Full Length Research Paper

Determining the recreational demands and tendencies of students at Atatürk University through questionnaires

Hilal Turgut, Pervin Yesil* and Sevgi Yilmaz

Atatürk University Agricultural Faculty Department of Landscape Architecture 25240 Erzurum-Turkey.

If recreational planning is to be made considering the demands and tendencies of users, limited resources will be utilized more profitably and the needs of the users will be met more effectively. From this point of view, the purpose of this study was to determine the recreational tendencies of students at Atatürk University and investigate whether the campus was satisfactory enough to meet the needs. At the end of the study, the results were put forward by comparing the factors which influence the demands and tendencies of the students most to the parameters such as the faculty, origin and sex of the student.

Key Words: Recreation, demand of students, recreational tendencies.

INTRODUCTION

Human beings need recreational activities to isolate themselves from the busy living conditions. Recreational activities have been found to have emotionally, intellecttually, socially and physically positive effects on people (Hartig et al., 1991; Kaplan, 1993; Cessford and Muhar, 2003; Grahn and Stigsdotter, 2004; Özgüner, 2004).

According to Uzun and Altunkasa (1991), the issues such as the preferences of users and the adequacy of utilization, and the levels of participation in recreational activities and the evaluation of unregistered recreational demands should be investigated in regard to recreational areas and activities when examining the attitudes of society in free times. The development process has enabled the existing universities to grow up and led new universities to be established in recent years. The constant development process in universities necessi-tates changing and expanding. The addition of new bodies to scientific institutions, the increase in student population, and the need for extra spaces for social activities in addition to educational activities entail planning campus fields. Building the required spaces costs universities a lot, and this, in turn, causes the physical planning of uni-

versities to gain importance (Öner, 1999; Korkut and Çilek, 2005). The common structures in campus should appeal to everyone, they should enable the users to communicate mutually, and they should be on a location which can easily be noticed by those using the structures around and walking around (Sönmez and Küçükerbaş, 2005).

It is widely known that user surveys are important sources of data to aid the planning, designing and management processing of playgrounds and other facilities demanded by people from all levels and in their evaluation purposes (Oguz, 2000; Yilmaz and Bulut, 2007). In this respect, one of the most studied areas is urban parks whose visitors and users are surveyed. In order to determined the users' satisfaction in the urban parks, user survey are carried out (Yilmaz et al., 2007)

Universities are not only the medium of education, but they are also the places where individuals must satisfy and improve themselves socially. It is the responsibility of universities to provide a medium for students where they can broaden their opinions and receive a versatile education. From a general observational perspective, it may be seen that in order for students to be successful in their studies, they must like the subject they study on, and for doing this, they must like the university environment they attend. With this approach, environments of universities must be well-prepared according to students' demands and students must be determinant factors on the planning

*Corresponding author. E-mail: perviny48@gmail.com.

Table 1. The personal characteristics of the subjects participating in the survey and their percentage distributions.

Personal characteristics		%	Personal characteristics	%	Personal characteristics		%
Sex	Male	58.3		17-19	5.9		<250	34.2
	Female	41.7	Age	20-22	55.6	Income (YTL)	251-500	49.2
Accommodation	Srate hostel	24.6		23-25	26.7		501-1000	12.8
	Home	70.1		>25	11.8		>1001	3.7
	Private hostel	5..3		0-1	7.5		Agriculture	10.7
Origin	Village	7		2	12.8		Engineering	8
	Town	15	The course of time at university	3	17.6		Dentistry	10.7
	City	42.2		4	17.6		Fine Arts	10.7
	Metropolis	35.8		5	17.6		Medicine	9.6
	1 hour	5.9		6	4.8		Education	10.2
	2 hours	9.6		>7	21.9	Faculty	Art and Science	10.7
Free time	3 hours	17.6					Economics and Administrative Science	10.2
	4 hours	20.9					Theology	9.6
							Communication and journalism	9.6

and designing of the environment of universities. Therefore, this study aims to help determine the recreational demands and tendencies of students at Atatürk University and consider students' desires in the development of our university, which undergoes a constant self reformation.

MATERIALS AND METHODS

The latest student population of Atatürk University in 2005 - 2006 education periods is 41.613 students. There are 11 faculties, 2 higher schools, a vocational training school and 16 research centers in the central campus of Atatürk University. There are residences, faculties, administrative units, service units, flats, social texture, hostels and green fields in the campus, which was established on a 3.300 ha field with covered and open spaces. Among the social texture are banks, cafeterias, leisure centers, a cinema, an exhibition center, ceremony and festival fields, a fitness center and a small shopping center. In addition to these, the central campus houses a sports center, a stadium, a mini football pitch, a basketball pitch and 5 tennis courts. The Sports Administration organizes sportive activities in several branches, mainly skiing, mountaineering, football and athleticism (Anonim, 2006).

A total of 200 questionnaires were administered in face to face interviews. Subjects for the study were chosen from different faculties of Atatürk University by using random sampling method including faculty of agriculture, faculty of engineering, faculty of dentistry, faculty of fine arts, faculty of medicine, faculty of education, faculty of art and sciences, faculty of economics and administrative sciences and faculty of theology. 20 subjects were chosen from each of the faculties. The first 8 questions were compiled from personal details, which were thought to influence the individuals' answers. The rest 23 questions intended to determine the recreational tendencies of the students.

In this study, nonparametric tests were applied as placement points were used in the analysis of scores instead of real observation values. Chi-square test was used to control the significance between two percentages. Mann-Whitney U test was used to compare two mean scores. Kruskal-Wallis H test was used for multi comparisons (Özdamar, 2002). The study was conducted between April and May 2005. This period was chosen as students would be able to have the chance to perform outdoor recreational activities as well.

FINDINGS

To determine the personal characteristics of the subjects, the first 8 questions were evaluated. The percentage distributions of answers are presented in Table 1.

Individuals' desires or apparent demands for any recreational activity are limited regardless of their income and free time. Satisfaction point is a subjective concept. It has variability according to individuals' age, free time periods, social status, family structure, and life style (Uzun and Altunkasa, 1991).

Table 2 presents the chi-square test results regarding individuals' evaluations whether the outdoor-indoor recreational spaces are satisfactory in the campus.

The relation between accommodation and the frequency of indoor recreational space use was found to be statistically significant at 5% level. The income level might have influenced the individual's need for recreational space, and this, in turn, might have affected the results. Indeed Mansuroğlu 2002 found that low level income had a negative impact on recreation.

The most preferred sportive activity in open spaces by the students was significant at 1% level in regard to sex (Table 2). The most preferred activities in open spaces by students from different faculties were found to be significant at 1% level. There are a number of limiters influencing the individual's decision on how he/she utilizes free time. A part of these limiters stem from individual's personal conditions. For example, income level, age, sex, job, the attribute of free time and social values affect the free time utilization with regard to age and sex.

Atatürk University, which has a dispersed establishment model whose building groups show a random distribution on the land (Karakaş, 1999), has a main access axis of 4, 5 km. The university campus is located adjacent to the city center on the west of the city. Among the answers relating to closeness of campus to the city cen-

Table 2. The chi-square evaluation results of multiple choice questions.

The item in the questionnaire	Sex	Age	Income	Faculty	Accommodation	Origin	Course of time	Free time
The rate of indoor recreational space use	3.23	7.25	7.25	5.54	12.05*	2.63	4.74	10.16
The most preferred outdoor sportive activities in open sports fields	62.16**	21.06	17.09	87.48**	9.44	22.56	34.23	31.43
In what ways are you affected by the closeness of the campus to the city center	9.43**	4.04	8.51	7.50	1.79	5.29	8.30	8.21

*significant at 5% level
**significant at 1% level

Table 3. The mean scores concerning the most preferred indoor activities

Indoor activity	Mean score	Indoor activity	Mean score
Canteen conversations	11.03	Playing table tennis	9.33
Room conversations	10.78	Going to coffeehouses	8.06
Theatre – cinema	10.77	Covered sports center	7.84
Reading books	10.47	Attending to conferences	7.71
Going to cafés	10.36	Playing billiards	6.77
Listening to the radio	10.35	Going to the library	5.91
Playing group games	9.59	Going to internet café	5.69

ter, the only statistical difference was in regard to sex, which was found to be significant at 1% level. Mansuroğlu 2002 found in his study that close distances in daily activities influenced the recreational preferences on weekends and other holidays for spaces close to accommodations.

The students were asked to rate indoor recreational activities which they had a chance to perform from the most preferred to the least (Table 3).

Sex is a two parameter variable, therefore the values obtained were analyzed using Mann-Whitney U test. The other values in the same rating question such as age, income, faculty, etc. are multi parameter variables, thus the values were analyzed using Kruskal Wallis test. The results are presented in Table 4. Room conversations item was found to be significant at 1% level when age, faculty and the duration for which the students participating in this survey spent in Erzurum were taken into consideration. Canteen conversations item was found to be significant at 1% level with respect to origin of the students. While listening to radio was found to be significant at 1% level in regard to age, faculty, accommodation and the course of time, it was found to be significant at 5% level relating to sex. Reading books was found to be significant at 1% level with regard to sex, age, faculty and the course of time, whereas it was found to be significant at 5% level relating to accommodation and origin. Going to the theatre was found to be significant at 1% level in regard to origin. Going to coffeehouses was found to be signify-cant at 1% level related to faculty. Attending to conferences was found to be significant at 1% level with free time and 5% with fa-

culty. While playing group games was found to be significant at 5% level with faculty, going to café was found to be significant between income level and faculty. While going to covered sports center was found to be significant at 1% level with income, it was found to be 5% with sex and the course of time. Internet café was found to be significant at 1% level with faculty and the course of time, and it was found 5% with age. Going to the library was found to be significant at 5% level with age, faculty and free time.

The students participating in the survey were asked to rate cinema saloon, theatre saloon, exhibition center, art museum, conference hall, cafeteria, and library options that they felt lacking from the most to the least. The results indicated that theatre??? was the one which was felt lacking most and conference hall was the least (Table 5). According to the rating question relating to indoor spaces, cinema, art museum and cafeteria were found to be significant at 5% level and theatre at 1% level with faculty. Theatre saloon was found to be significant at 1% level with accommodation and the course of time. On the other hand, cafeteria was found to be significant at 5% level with the course of time. The results are presented in Table 6.

Table 7 presents the ratings concerning outdoor recreational spaces which were felt to be lacking. According to these values, park was the one which was felt lacking most and rollerblading course was the least (Table 7). The statistical analysis of the answers indicated that football pitch was found to be significant at 1% level with sex and the course of time in Erzurum. It was found to be at 5% with faculty. Walking paths item was at 1% level with sex and the

Table 4. The statistical analysis results concerning the most preferred indoor activities.

	Sex [a]	Age[b]	Income[b]	Faculty[b]	Accommodation[b]	Origin[b]	The course of time[b]	Free time[b]
Room conversations	-0.50	12.36**	4.07	18.97**	5.25	0.96	12.90**	2.98
Canteen conversations	-1.80	1.54	1.90	11.54	0.25	8.27*	8.33	1.27
Listening to the radio	-2.29*	15.91**	5.91	22.72**	10.19**	0.91	18.60**	2.06
Reading books	-2.71**	11.62**	0.36	50.86**	8.59*	8.75*	26.90**	4.34
Theatre – cinema	-0.25	0.94	5.38	9.78	0.33	12.52**	4.05	4.59
Going to coffeehouses	-1.92	0.97	3.86	25.13**	0.22	1.58	3.38	6.71
Attending to conferences	-1.30	6.13	0.38	17.03*	1.25	0.61	11.84	13.71**
Playing group games	-0.78	1.53	6.82	20.48*	5.62	2.89	2.60	1.30
Going to cafés	-0.92	0.12	20.02**	29.26**	1.36	0.57	8.13	6.25
Covered sports center	-2.12*	4.05	11.67**	16.13	1.26	1.16	12.71*	3.92
Going to internet café	-0.80	9.54*	1.14	33.09**	5.32	0.95	18.31**	1.14
Going to the library	-0.16	10.33*	1.92	17.23*	3.44	1.54	10.50	9.60*

[a] z scores for Mann-Whitney U Test
[b] Chi-Square scores for Kruskal Wallis Test
*significant at 1% level
**significant at 5% level

Table 5. The ratings of indoor spaces felt to be lacking most in the campus.

Felt to be lacking	Mean score	Felt to be lacking	Mean score
Theatre saloon	5.58	Cafeteria	4.49
Cinema saloon	5.15	Library	3.78
Art Museum	4.84	Conference Hall	3.38
Exhibition Center	4.79		

Table 6. The statistical evaluation concerning the indoor spaces felt to be lacking most in the campus.

	Sex [a]	Age[b]	Income[b]	Faculty[b]	Accommodation[b]	Origin[b]	The course of time[b]	Free time[b]
Cinema saloon	-1.01	5.41	7.02	20.25*	2.76	0.80	2.03	3.32
Theatre saloon	-0.33	2.82	1.95	30.23**	11.01**	6.49	16.69**	7.30
Art Museum	-0.79	4.46	4.93	17.97*	1.84	4.65	12.04	0.65
Cafeteria	-1.49	2.92	6.56	20.87*	1.42	1.19	13.63*	1.92

[a] z scores for Mann-Whitney U Test
[b] Chi-Square scores for Kruskal Wallis Test
*significant at 1 % level
**significant at 5 % level

Table 7. The mean scores concerning the outdoor recreation spaces felt to be lacking.

The outdoor recreation spaces felt to be lacking	Mean Scores	The outdoor recreation spaces felt to be lacking	Mean Scores
Small relaxation spaces	11.36	Bicycle course	8.00
Exhibition and exposition centers	10.45	Basketball pitch	7.97
Walking paths	10.06	Ice skating course	7.41
Football pitch	8.81	Shooting gallery	6.74
Botanic garden	8.29	Table tennis	7.01
Running courses	8.24	Rollerblading course	5.94
Square	8.24		

Table 8. The statistical test results concerning the outdoor recreation spaces felt to be lacking most.

	Sex[a]	Age[b]	Income[b]	Faculty[b]	Accommodation[b]	Origin[b]	The course of time[b]	Free time[b]
Football pitch	-4.34**	2.82	1.21	20.24*	0.65	3.70	19.02**	6.51
Walking paths	-3.44**	2.10	3.56	13.68	4.08	0.98	16.37**	1.38
Running courses	-2.34*	4.75	1.35	24.21**	6.43*	0.93	19.36**	3.46
Bicycle courses	-0.99	4.70	1.15	15.85*	0.77	0.96	9.29	2.38
Botanic garden	-0.50	9.31	4.90	22.58**	1.22	1.32	13.57**	5.66
Square	-2.63**	2.99	1.66	18.30*	2.70	3.28	11.94	2.64
Ice skating pitch	-0.60	5.93	8.45*	21.38*	1.55	2.05	7.72	7.41
Rollerblading course	-1.46	3.51	9.8*	15.67	0.91	4.23	7.14	9.49

[a] z scores for Mann-Whitney U Test
[b] Chi-Square scores for Kruskal Wallis Test
*significant at 1 % level
**significant at 5 % level

Table 9. The mean sores concerning peripheral equipment students would like to see in the campus.

Outdoor furniture	Mean scores	Outdoor furniture	Mean scores
Wooden benches	4.77	Walking paths	3.60
Running and still water surfaces	4.19	Illumination units	3.60
Green fences	4.13	Direction signs	2.02

course of time, running courses item was at 1% level with faculty and the course of time and it was at 5% level with sex and accommodation, bicycle course was at 5 % level with faculty, botanic garden was at 1% level with faculty and the course of time, and open places item was at 1% with sex and it was at 5% with faculty. While ice skating was found to be significant at 5% significance level with income and faculty, skating course was at 5% level with income (Table 8).

The students were asked to rate peripheral equipment they would like to see in the campus (Table 9). The results indicated that students rated wooden benches as the most preferred and direction signs as the least. The results were statistically evaluated in table 10. As for the significance levels, wooden benches item was 1% with faculty and the course of time, and green fences item was 5% with sex and age. Running and still water surfaces item was 1% with age and faculty and it was 5% with sex and accommodation. Illumination unit item was 1% with age and accommodation

The students participating in the survey were asked to state the features of Atatürk University campus they liked. The answers revealed that education of the university was the most liked feature. However, security of the campus was the least liked (Table 11). The results were statistically evaluated in Table 12. The facilities provided by the university for the students were significant at 5% significance level with sex.

DISCUSSION AND RESULTS

Atatürk University, established on a 3,300 ha field, is one of the noticeable universities in Turkey, whose development process is still continuing. This study, evaluating the students' social lives in the campus, aimed to answer the question to what extend the students could utilize the facilities provided by the university.

Table 10. The statistical test results concerning peripheral equipment students would like to see in the campus.

	Sex[a]	Age[b]	Income[b]	Faculty[b]	Accommodation[b]	Origin[b]	The course of time[b]	Free time[b]
Wooden benches	-0.96	3.15	1.88	19.92*	3.00	0.52	16.72**	6.56
Green fences	-2.17*	8.99*	7.58	9.92	4.08	0.40	1.99	4.96
Running and still water surfaces	-2.72*	12.55**	4.63	24.11**	6.24*	5.31	9.83	3.10
Illumination units	-0.95	8.03*	2.62	16.61	7.46*	0.59	11.53	7.70

[a]z scores for Mann-Whitney U Test
[b]Chi-Square scores for Kruskal Wallis Test
*significant at 1% level
**significant at 5% level

Table 11. The mean scores concerning the most liked features in the campus.

The most liked feature of the campus	Mean score	The most liked feature of the campus	Mean score
Education	3.95	Facilities provided for the students	2.61
Transportation Facility	3.82	Security	2.28
Open place facilities	3.31		

Table 12. The statistical test results concerning the most liked features in the campus.

	Sex[a]	Age[b]	Income[b]	Faculty[b]	Accommodation[b]	Origin[b]	The course of time[b]	Free time[b]
Facilities provided for the students	-2.00*	0.63	2.38	15.15	0.05	3.18	9.84	3.23

[a] z scores for Mann-Whitney U Test
[b] Chi-Square scores for Kruskal Wallis Test
*significant at 1 % level
**significant at 5 % level

An individual gives his or her own decision concerning how and where he/she will spend his or her free time considering his or her own conditions and circumferential agents. If the individual can not perform his or her primary activities due to some restrictive factors, then he/she is to prefer secondary and subsequent choices.

The texture of campus should not only provide students' lives with a satisfactory medium from both individual and social respects, it should also give chances to people of the city to participate in campus life (Fesli, 1993). It was observed that among the most preferred out-door recreational activities by the students were walking, football, basketball, volleyball and tennis. Upon examining the campus, we identified these activities as the most possible ones with adequate substructure. A walking path of 3.6 km in length was built after the survey was conducted. Some shortages were removed in the campus by placing several benches, illumination units and seats. The field undergoing construction work was enriched by a running water axis. The most preferred indoor recreational activity was found to be canteen conversation and the least preferred was going to internet café. It was observed that the students generally preferred to stay at school between lesson breaks and that they spent this duration in the canteen. It is known that the farther a recreative space is located from the user, the less the frequency of its utilization is. When we remember that canteens are the most closely located indoor recreational spaces to students, the reason for this choice can easily be understood. The more income an individual has and the higher his or her culture level is the more recreational forms the individual participates in. Therefore the activity variety in the recreational activities range is determined, to some extent, by the level of education and income (Uzun and Altunkasa, 1991). As a result of the evaluations, it was observed that the students whose incomes are above 1000 New Turkish Liras (YTL) showed interest mostly in disco, bowling and covered sports centers. Recreational spaces should be big enough for their utilization goals and the number of people who will benefit from them and they should also be suitably planned so that they can be utilized in every season.

Atatürk University campus must be able to make use of its current rich natural potential thoroughly. All the individual needs of the students will be met only when this is

accomplished. There are separate empty spaces in the campus, where there is particularly a shortage of outdoor recreational spaces. The utilization of these empty areas as a whole will be a solution for the outdoor spaces. As a result, the users' demands and needs must absolutely be taken into consideration in the planning of campus and in the applications. Organizations must contribute to the users' socialization and the campus must foreground itself with its university identity. In addition, the planning in the campus must be suitable for city identity and it must be contributing to physical and social development of city. It must be in agreement with city with a planning approach which has a continuation. In conclusion, Atatürk University campus has the potential to meet the students' demands' and tendencies.

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