According to the same study, university graduates whose annual incomes are over 50 thousand dollars are those participating in recreational activities the most. Another study which was conducted in Helsinki reports that a great majority of the people who responded the survey (97%) participated in recreational activities within the last one year and almost half of the people visited recreational areas once within two days (Neuvonen et al., 2007).

Understanding recreational behaviors and preferences of residents is of great importance for cities in order to have a sustainable recreational plan. It is only then that city managers and decision makers will make sure that number of recreational areas and their size, facilities and other characteristics are adequate to meet various re-

creational needs of residents (Zandersen and Tol, 2008; Jensen and Ouis, 2008). Conducting a survey among residents is still the best way to understand their recreational behaviors and preferences (Zandersen and Tol, 2008). Surveys are conducted in cities and countries by researchers and government agencies in order to collect data about locations of most preferred recreational areas, frequency of participation, type of recreational activities to engage in, problems of existing recreational areas, and recommendations for further developments. Surveys also include some questions on gender, age, occupation, educational level, and income to make further analysis among different groups of participants and determine recreational constraints within community. A survey was conducted among the residents of Istanbul in this study which was a joint project supported by Istanbul Metropolitan Municipality.

Istanbul has witnessed a rapid population increase in line with economic developments seen especially after the 1950s. Population has risen from 1.2 - 12.5 million between 1950 and 2007 (TÜİK, 2008). Rapid population increase starting in the 1950s has triggered a very fast unplanned urban development in Istanbul. Providing residents with basic necessities like new roads, electricity, and clean drinking water was the main priority of the municipality until the 1990s. Therefore, recreational needs of the residents were ignored for a long time in the city while it was expanding very rapidly. This situation started to change after 1990 with economic development and increasing number of people in the middle income class. While existing forest areas located in the north were utilized in order to provide public with picnic areas, new recreational areas were established in different parts of the city. Facility characteristics of the existing recreational areas have also been improved in order to allow residents to engage in different recreational activities.

Recreational behaviors and preferences of the residents have not been investigated in depth so far in Istanbul, although a number of studies have been conducted on location, size, and facilities of recreational areas in the city (Aksoy, 2001; Erdem, 1996; Karataş, 1995). Only a limited number of studies investigated recreational preferences of the residents locally in one or few districts of Istanbul (Güven, 1992; Nabavi, 1994; Çayır, 2004). For this reason, this study was initiated with the support of the Istanbul Metropolitan Municipality to have a comprehensive understanding of recreational behaviors and preferences of residents in entire Istanbul. The study aimed at understanding how residents in Istanbul spend their spare time, what types of outdoor recreational activities they engage in, and what factors are preventing them from participating in outdoor recreational activities.

By focusing on general recreational behaviors and preferences of the residents, the study was also aimed at answering the following research questions:

(1) What are the problems of outdoor recreational areas in Istanbul?

(2) To what extent age, gender, educational level, and income affect participation of residents in outdoor recreational activities?

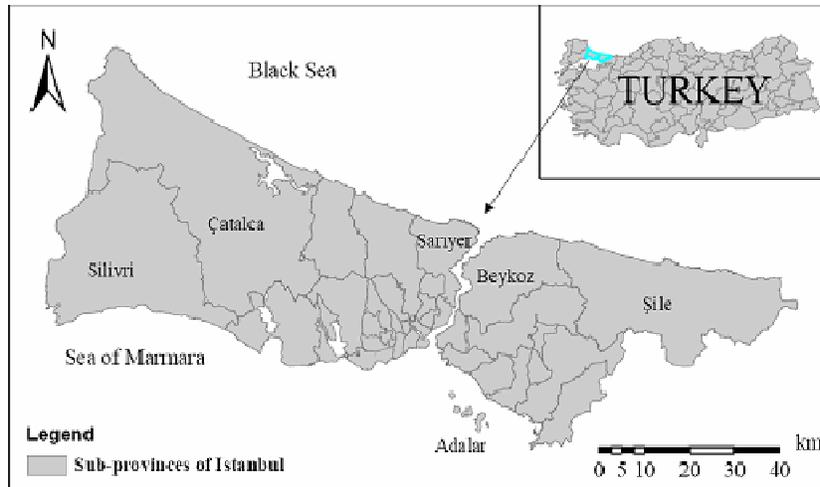
## METHOD

The study is based on a survey which was conducted among 1400 residents in 32 districts of Istanbul. Respondents were chosen randomly and survey was conducted face to face in different parts of the districts like existing recreational areas, bus stations, streets, and restaurants. The population of the districts was taken into consideration when the number of surveys to be conducted in each district was determined. Around 100 surveys were conducted in the most-populated districts while between 25 and 50 surveys were accomplished in the less populated ones. The surveys were conducted only among those who had been living in Istanbul for at least five years and those who were over 16 years old. In doing so, only permanent residents who have known Istanbul and its problems better were targeted for the survey. Conduction of surveys was completed within a five month period between December, 2006 and April, 2007.

The survey consisted of five sections. The first section of the survey was dedicated to personal characteristics of the participants like age, gender, educational level, monthly income, and occupation. The second section included questions about types of outdoor recreational activities the participants engaged in. Without giving them any choice, participants were asked what they do in their spare time to relax physically and mentally. This question aimed at determining to what extent outdoor recreational activities occupy residents' free time in Istanbul. In the second section of the survey, participants were given twenty-three different outdoor recreational activities such as picnic, swimming, and trekking and they were asked to indicate which activities they usually engage in. The aim of this question was to understand which outdoor recreational activities are preferred by the residents of Istanbul. In the last question of the second section, participants were asked which three districts they prefer the most for outdoor recreational activities.

The third section of the survey contained questions in regard to frequency of participation in recreational activities, time spent in recreational areas, and problems of recreational areas. In the first question of this section, participants were asked at what frequency they visit outdoor recreational areas. To answer this question, participants were given four choices including "once or more per week", "once per two weeks", "once a month", "once a year". The second question of the third section aimed at determining the time participants spent at recreational areas. For this reason, participants were asked how long they stay in outdoor recreational areas by giving them four options including "one day or less", "one or two days", "one week", "more than one week". Participants were also asked if they thought they participated in recreational activities enough in the survey. Those who said NO to this question were also asked why they did not participate in recreational activities enough. This question aimed at determining main recreational constraints for residents of Istanbul. In the last question of the third section of the survey, participants were asked what problems they encounter when they visit outdoor recreational areas.

The fourth section of the survey included three questions about means of access and cost to participate in outdoor recreational activities. In the first question of this section, participants were asked how they go to outdoor recreational areas by giving them five options including; "by my private car", "by a rental car", "by public transportation", "by walking", and "by tour operators". In the second question, participants were asked how many kilometers they usually travel to visit outdoor recreational areas in Istanbul. Participants were given four options for this question like; "less than 10 km",



**Figure 1.** The location of Istanbul.

“between 10 and 30 km”, “between 30 and 100 km”, and “more than 100 km”. In the last question of the fourth section, participants were asked what is the average money they spend for each recreational activity by giving them six options including; “20 - 50 TL (1 TL equals to 0.7 US dollar approximately)”, “50 - 100 TL”, “100 - 250 TL”, “250 - 500 TL”, “500 - 1000 TL”, and “more than 1000 TL”.

In the last section of the survey, participants were first asked whether they go out of Istanbul for outdoor recreational activities. Then those who said yes to this question were asked where they usually go and how much time they spend there by giving them four options including; “less than a week”, “between 8 - 15 days”, “between 15 - 30 days”, “more than 30 days”. SPSS program was used to evaluate the results of the survey at the end of the study. Frequency analysis was the main method in the study.

### Study area

Istanbul is located in northwest Turkey along both sides of the Bosphorus where the western side of the city is in Europe and its eastern side is in Asia (Figure 1). It is located at the 41st latitude and the 29th longitude. Istanbul covers a surface area of 5390 km<sup>2</sup> with 32 districts administered by the Istanbul Metropolitan Municipality.

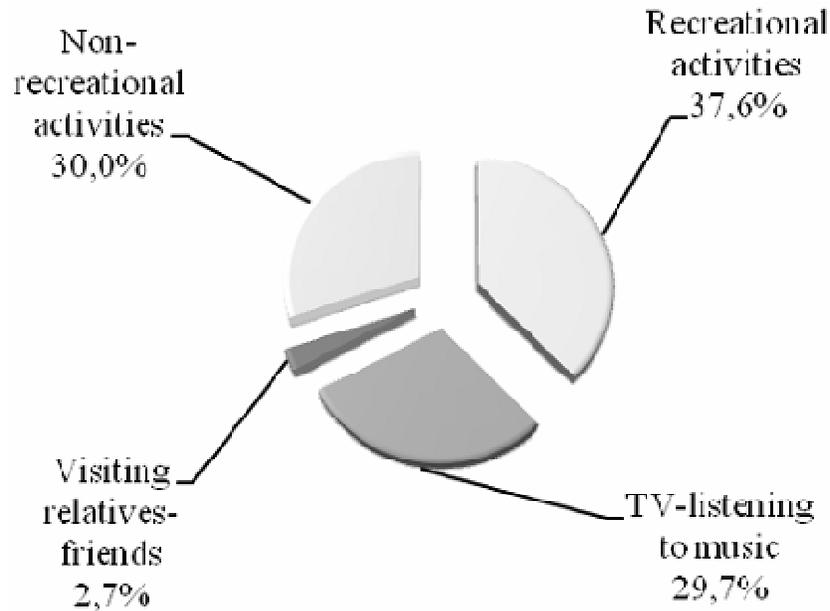
## RESULTS

The study provided an understanding of outdoor recreational behaviors and preferences of the residents in Istanbul. The survey was responded by 1,400 residents from 32 districts of Istanbul. The majority of the participants were male (62%) and 38% were female. The participants ranged in age from 16 - 71 with a mean age of 33.9 years. Two thirds of the participants were between 21 - 40 years of age; 34.9% were between 21 - 30 while 33.7% were between 31 - 40 years old. There were only 86 participants (6.2%) at the age between 16 - 20 years old. The age of 17.2% of the participants was between 41 - 50 years while those between 51-60 years accounted for 6.6% of the total. Only a small number of participants (1.4%) were over 60 years old.

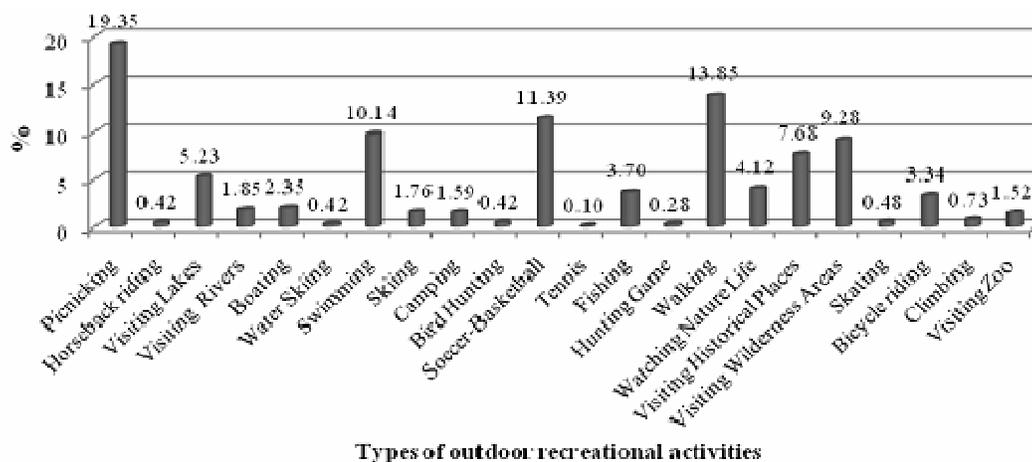
Participants varied in their educational level. 16.3% of the participants indicated that they either did not receive any formal education or had a primary school diploma. Almost one third of the participants (35.2%) had a high school diploma while 10.1% of them were university students. Over one fourth of the participants (28.4%) graduated from a university while 9.9% of them were either continuing or completed their post-graduate education, including master and Ph.D. Regarding the professional occupation of the participants involved, data revealed that almost half of the participants (48.6%) were employed in various sectors as a worker; 12.2% working in industrial sector, 33.3% working in service sector while 3.1% working in non-professional areas. 11.6% of the participants said that they owned a store. A small number of participants (2.4%) were academicians while 14.8% of them were students. Housewife, which shows the unemployed female group staying at home and working mainly on houseworks and raising children, accounted for 10.6% of the participants. Only 5.8% of the participants were unemployed while 6.2% were retired. The average monthly income of the participants' families was as follows: 2.7% less than 500 TL; 25.7% between 500 and 1000 TL; 39.8% between 1000 and 2000 TL; 26.1% between 2000 and 5000 TL; 5.7% more than 5000 TL.

### Types of outdoor recreational activities

The study revealed significant results to understand to what extent recreational activities occupy residents' spare time in Istanbul. Without being given any options, participants were asked how they spent their spare time. The answers were grouped into four categories to understand whether the activities participants engaged in were recreational or not. The categories were: “recreational activities”, “watching TV-listening to music”, “visiting friends and relatives”, and “other non-recreational activities”. The results were outlined in Figure 2. As Figure 2 revealed, more than one



**Figure 2.** How do residents spend their spare time in Istanbul?



**Figure 3.** Recreational preferences of residents in Istanbul.

third of the participants (37.6%) engage in recreational activities in their spare time. According to the same data, 29.7% of the participants prefer watching TV or listening to music while 30% of them participate in different non-recreational activities like shopping in their free time. Only a small number of participants (2.7%) said that they were visiting their friends and relatives in their free time (Figure 2).

The study provided an analysis of the types of recreational activities which residents of Istanbul usually preferred. The participants were given twenty-three outdoor recreational activities in a table and asked to show which recreational activity they usually engage in the most. As Figure 3 reveals, having a picnic, walking, play-

ing soccer and basketball, swimming, visiting wilderness areas, historical places and lakes are the most preferred outdoor recreational activities of the participants. As 19.35% of the participants indicated, having a picnic is the most preferred outdoor recreational activity among the participants. Walking is the second most preferred outdoor recreational activity. 13.85% of the participants said that they usually go walking for outdoor recreational activity. As the Figure 3 reveals, playing soccer and basketball is the third most preferred outdoor recreational activity among the participants. 11.39% of the participants chose playing soccer and basketball for their most preferred outdoor recreational activity. As indicated by 10.14% of the participants, swimming is the fourth most

**Table 1.** The most preferred outdoor recreational activities in terms of age, gender, educational level, and monthly income.

Types of outdoor recreational activities								
	Male participants	Female participants	Younger than 30 years old	30 years old and older	University graduate	No university education	Monthly income is less than 2000 TL	Monthly income is more than 2000 TL
Having a picnic	17.6	39.2	33.9	20.2	22.2	31.5	30.6	22.6
Playing Soccer and Basketball	37.7	5.4	18.6	34.6	20.3	28.9	27.9	20.1
Water Sports (boating, water skiing, and swimming)	12.6	17.0	11.4	13.2	17.9	8.5	8.1	20.3
Visiting wilderness areas	16.9	22.2	17.1	18.3	23.4	14.4	16	21.7
Visiting Historical Areas	4.5	7.2	6.2	4.4	5.4	5.4	4.9	7
Fishing- Bird Hunting	6.9	1.3	6.1	3	4.3	5.2	5.6	3.2
Walking	2.9	4.6	4.4	2.1	4	3.2	3.7	3.2
Zoo Visiting	0.2	0	0.1	0.2	0.2	0.1	0.1	0.2
Camping	0.4	0.2	0.5	0.2	0.6	0.2	0.4	0.2
Others (playing tennis, hunting game, etc.)	0.3	2.9	1.7	3.8	1.7	2.6	2.7	1.5

preferred outdoor recreational activity among the participants. As the Figure 3 reveals, visiting wilderness areas (9.28%), visiting historical places (7.68%), and visiting lakes (5.23%) received significant number of votes from the participants as the most preferred outdoor recreational activity. The study also provided an understanding of the least preferred recreational activities in Istanbul. As the Figure 3 shows, playing tennis is the least preferred outdoor recreational activity among the participants. Only three participants indicated that playing tennis was their most important outdoor recreational activity. As the Figure 3 reveals, playing a hunting game, water-skiing, horseback riding, bird hunting, skating, and climbing received less than one percent vote from the participants as their most preferred outdoor recreational activity (Figure 3).

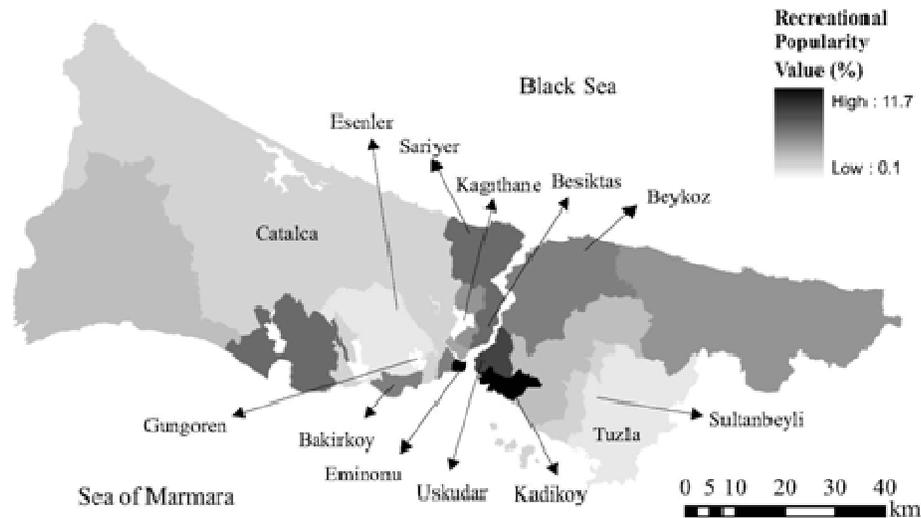
The types of recreational activities were regrouped in Table 1 in order to make comparisons for the most preferred outdoor recreational activities between different groups in terms of their age, gender, educational level, and monthly income. As the results in Table 1 reveal, having a picnic, walking, playing soccer and basketball, engaging in different natural sports like boating, water skiing, and swimming, and visiting wilderness areas are the most preferred outdoor recreational activities among all groups of participants with almost 70%. However, the types of outdoor recreational activities which were mostly preferred by the participants vary according to their age, gender, educational level, and income. As the study revealed, playing soccer and basketball is the main outdoor recreational activity among male respondents while female respondents prefer having a picnic the most

(Table 1).

As the Table 1 reveals, having a picnic is still the most preferred outdoor recreational activity among the participants who are younger than 30 years old. However, the participants who are 30 years old and older prefer playing soccer or basketball the most as an outdoor recreational activity. Playing soccer and basketball is still an important recreational activity for the both age groups, however, there is a significant difference between the two groups in terms of the level of participation in these sports. 18.6% of the participants, who are younger than 30 years old prefer playing soccer and basketball as the most important outdoor recreational activity while the same figure is 36.6% among the ones who are 30 years old and older.

A similar difference has been observed between participants in terms of whether they had a university degree or not. For the university graduates, visiting wilderness areas was the most preferred outdoor recreational activity. 23.7% of the participants who had a university degree indicated visiting wilderness areas as their most preferred recreational activity. Almost the same number of participants (23.2%) who had a university degree indicated that having a picnic is what they do most as an outdoor recreational activity. These figures, however, change when the group of participants who did not have a university education is concerned.

Visiting wilderness areas is the third most preferred outdoor recreational activity for the participants who did not have a university degree while having a picnic and playing soccer and basketball are their first two most preferred activities. As the Table 1 shows, the level of interest in natural sports increases when university gra-



**Figure 4.** Popularity of districts in Istanbul in terms of participation of outdoor recreational activities.

graduates are taken into consideration. 17.9% of the participants who had a university degree preferred natural sports as their most important outdoor recreational activity while the same figure is 8.5% among the participant who did not have a university degree (Table 1).

The types of the most preferred outdoor recreational activities change according to the income of the participants' families. The level of interest in natural sports and visiting wilderness areas is significantly higher among participants whose monthly income is over 2000 TL. 20.3% of the participants whose monthly income is over 2000 TL prefer engaging in natural sports as recreational activity while the same figure is only 8.1% in participants whose monthly income is less than 2000 TL. Although having a picnic is the most preferred outdoor recreational activity in both groups, participants whose monthly income is over 2000 TL prefer it less than the other group (Table 1). Having a picnic and playing soccer and basketball are the most preferred outdoor recreational activity for the participants whose monthly income is less than 2000 TL.

The study also revealed important results about which districts participants preferred the most for outdoor recreational activities. Participants were asked to name three districts to where they usually go for their recreational activities. They also asked not to include the name of the district where they live in to determine the most popular districts of Istanbul in terms of recreational areas. As the Figure 4 shows, Eminonu, Kadikoy, and Uskudar are the most preferred districts of Istanbul for outdoor recreational activities. Eminonu has received the highest amount of votes (11.7%) from the participants. The same figure is 10.4% for Kadikoy, and 7.4% for Uskudar. These districts constitutes the historical peninsula and its close vicinity in Istanbul where majority of the historical and cultural richness of the city exist. Sariyer and Beykoz,

located in the north, receive a significant number of visitors for recreational activities mainly because of their forest areas. Besiktas and Bakirkoy which are located at the coast in the European side of Istanbul are the other districts receiving many visitors due mainly to their small woods, green areas, parks, walking areas along the coast. Kagithane, Gungoren, Esenler, and Sutanbeyli are the districts participants do not usually prefer for outdoor recreational activities. Another important result of the study was that a significant number of participants (9.7%) preferred outside of Istanbul for outdoor recreational activities (Figure 4).

The study presented useful information about whether residents engage in outdoor recreational activities outside of Istanbul. As the study revealed, the majority of the respondents (70.5%) go outside of Istanbul at least once a year for recreational purpose. Almost half of these respondents (47.4%) indicated that they usually prefer going to their hometown while 36.5% said they go to a holiday center. The rest of them said that they usually leave Istanbul for a conference or a business trip. Around 31.2% of the respondents who leave Istanbul at least once a year for recreational purpose said that they usually spend less than a week on their visit. The average time spent for recreational purpose outside of Istanbul was indicated as around two weeks by 44.3% and as between 16 and 30 days by 18.5% of the respondents. Only 6% of the respondents said that they spend more than a month every year outside of Istanbul for recreational purpose.

#### Frequency of participation and time spend in recreational activities

The study provided adequate information about at what

**Table 2.** Frequency of participation in outdoor recreational areas within different groups with gender, age, education and income level.

Frequency of participation								
	Male participants	Female participants	Younger than 30 years old	30 years old and older	University graduate	No university education	Monthly income is less than 2000 TL	Monthly income is more than 2000 TL
Once a week	32.9	35.8	36,2	32,7	31	36	35,8	29,7
Once in two weeks	29.8	23.9	28,8	26,7	26,2	28,4	27,9	27,5
Once a month	35.1	37.2	33,3	36,9	41,2	31,8	33,4	40,3
Once a year	2.2	3.1	1,7	3,7	1,6	3,8	2,9	2,5

frequency residents participate in outdoor recreational activities and how much time they spend at recreational areas in Istanbul. As the results revealed majority of the participants (97.5%) engaged in outdoor recreational activities at least once a month. Almost one third of the participants (34.2%) said that they engaged in an outdoor recreational activity once a week while 27.7% of the respondents indicated that they participated in recreational activities once in two weeks. The percentage of the respondents who participated in outdoor recreational areas once a month is 35.6% while only 2.5% said that they engaged in outdoor recreational activities only once a year or never.

The frequency of participation in outdoor recreational activities changes slightly among the respondents according to their gender, age, educational and income level. There is not a dramatic change on frequency of participation between male and female groups. As seen from the Table 2, both male and female groups indicated that they mostly preferred participating in outdoor recreational areas once a month. As Table 2 reveals, respondents who are younger than 30 years old participate in outdoor recreational areas more frequently than those who are 30 years old and older. Educational level has also been effective on the frequency of participation in recreational activities. In general, the respondents having a university degree participate in recreational activities more frequently than those without a university degree. However, participation in outdoor recreational activities once a week was dedicated by 36% of the respondents without a university education while the same figure was only 31% among those with a university degree. A similar difference was seen on the frequency of participation in recreational activities between different groups of respondents whose income levels are different. It is quite interesting that the frequency of participation has been found more over respondents whose monthly

income levels are less than 2,000 TL. 35.8% of the respondents whose monthly income level is less than 2,000 TL said that they engaged in an outdoor recreational activity once a week while the same figure was only 29.7% among others with a monthly income level over 2,000 TL (Table 2).

As the study revealed, majority of the respondents (85.2%) participate in daily outdoor recreational activities. However, 10.7% of the respondents said that they spend between one or two days in outdoor recreational areas while only 3.1% of them indicated that they prefer longer outdoor recreational activities lasting between three days and one week. The percentage of those who spend more than a week on outdoor recreational activities is only 0.9%.

### Outdoor recreational constraints and problems in recreational areas

The results of the survey provided an understanding of the factors preventing participation of residents in outdoor recreational activities and also what problems they face in recreational areas in Istanbul. People were asked first if they thought they engaged in outdoor recreational activities enough. It is one of the most striking results of the survey that 61% of the respondents thought they did not participate in outdoor recreational activities enough. Only 39% of the respondents answered this question positively. Those who responded this question with NO were also asked what were the reasons preventing them from engaging in outdoor recreational activities. The answers of the participants were grouped in order to understand the most important outdoor recreational constraints in Istanbul. As Figure 5 shows, lack of time was the most important recreational constraint indicated by 74.8% of the participants who think that they do not parti-

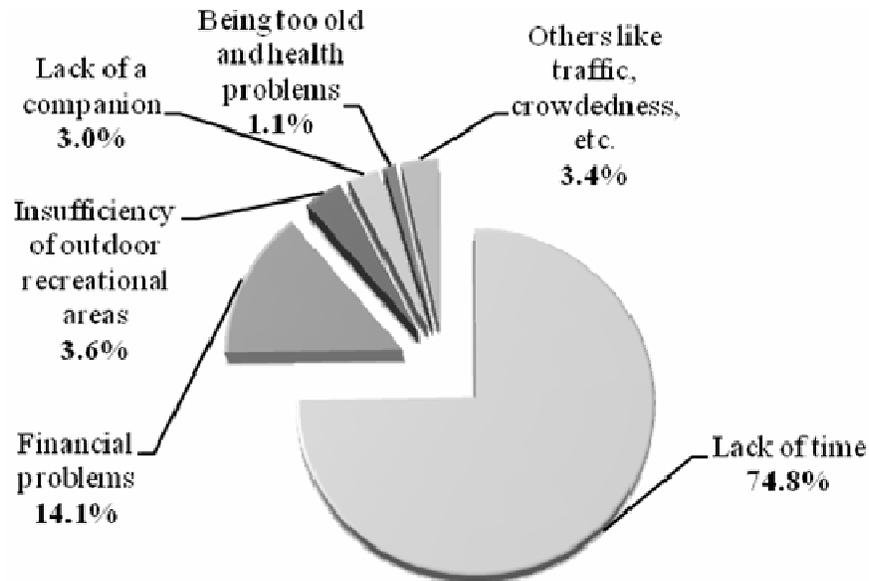


Figure 5. Major outdoor recreation constraints in Istanbul.

participate in outdoor recreational activities enough. The second most important constraint was about money. 14.1% of the participants said that they could not engage in outdoor recreational activities enough because of their financial problems. Only 3.6% of the respondents indicated that they could not participate in outdoor recreational activities enough because existing recreational areas are not enough to meet their recreational needs in quality and quantity. Lack of companion was mentioned by 3% of the respondents as an other constraint while 1.1% of the respondents thought that they could not engage in outdoor recreational activities because they were too old and had health problems (Figure 5).

The survey results also reveal some important clues about the problems residents are having in outdoor recreational areas in Istanbul. Only a small number of people (7.6%) are happy with the existing outdoor recreational areas. However, the rest of the respondents indicated a variety of problems upon being asked what are the major problems they see in outdoor recreational areas. As the Figure 6 presents, the most important problem of the outdoor recreational areas is dirtiness and visual pollution in Istanbul. Almost one fourth of the respondents (23.5%) pointed out this problem. Lack of facility in recreational areas was pointed out by 18.9% of the respondents. Overcrowding, lack of care, lack of enough parking areas, having no guide, and lack of security are the other important problems of the outdoor recreational areas in Istanbul according to the participants (Figure 6).

#### Means of access and cost to participate in outdoor recreational activities

As the study revealed, almost half of the respondents

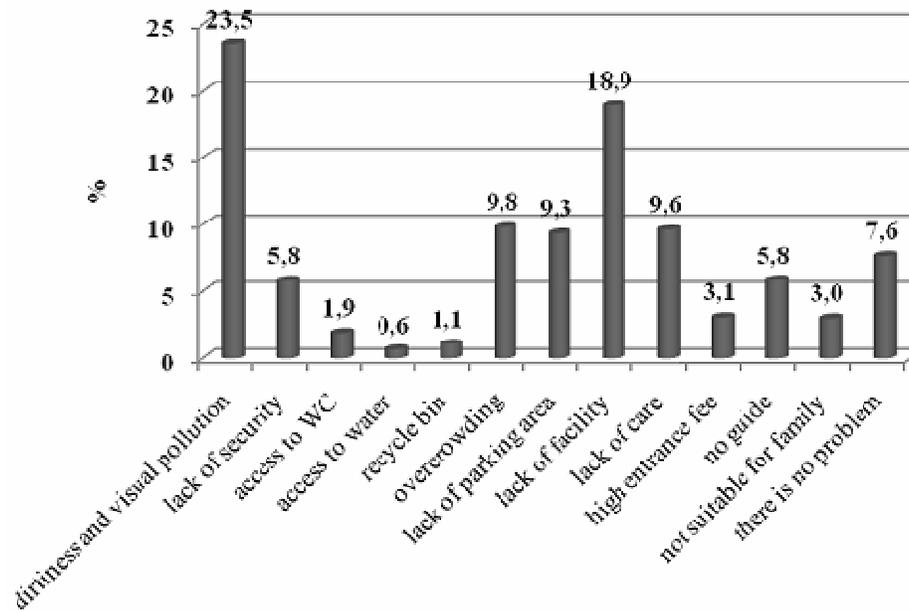
(45.8%) use their own car to access outdoor recreational areas. One third of the participants (35.6%) indicated that they prefer public transportation to go to outdoor recreational areas. 9.4% of the participants said that they usually walk while 3% of them use tour operators and 1.9% rent a car to go to outdoor recreational areas.

The study provided information about average distance residents travel to access outdoor recreational areas in Istanbul. Around one third of the respondents (32.5%) said that they travel between 10 - 30 km to access outdoor recreational areas. The average distance covered to participate in outdoor recreational activities is less than 10 km for 28.7% of the respondents while it is between 30 and 100 km for 29.1% of the respondents. Around one tenth of the respondents (9.6%) travel more than 100 km for outdoor recreational activities.

The average money that residents spend for each outdoor recreational activity is another data reflecting mainly economic status of the residents and types of activity they engage in. As the study revealed, almost half of the respondents (49.2%) said that they spend less than 50 TL for each outdoor recreational activity. The average cost for each outdoor recreational activity was indicated between 50 - 100 TL by 29% of the respondents, while 11.9% said it was between 100 - 250 TL. The rest of the respondents (9.9%) said that they spend more than 250 TL for each outdoor recreational activity.

#### DISCUSSION AND CONCLUSION

The study provided an understanding of outdoor recreational behaviors and preferences of the residents in Istanbul. Being responded by 1,400 residents in 32 districts of Istanbul, the survey results were adequate to



**Figure 6.** Major problems of outdoor recreational areas of Istanbul.

answer the research questions of the study. The first research question was how residents spend their spare time in Istanbul. This question aimed at understanding to what extent recreational activities occupy residents' spare time in the city. As the results revealed, only 37.6% of the residents participate in recreational activities in their spare time. The rest of the residents engage in other activities like watching TV, listening to music, visiting friends or relatives. This figure become more meaningful when it is combined with the results of other question in the survey. As the survey results revealed, only 34.2% of the residents engage in outdoor recreational activities once a week in Istanbul. This result infers that recreational activities do not play an important role in residents' life in Istanbul. Instead of engaging in different recreational activities, residents in Istanbul would rather prefer passive activities without exerting much energy physically and mentally. This result can also be implied indirectly that participation in outdoor recreational activities has not become a part of culture yet in residents' daily life in Istanbul.

The second research question of the study was about the types of outdoor recreational activities in which residents mostly engage in Istanbul. As the answers in the survey revealed, having a picnic is the most preferred outdoor recreational activity among the residents of Istanbul. Walking, and playing soccer and basketball are the second and third most preferred outdoor recreational activities. This is partly due to the fact that those activities do not require a detailed planning and big effort to organize. Since northern part of Istanbul is covered by forest, it is not difficult for residents to travel between 5 -

30 km to reach an area to have a picnic in the city. These activities which residents involve with also represents the inadequacy of the city in terms of enough number of outdoor recreational areas with various facilities which provide residents with opportunities to meet their different outdoor recreational needs. This is obvious from the same survey results that playing tennis, hunting, skating, water skiing, and climbing are the least preferred outdoor recreational activities in Istanbul. Because residents cannot find suitable outdoor recreational areas, they do not participate more in those activities.

The study was useful to understand outdoor recreational constraints in Istanbul which was the aim of the third research question of the study. It is a very striking result that more than half of the respondents (61%) do not think that they participate in outdoor recreational activities enough due to various constraints. Lack of time, financial problems, inadequacy of outdoor recreational areas in quality and quantity, lack of companion, and health problems were the main constraints pointed out by the respondents. Lack of time and financial problems are the two most important recreational constraints in Istanbul. Attitudes of the residents towards recreational activities and habits of the residents about how they spend their spare time seem to be the other factors effecting residents' participation in outdoor recreational activities in Istanbul.

The fourth research question of the study was aimed at determining the problems of the existing outdoor recreational areas in Istanbul. It is quite surprising that only 7.6% of the respondents said that there was no problem with the outdoor recreational areas they visited so far.

However, majority of the respondents (92.4%) indicated that they encountered many different problems in outdoor recreational areas. This result is very important to have an understanding of the problems in existing outdoor recreational areas from residents' point of view in Istanbul. Dirtiness and visual pollution are the most important problems in existing outdoor recreational areas in the city. This is due to the fact that there is not enough staff working in outdoor recreational areas for maintaining and cleaning. As being indicated as one of the most significant constraints, lack of facility has been presented as the second most important problem of the existing outdoor recreational areas in Istanbul. Existing outdoor recreational areas in Istanbul consist mainly of green areas, trees, and picnic tables, however, their lack of facilities prevents residents from engaging in different activities to satisfy their different recreational needs such as camping, playing tennis and golf. Overcrowding, lack of enough parking area, having no guide, and lack of security are the other important problems of the existing outdoor recreational areas in Istanbul.

The last research question of the study was aimed at determining how recreational behaviors change with age, gender, educational level, family income of the residents in Istanbul. As the results revealed age, gender, educational level, and family income play a role on behaviors and preferences of the residents in Istanbul although the difference among the groups is not dramatic. Having a picnic is the most preferred outdoor recreational activity among those who are younger than 30 years old while playing soccer or basketball are preferred the most by those who are 30 years old or older. A similar difference has been observed between participants in terms of whether they had a university degree or not. For the university graduates, visiting wilderness areas was the most preferred outdoor recreational activity while those who did not have a university degree preferred having a picnic the most. Interest of the residents towards water sports like swimming, skating, and boating changes too according to educational level. University graduates are more interested in water sports than those who do not have a university degree. Monthly family income has also been found effective on recreational preferences of the residents. Residents whose monthly family income is less than 2,000 TL is more interested in having picnics and playing soccer and basketball than those whose monthly family income is 2,000 TL and over. However, those whose monthly family income is 2,000 TL and over are more interested in visiting wilderness areas and water sports than those whose income is less than 2,000 TL. By consideration of the amount of money which is required to engage in visiting wilderness areas and water sports, this figure is quite normal.

The overall study revealed that existing outdoor recreational areas are not adequate in Istanbul in terms of their number and facility characteristics in order to provide residents with enough opportunities to engage in different recreational activities. This negative situation has been

found as a dominant factor determining the behaviors and preferences of the residents in Istanbul. It is most likely that improvement of the existing outdoor recreational areas in terms of number and facility will make more residents participate in outdoor recreational activities. This will also allow residents to participate in outdoor recreational areas more frequently. The types of recreational activities which residents engage in will also increase with a new sustainable outdoor recreational plan.

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