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# Full Length Research Paper

# Determination of user satisfaction for management practices on recreational areas

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For different recreational areas, studies have been conducted to investigate the satisfactions of users from different socio-economic background and recreation habits. However, data is scarce about management practices on user satisfaction. For the current study, a survey was conducted on 300 people to determine the user satisfaction related to management practices on the recreational areas. Study has been conducted in Mogan park, Ankara and coastal area of Mugada, Bartın. The results of questionary indicate that user's satisfaction has been affected by the management practices. However, data indicates that the users with experiences about the site are more satisfied with current management situation than the ones who do not have experiences about the site.

**Key words:** User-satisfaction, Mogan park, Mugada, recreation.

#### INTRODUCTION

Studies conducted to determine user satisfaction for management practices may guide to decision making on planning and sustainable use of recreational areas (Mackay and Crompton, 1990; Burns et al., 1997; Cole and Cromption, 2003). Therefore, this kind of studies may also provide useful insight for managers of recreational areas. However, most of the related study is focused on the quality of service in the recreational areas but the data for the other management practices is very limited (Cole and Cromption, 2003; Ryan and Cessford, 2003; Khan, 2003; Borrie and Birzell, 2001; Burns et al., 2003; Chih-Yu et al., 2005). Parasuraman et al. (1985, 1988) claimed that high quality services have positive effects on user satisfaction. And his study has leaded the others to determine service quality. There are related studies mostly focused on user's experiences on their satisfaction. For example, Churchill and Suprenant (1982) and Oliver and DeSarbo (1988) stated that experiences have a great effect on user satisfaction. Tian-Cole et al. (2002) examined the relationship between service quality and

Borrie and Birzell (2001) said that satisfaction show an alteration according to the characteristics of users. Results of different studies showed that users' socio-economic background influences their satisfactions (Newman and Dawson, 1998; Gibson et al., 1992; Li and Vogelson, 2003; Dawson and Watson, 2000). According to their influences on the user's satisfaction, Newman and Dawson (1998) ranked the variables as visual pollution, perception of crowding and information gathering. Absher et al. (1999) on the other hand, ranked the variables as experiences, the opportunities that the area offers, services and grounding about the area. Cole and Cromption (2003) asserted that, the satisfaction would be achieved by meeting the expectations of the users from the activity.

Abbreviation: SERVQUAL, Service quality.

user satisfaction by using structural usage equation model. Khan (2003) used ECOSERV scale to determine service quality by using SERVQUAL model. Then he stated that SERVQUAL is one the most-used and best method to measure service quality. This method which calls attention to quality in service components has been developed by Parasuraman et al. (1985, 1988). Cronin and Taylor (1992) used SERVPERF scale in SERVQUAL model to determine the relationship between service quality and satisfaction. However, Crompton and Mackay (1989) stated that socialization is more important for the user and therefore service quality less effective on user's satisfaction.

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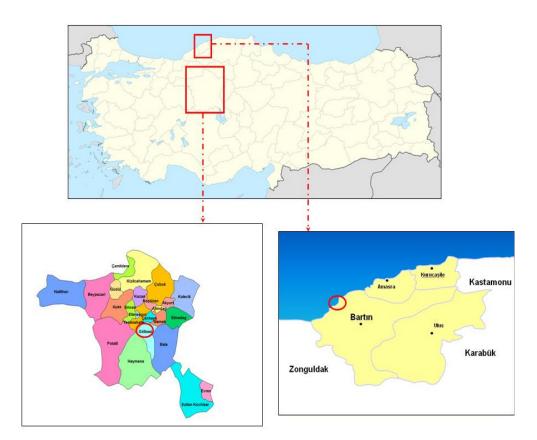


Figure 1. The locations of the study areas (Anonyms 2009a, Anonyms 2009b, Anonyms 2009d).

Ross and Iso-Ahola (1991) speculated that expectations of users about the recreational practices can be summarized as a getaway and grounding about the area. Manning (1999) stated that user satisfactions highly correlated with the quality of the recreational area. By using the results of these user satisfaction studies, managers can improve the plans and practices about the recreational area. For example, the GAP method, which is used to evaluate the relation between satisfaction and expectation can help to decide management actions (Saleh and Ryan, 1992; Carman, 1990). Cole and Cromption (2003) stated that improved service quality will increased user satisfaction which in turn increase tourist attractions to the place. Therefore, the aim of the current study is to evaluate the expectations of the users who attend the recreational activities in Mogan park and coastal areas of Mugada. And, to determine the user satisfactions for management practices for different areas used by the visitors. The research hypotheses that will be tested are:

- 1. The management expectation of users differs according to their socio-economic conditions.
- 2. The management expectation of the users differs according to their area usage habits.
- 3. The management expectation of the user's different recreational area.

# **MATERIALS AND METHODS**

In this study, a face to face interview has been carried out to determine users' satisfaction about the management practices in Ankara Mogan park recreation area and Bartın Mugada coastal areas. For the questionary, methods developed by Parasuraman et al. (1985, 1988), Fusselman (1993), Manning et al. (1994) and Li and Vogelson (2003) have been used.

### Study areas

Mogan lake is situated approximately 22 km south of the centre of Ankara and Gölbaşı district. Ankara is the capital of Turkey and the country's second largest city after Istanbul (Anonymous, 2009a; 2009b). It has a population of near 5 million including the eight districts under the city's administration. Mogan park occupies about 600.000 m² area surrounding the Mogan lake. On the park there are many recreational activity areas, a research center, bird watching houses and horse maneges (Anonymous, 2009c). And it is an attractive recreational area used by visitors mostly from Ankara (Figure 1).

The other study area, Mugada, is situated in the province of Bartın city (Anonym, 2003). Bartın is located on the coast of Black sea and Bartın province has near 200 thousand populations (Anonymous, 2009d). Mugada is 18 km away from the city center, can be reached either from Bartın or Inkumu (Anonymous, 1998). This area is about 400 ha. The area is bordered with Muda avenue in the northern site and Arıonu village and agricultural landscape in the southern side and Black sea and forested land surrounding the western side of the area (Figure 1). The area does not have enough accommodation infrastructures and therefore the site is mostly used

Table 1. Socio-economic backgrounds of users, their recreational habits and the activities they participate in.

	·	Ankara Mogan park (%)	Mugada coastal region (%)
	15-25 years old	53	40
	26-35 years old	22	31
Age	36-45 years old	15	19
	46-55 years old	7	6
	56 years old and older	3	4
Gender	Female	47	41
	Male	53	59
	Less than 500 Turkish Liras	4	6
Monthly Income	Between 500-850 TL	13	23
	Between 850- 1250 TL	26	24
	Between 1250-2250 TL	30	34
	2250 TL and over	27	13
With whom they visit the site	Family	22	42
	Friends	74	56
	Alone	4	2
	Less than once a year	14	13
How often they visit the site	More than once a year	60	64
	Once a month and more	22	15
	Once a week and more	4	6
	Everyday	0	2
Main activities that they	The site need basic designed area	14	30
Main activities that they have attended	The site need designed area	14	44
nave allenueu	The site need advanced designed area	72	26

by daily users (Aydın, 2005). The site is mostly preferred by one-day users as it does not have enough rest areas. There is only one camping site, seven restaurants and four tea gardens in the littoral zone of Mugada. Therefore both of these two study areas are situated in waterfronts but in different geographical regions. They both provide recreational activities but the user potentials and management practices differ. For example, Mogan park has urban characteristic and Mugada coastal region has rural characteristic.

#### User profile

Survey was conducted on 300 people (150 for Mogan park recreation area and 150 for Mugada coastal region). For the survey in the first part, users answered the questions about their age, sex, educational background, total monthly income, job status, with whom they visit the sites, how they reach the site, how often they visit the site, how much time they spend in the site, in which district they live, how many years they have lived in that district, the first three activities that they have attended in the site and general satisfactions.

In the second part of the survey, twenty-one questions that aim to appoint administration satisfaction were asked. Five point Likert scale has been used. For the scale the number 1 is indicating ineffectiveness and the number 5 is indicating impactful.

#### Evaluation of the data

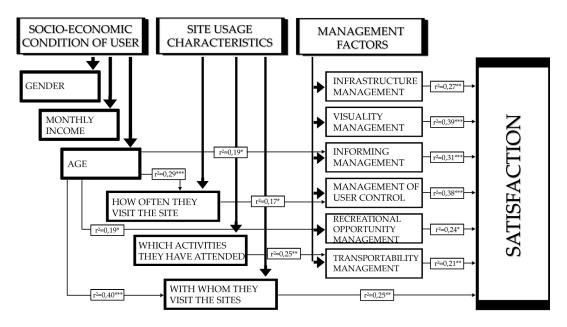
The statistical analysis of the whole study has been carried out by using SPSS 11 program. At first, factor groups have been formed. Cronbach's Alpha Reliability Analysis has been carried out to present the reliability of the factors. Single-acting Variance Analysis has been used to exhibit that the characteristics of users have effect on administration satisfaction. Lastly, Correlation Analysis has been carried out to present the interaction between the factors of user characteristics and management satisfaction and general satisfaction.

#### **RESULTS AND DISCUSSION**

About 53% of the people who have taken a part in the poll are in the 15 - 25 age groups in Ankara Mogan park. And 53% of them are male, 30% of them have 1250 - 2250 TL level of income, 74% of them visit the site with their friends, 60% of them visit the site once a year or more. On the other side, about 40 % of the people in Mugada Coastal Region are in the 15 - 25 age groups. And 59% of them are male, 34% of them have 1250 -

**Table 2.** The users' suggestions for the management.

			Anl	kara M	ogan p	oark			Muga	ada co	astal r	egion	
Area management factor		Highly unsatisfied	Partly unsatisfied	Unsatisfied	Satisfied	Highly Satisfied	Arithmetic Average	Highly unsatisfied	Partly unsatisfied	Unsatisfied	Satisfied	Highly Satisfied	Arithmetic Average
Transportability management factor $(\alpha = 0.74)$	Your opinion about the accessibility to the area	12	24	28	27	9	2.9	25	35	25	13	2	2.3
	Your opinion about the accessibility to the utilization on the site	5	29	28	31	7	3.1	12	35	36	16	1	2.5
Management of user control factor $(\alpha = 0.74)$	Your opinion about the security in the site	0	4	27	51	18	3.8	29	43	16	12	0	2.1
	Your opinion about the crowding on the site	2	6	22	52	18	3.7	6	20	36	23	15	3.2
	Your opinion about the management of the area	2	11	23	50	14	3.6	28	44	22	6	0	2.1
	Your opinion about the maintenance and cleaning of the site	1	9	18	48	24	3.8	33	23	35	7	2	2.2
Informing management factor $(\alpha = 0.75)$	Your opinion about the utilities to inform and help	6	12	33	38	11	3.3	35	44	14	7	0	1.9
	Your opinion about the relationship of the employee with the visitors	3	10	31	41	15	3.5	32	42	17	7	2	2.1
	Your opinion about the adequacy of the signs to direct and inform you	1	10	27	42	20	37	12	42	38	5	3	2.4
Visual management factor $\alpha$ = 0,70)	Your opinion about the overall appearance of the site	2	4	22	39	33	3.9	8	12	13	41	26	3.6
	Your opinion about the adequacy of the green part of the site.	3	12	19	44	22	3.7	2	22	24	34	18	3.4
Recreational opportunity Management factor ( $\alpha$ = 0,77)	Your opinion about the recreational quality of the green part of the site	4	10	37	31	18	3.4	21	37	26	15	1	2.3
	Your opinion about the diversity of the recreational activity in the site	5	18	42	30	5	3.1	33	44	15	8	0	1.9
	Your opinion about the cost of the recreational activities on the site.	10	17	40	24	9	3.1	13	33	29	20	5	2.7
	Your opinion about the aesthetics quality of the utilities on the site.	3	15	39	39	4	3.2	24	50	17	8	1	2.1

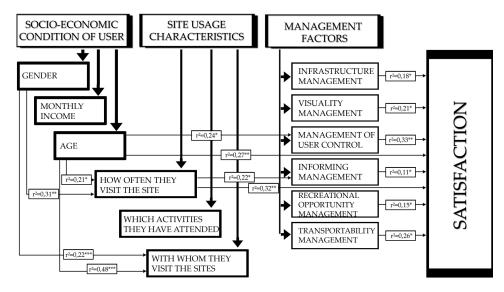


**Figure 2.** User characteristics and the interaction of user satisfactions with management practices in Mogan Park.

2250 TL level of income, 56% of them visit the site with their friends, 64% visit the site once a year or more (Table 1). The first three activities that are preferred by the visitors in Ankara Mogan park are picnic (44%), hiking up and water cycling (11%) and go-cart (7%). For the Mugada Coastal Region, the first three activities preferred by the visitors are swimming (44%), sightseeing (20%) and eating at restaurants (14%, Table 1). Data indicates that even though user profiles for each site do not differ drastically in terms of socio-economic condition. recreational habits show differences depending on the opportunity offered by each site. The visitors of both sites make use of the natural appearances of the sites. Besides the visitors of Mogan park are mostly dissatisfied with inadequate infrastructure, while visitors of Mugada coastal region mostly complained about both inadequate infrastructure and insufficient information (Table 2).

The result of the reliability analysis of six management factor groups showed that the first factor group deals with transportation issues (Transportability Management Factor) has  $\alpha$ = 0.74.Cronbach alpha coefficient (Table 2). This value is between 0.60 and 0.80 and indicating that the factor is highly reliable (Ozdamar, 1999). The second factor group deals with management of the user on the site and it is called as Control of User Management Factor. The Cronbach alpha coefficient for this factor is also 0.74 (Table 2) and it is designated highly reliable. The third factor group deals with the issues like user informing and it is called as Informing Management Factor. Its Cronbach alpha coefficient unit is calculated as  $\alpha$ = 0.75 (Table 2). As the calculated Cronbach alpha coefficient is again between 0.60 and 0.80 it is considered again highly reliable. The fourth factor group

is called as Visualty Management Factor and its Cronbach alpha coefficient unit is 0.70 (Table 2). Since the calculated Cronbach alpha coefficient is between 0.60 and 0.80 (Table 2). This factor is also being considered as highly reliable. The fifth factor group deals with the issues related with recreational opportunities and it is called as Recreational Management Factor. The Cronbach alpha coefficient unit for his factor calculated as = 0.77 (Table 2). Since the calculated Cronbach alpha coefficient is between 0.60 and 0.80 we can consider this factor as highly reliable too. The sixth factor group contains issues associated with infrastructure efficiency and it is called as Infrastructure Management Factor. Its Cronbach alpha coefficient unit is calculated as  $\alpha$ = 0.82 (Table 2). Since the calculated Cronbach alpha coefficient is between 0.80 and 1 this factor has high degree of reliability (Table 2). In Mogan Park the younger users visit the site less often in comparison with the older visitors. And the young users do not prefer to visit the site with their families (Figure 2). The age is one of the characteristics of users, interacting with informing and recreational opportunity of the site. Frequency of visiting the site is associated with management of user control factor. As the frequency of visiting the site decreases, management of user control factor becomes insufficient. Participated activity has interaction with transportability management factor. The users, who have taken part in an activity, find the transportability management ineffective. However, the visitors that come to the site alone do not have the same pleasure as the ones who do not come alone. The management factors (transportability management, user controlling management, informing management, visuality management, recreational



**Figure 3.** User characteristics and the interaction of user satisfactions with management practices in Mogada Coastal Region.

Table 3. The relation between management factors and the area.

Area management factors	Ankara Mogan park (A.A.)	Mugada coastal region (A.A.)	F
Transportability Management	3.01	2.46	20.37***
Management of User Control	3.77	2.42	321.99***
Informing Management	3.56	2.14	254.94***
Visual Management	3.82	3.54	5.23 *
Recreational Opportunity Management	3.25	2.30	100.04***
Infrastructure Management	3.31	2.26	157. 87***
Satisfaction	2.62	1.88	105.42***

(\*p<0, 05; \*\*p<0, 01; \*\*\*p<0,001 arithmetic average: A.A [1] 1: inefficient, 5: highly effective, [2] 1: discontent, 3: content).

opportunity management, and infrastructure management) are in interaction with satisfaction. When the management factors meet the expectations, satisfaction in the site increases. Visuality management and user controlling management are the ones that have an effect on satisfaction. In Mugada coastal region the young users visit the site less seldom than the older ones. And the young users do not prefer to visit the site alone. The age characteristic of the users is associated with controlling management (Figure 3).

The older visitors have greater expectations from the management about satisfaction. As the age of the users increase, the satisfaction they get from the site increases as well. Gender is in relation with the frequency of visiting the site and accompanier of the users. Male users prefer to visit the site alone and more often. There is not seen a relation between the income level and area usage habits, management expectations and satisfaction. The frequency of visiting the area is in interaction with informing

management factor. When the frequency of visiting the area decreases, the informing management is ineffective. The frequency of visiting the site has an effect on satisfaction.

When the frequency of visiting the area increases, the general satisfaction increases as well. The accompaniers of the visitors and the activities that they take part in do not have any effect on any management factor expectation. Management factors (transportability management, user controlling management, informing management, visuality management, recreational opportunity management, and infrastructure management) are in interaction with satisfaction. When the management factors meet the expectations, satisfaction in the site increases. User controlling management has the greatest effect on satisfaction among these management factors (Table 3).

In terms of user expectations, user controlling management and informing management are the variables differs most between the sites. Most of the differences can be

observed in visual management of the site. According to the data acquired, Mogan Park is better managed than Mugada Coastal Region. So this success has a direct effect on user satisfaction. The user characteristics (socio-economic condition and area usage habits) have an effect on management satisfaction and management satisfaction differs according to user characteristics. According to the data the management satisfactions are gathered under six factor groups. These groups are; transportability management, user controlling management, informing management, visuality management, recreational opportunity management, infrastructure management. Up to date, the studies that evaluate the recreational experience quality have been limited with physical sites and there has not been any subject dealing with the value of natural source of the site (Lynn and Brown, 2003; Manfredo et al., 1983; Kliskey, 1998; Patterson et al., 1998). In this study, area management has been evaluated with physical area management. social area management and natural area management. Thus, all the management factors that affect satisfaction harmonized. Data showed that the age is the most effective user characteristic on rural waterfront recreation area. Moreover, age has an effect on management expectation and accordingly satisfaction in the area. Also gender can affect usage habits for waterfronts though not entirely. The effects of age and gender on recreational area usage habits have been studied (Li et al., 2007a; 2008). However, which one (age or sex) is more effective on area usage habit has not been clarified. The result of the current study has presented that age has a more drastic effect on rural waterfront recreation area than gender.

Another drastic result of this study is that con-trary to many studies (Müderrisoğlu et al., 2005) there is no relation between economic conditions of users and their area usage habits. Li et al. (2007a; 2007b) advised that the visitors should be grouped according to their cultural structure (for example; modernist or post-modernist). They emphasize that firstly the differences between these groups should be examined and then these cultural groups should be observed according to their socioeconomic conditions separately. Because of the geographical position of the study areas, there are very different user profiles containing different cultural structure in our study. However, this difference could not be stated clearly as socio-economic conditions of the user have been examined one by one. As it is stated above, only the age can be accepted as a distinctive factor in the recreational experiences among the user characteristic elements. This should be remembered in future studies.

#### Conclusion

One of the assumptions of the study stating that usage habits affect management expectation has not been approved. But the frequency of visiting the area has a very limited effect. These kinds of findings have been reached in previous studies (Herrick and McDonald, 1992). Data indicate that the users who experiences about the site are more satisfied with current management situation than the ones who do not. This can be partly explained that when the frequency of visiting the area increases, the users have more opportunities to discover the site and also they may develop some ideas about the site. On the other hand, as it is stated on various studies, when the frequency of users' visiting the recreation site increases, their expectation change and become appropriate for the site (Shelby, 1980; Stankey and McCool, 1984).

The experience that is acquired in the studies present the reason of satisfaction relation. The studies that have been conducted show that satisfaction of the users change according to the opportunities that the site provides (Yu et al., 2005).

Therefore, the evaluation of satisfaction should be made according to the features of the area and usage purposes (Crompton et al., 1991). In this study, although both areas have similar natural features, their evaluation reliability is not high enough because of their usage type and different geographical position. The future studies should try different satisfac-tion evaluation by using different areas and usage types.

The studies that examine the impact degree of experiences which affect satisfaction emphasize that the general satisfaction depends much more on natural and social source quality than physical management of the area (Swan and Combs, 1976; Leiber and Fesenmaier, 1985; Connelly, 1987). The result of the current study is in accordance with this conclusion. If the managers of the areas want to increase experience quality of the users they should make improvement in user controlling and informing. For the future study, expectations of the users before they visit the site and experience quality of them after they have visited the site should be determined. Then the differences between the expectations and experiences should be examined and appropriate decisions should be made. For his purpose the GAP method can be used (Crompton and Love, 1995; Ryan and Cessford, 2003) and management decisions can be taken according to these results (Ryan and Cessford, 2003).

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