USER SATISFACTION IN NATIONAL PARKS

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ABSTRACT

This study has been prepared for the purpose of measuring place related satisfaction of the national park visitors, with the aim of providing a perceptual evaluation at the end. In order to measure the demographic characteristics of the national park visitors, their thoughts and evaluations on the national parks, their leisure management attributes, and their perception, satisfaction related with the national parks a questionnaire was used. Many methods are being devised to be able to analyze the balance between the recreational use and preservation of natural spaces. It appears that the basic purpose of these methods is to achieve recreational satisfaction. Understanding recreational satisfaction provides managers with critical information for developing various services to meet expectations of visitors and make them satisfied with their visiting experiences. Literature survey on satisfaction was conducted, and, in the light of all the gathered information, various statistical analyses were applied. Literature review and as a result of the statistical analyses, a conceptual relationship model that comprises satisfaction and other factors that have an impact on these concepts was formed. Satisfaction model that is encompassed by this conceptual relationship model is the first study to be done on this subject in the national park. It is intended to pave the way and be a guide for future studies.

Keywords: National Parks; satisfaction; perception; protected areas

INTRODUCTION

The irresponsible exploitation of natural resources for the sole purpose of satisfying human needs has brought about numerous problems in the fragile relations between nature and humankind. Almost all the definitions concerning sustainability and sustainable development require the involvement of posterity in today's decision making process. It appears that the theory of sustainable development reflects a new tendency in thought and involves changes in behavior, attitudes and value judgments (Demir, 2001). The researches on the balance between the recreational use and preservation of natural spaces have yielded many methods. Providing recreational satisfaction seems to be the sole objective of these methods that are being devised in such researches.

Natural and green spaces have a significant impact on human health and psychology. The potential advantages for the urbanites of living in touch with nature have been investigated by those working on environmental psychology and, in the majority of environmental literature, it has been widely accepted that, living in close contact with nature has positive effect upon human psychology. Ulrich and Parson, point out that, not only by being in direct touch (active contact) with nature, urbanites also, psychologically, benefit from nature by merely seeing nature (passive contact), such as watching the flowers in a park or looking at trees through a window or even by only knowing that there are such natural places around, and they can use them whenever they want (Özgüner, as cited in 2004).

Visitor satisfaction is a key factor for a successful business enterprise. Satisfaction instigates the possibility of a revisit and determines the experiences the visitors have during the visitation. In terms of marketing, on the other hand, a satisfied visitor means that he/she will come back again, or prolong his/her visit or encourage others to visit the same place. Increasing the number of conscious National Park visitors will, also, have effect on the development of tourism potential of the city where the park is situated. Visitor satisfaction can also be considered a significant factor determining the management performance of the national park; and, it is believed that well managed national parks contribute to the economic development of the surrounding residential areas. Measuring visitor satisfaction, therefore, is extremely beneficial. .

PLACE SATISFACTION

User satisfaction lies at the core of many sectors and work areas today (housing, commerce, tourism, service industry, recreational satisfaction). In all work areas involving human use, gathering information about such concepts like satisfaction, perception, preference provides significant clues for getting more successful results in these areas. Today, numerous methods and measuring techniques are being used for measuring satisfaction. Managers can develop various activities and services to address visitor expectations and make them satisfied with their experiences during their visit. Visitors usually come with already clear expectations as to the quality and types of services that a certain place provides. To what degree their expectations are met after the visit will determine the visitor satisfaction level. When general performance during or after visiting the destination meets or exceeds the expectation, visitor is considered to be satisfied. However, when perceived performance falls beneath the expectation, visitor, in this case, may be dissatisfied.

According to Crosby (1993) and Oderlund (1998), customer satisfaction is increasingly becoming a salient issue in most service industries (Akama and Kieti, as cited in 2003). With reference to the tourism and hospitality industry, it can be stated that satisfied tourists are more likely to recommend the tourist destination to others, which is the cheapest and most effective form of marketing and promotion. Furthermore, tourist satisfaction usually contributes to increased rates of the retention of tourists' patronage, loyalty and acquisition, which in turn helps in realizing economic goals like increased number of tourists and revenues. There is usually a positive association between tourist satisfaction and the destination's long-term economic success. Moreover, tourists can express their satisfaction through many ways such as positive word of mouth, paying compliments to the service or product provider and development of long-term loyalty to the destination. At the same time, the relationship between the tourist and the tourist destination is strengthened. Thus, the quality of the services that are provided has serious influence on the overall tourist satisfaction (Akama and Kieti, 2003).

As Rosenberg and Hovland point out, when different behavioral components (cognitive, affective and behavioral) are taken into consideration, we see that some researchers define user satisfaction in terms of affective constituents while others maintain that perception is a hugely significant factor. The definitions that rely on the affective constituents identify user satisfaction as satisfaction with the place one lives in and reflection of happy feelings on the place where one lives. The definitions that rely on the cognitive constituents, on the other hand, define user satisfaction by comparing the existing situation with the standards, in terms of expectations and demands (Kellekçi and Berköz, as cited in 2006).

Another view defines place satisfaction as a multidimensional and concise judgment about the perceived quality of a place (Stedman, 2002). Satisfaction depends upon many variables. It has been observed, both in recreation and community sociology literature, that social criteria have a significant role (Eisenhauer et al., 2000; Jonas et al., 2003; Kyle et al., 2004a, 2004c; Mesch and Manor, 1998; Stedman, 2003). Being able to engage in activities that one likes is a criterion that contributes to the place satisfaction of persons in recreation (Bricker and Kerstetter, 2000; Kyle et al., 2004a; Manning, 1999). Ecologic and environmental conditions, also, contribute to the formation of satisfaction one feels for a certain place (Eisenhauer et al., 2000; Kaltenborn, 1998; Kyle et al., 2004a, 2004b; Stedman, 2002; 2003).

Studying user satisfaction and choosing one of the nature protection zones as the study area Müderrisoğlu et al. (2005), in order to measure user satisfaction in Abant Nature Park, used ROS (Recreational Opportunity Spectrum) method. It was observed that the general satisfaction expectations of the park users were similar to the actual satisfactions, they got from the area, but that satisfaction differed in terms of the relation between the purpose of their visit and the qualities that the park offered. It has been observed that identifying the bearing capacity of the area accurately, giving visitors information about the natural beauties the area offers, the type and the form of using the area, and the range of activities contributes to the creation of conscious users and increases the satisfaction that they get from the area (Müderrisoğlu et al., 2005). Uzun and Müderrisoğlu (2010) found that rural area satisfaction and dissatisfaction factors are affected by user characteristics. It was found that

satisfaction factors slightly varied depending on educational level, age, the time spent in the area, visiting frequency, and group size and that the most significant user characteristic was education.

STUDY AREA AND METHODOLOGY

In this study, 5 national parks in the Marmara Region, the most developed region in Turkey in terms of population and economic growth, with different characteristics and highest user density rates have been chosen as the study area. These 5 national parks that are chosen as sample area can be sub-divided into two groups: National parks with natural qualities (Uludağ National Park, KazDağları National Park, KuşCenneti National Park) and national parks with historical qualities (Gallipoli Historical Peninsula National Park and Troy Historical National Park).

In order to measure the demographic characteristics of the national park visitors, their thoughts and evaluations on the national parks, their leisure management attributes and their satisfaction with national parks a questionnaire was used. The questionnaire forms have been accordingly designed to provide relevant data to identify tendencies and evaluate them with suitable analysis techniques. The questionnaire was conducted face to face in the national parks chosen as the study area during summer months of 2010. As part of the study, the data gathered from the 400 survey forms have been analyzed bidirectional and evaluated with SPSS statistical package program in 95% confidence interval, with a $p < 0,05$ significance level.

There are two hypotheses in this study:

A. Measuring satisfaction of national park users and explaining its sub-dimensions; three different questions have been used for measuring satisfaction. The purpose of these questions is to be able to explain the concept of satisfaction with its sub-dimensions. For all these questions, measurement was done by using Likert scale.

B. Identifying other factors that affect satisfaction and explaining the relation among them; such as demographic properties, in particular, will have effect on satisfaction.

FINDINGS AND DISCUSSION

The evaluations of survey forms coming from the study area convinced us that it was very important to, initially, define visitor profile: It is seen that, of all the national park visitors who joined the survey 170 (42,5%) are female and 230 (57,5%) are male.

Table 1. Demographic Characteristics of Survey participants

	Frequency	Percentage (%)
Gender		
Female	170	42,5
Male	230	57,5
Age		
20 years old and younger	62	15,5
21-30 years old	185	46,3
31-40 years old	71	17,8
41-50 years old	51	12,8
51 years old and older	31	7,8
Income		
High income group	16	4,0
Upper middle income group	64	16,0
Middle income group	270	67,5
Lower middle income group	35	8,8
Low income group	15	3,8
Education		
Primary school	59	15,3
High school	129	33,4
Associate degree	23	6
Undergraduate and graduate	175	45,3

The sample group is balanced in terms of the gender spectrum, and also 64,1% of the national park visitors participating in the survey are in 20-40 age span. 270 (67,5%) of the national park visitors participating in the survey are from middle income group. It was also found that the results did not alter when the national parks were evaluated separately. Thus, it can be stated that members of middle income group visit national parks more often than the rest. University graduates and high school graduates constitute the majority of the national park visitors by a 78.7% ratio (Table 1).

In order to obtain data about the park usage and preferences of the national park visitors, participants were asked about their goal in coming to the national park. The participants were asked to make three choices in order of priority in reply to the question "What is your purpose in visiting national parks". The general assessment of the answers given by the survey participants showed that their first three choices were respectively, seeing historical assets, sight-seeing and relaxing.

Table 2. What is your purpose in visiting national parks?

	1. Choice		2. Choice		3. Choice	
	Frequency	(%)	Frequency	(%)	Frequency	(%)
To walk	16	4	18	4,5	23	5,8
To do exercise	6	1,5	6	1,5	7	1,8
To have a picnic	32	8	12	3	16	4
To get some fresh air	23	5,8	12	3	15	3,8
To see natural life	51	12,8	28	7	14	3,5
To stop over	5	1,3	4	1	4	1
For natural landscape beauties	11	2,8	27	6,8	8	2
For the flora/vegetation cover	4	1	10	2,5	10	2,5
To relax	35	8,8	42	10,5	63	15,8
For sight-seeing	62	15,5	85	21,3	52	13
To see historical assets	105	26,3	22	5,5	22	5,5
To take a vacation	20	5	31	7,8	17	4,3
For outdoor activities	3	0,8	10	2,5	3	0,8
For camping	6	1,5	6	1,5	4	1
For nature photography	5	1,3	7	1,8	15	3,8
For the fauna/wild life	3	0,8	9	2,3	9	2,3
Other	8	2	1	0,3	1	0,3
Unanswered	5	1,3	70	17,5	117	29,3
Overall	400	100	400	100	400	100

When participant choices on their purpose for visiting national parks were analyzed in terms of the national parks that comprise the study area it was found that; Uludağ National Park visitors, for, especially, picnic (21,5%) purposes and for getting fresh air (16.5%). KazDağları National park visitors who wanted, especially, relaxing (29.2%) and sight-seeing (19.1%), KuşCenneti National Park visitors who wanted to see natural life (47.6%).Gallipoli Historical Peninsula National Park (62.5%) and Troy Historical National Park (70.5%) visitors for their historical assets. When purposes in visiting the national parks were evaluated in terms of demographic characteristics, no differentiation was observed; similar results were obtained.

General evaluations have been carried out on measurements concerning the satisfaction rates for such factors as security, access transportation that affect user satisfaction; they were, at the same time, evaluated by means of different analyses made by way of crosstabs for each national park in the study area. When the averages belonging to these questions that are referred to as "security and transportation questions" were analyzed, it was found that feeling secure/insecure had the highest average while the statement 'parking places are enough' had the lowest average.

It was found that, of all the national park visitors who joined the survey, 58,8% (28.6%+30.2%) of them felt secure in the national park, 35,7 (%) of them felt neither secure nor insecure, 5,5 (%) of them felt insecure. When the evaluation was carried out in terms of distinct national parks, it was found that an overwhelming majority of KuşCenneti National Park visitors felt totally secure in the park. It can be seen that, of all the national park visitors who joined the survey 45% (30.2%+14.8%), think that access to national parks is easy while 27,9 (%) (19.1%+8.8%) of them think that it is not easy. It can

be said that 41,1 (%) of the participants are undecided whether the number of the parking places are enough or not. 32,6 of the participant, on the other hand, think that the number of the parking lots are enough, while 26,3 of them think the number is not enough.

Table 3. Average points belonging to questions on security and transportation factors

	N	Min.	Max.	Average.	Std.
Do you feel safe in this NP?	398	1	5	3,82	,961
There are enough parking places in this NP.	399	1	5	3,11	1,073
Access/transportation to this NP is easy.	398	1	5	3,23	1,178

Satisfaction Analyzes

The answers to the question that was designed to measure overall satisfaction were first analyzed totally and then were applied factor analysis, which was to be later used for regression analyses. It was found that, of all the national park visitors who joined the survey 67,3% were satisfied with their general visiting experiences. 64,4 (%) of them were satisfied with the natural environment quality of the national park. 54,4 (%) of them were satisfied with the quality of the social surroundings of the national park. 43,5 (%) of them were neither satisfied nor dissatisfied with the possibility of participating in activities, in the national park. When, by means of crosstab method, this question was analyzed in respect to each national park the results obtained were similar to the general results. When the average points are evaluated, natural environment quality of the national park has the highest (3,75) average while participating in favorite activities has the lowest one (3,27). It can, therefore, be said that the overall satisfaction levels of the national park visitors are high.

In order to see whether general satisfaction status is in any way related with demographic characteristics, the number of visits to the park and the time spent in the park; a correlation analysis was carried out for these variables. Correlation analysis is significant at the level of 0,01 and 0,05. No relation was found between overall satisfaction and age, gender and the time spent in the national park.

Table 4.Evaluation of overall satisfaction for national parks

Indicate your satisfaction level with the following criteria during your last visit to this park.	strongly dissatisfied	Dissatisfied	Neither satisfied nor dissatisfie	Satisfied	Strongly satisfied	Mean
Your general experience?	40 (% 10.1)	36 (%9.1)	53 (%13.4)	160 (%40.5)	106 (%26.8)	3,65
Natural environmental quality of the national park?	12 (%3.1)	37 (%9.4)	91 (%23.2)	151 (%38.4)	102 (%26)	3,75
Social environmental quality of the national park?	19 (%4.8)	39 (%9.9)	121 (%30.9)	139 (%35.5)	74 (%18.9)	3,54
The possibility of your joining your favorite activities in the national park?	42 (%10.7)	24 (%6.1)	170 (%43.5)	98 (%25.1)	57 (%14.6)	3,27

There was, however, a negative relation with educational status at the level of 16,8 (%). Thus, it seems, the higher educational status is the lower overall satisfaction level becomes. As higher education means higher expectations, when a place fails to meet the expectations, a drop in the satisfaction level is fairly normal. A positive correlation was found between overall satisfaction and income at the level of 17%. The higher the income is the higher the satisfaction level gets. There is also a positive relation between the number of visits to the national parks and overall satisfaction at the level of 17,9 (%). The higher the satisfaction is the bigger the number of the visits reaches.

Table 5.Correlation analysis

	Age	Education	Gender	Income	Number of visits to NP	Time spent in NP
Overall satisfaction	,005 ,926	-,168[**] ,001	,026 ,611	,170[**] ,001	,179[**] ,004	,023 ,652

Overall Satisfaction Factor Analysis

Four propositions in the first question have been bundled under 1 factor, to be used in the regression analysis and called overall satisfaction. As a result of KMO analysis, which was made to test the suitability of the question for the factor analysis, a KMO value of 0,757 was found, which is a remarkably high value and shows that the data set is suitable for the factor analysis. The 1 factor that was obtained explains 60,5 (%) of the total variance. The overall reliability coefficient (Cronbach Alpha) calculated for the overall satisfaction factor is α=0,776 which shows that the scale is reliable. The factor loads for the items of overall satisfaction factor are shown in Table 6, and the loads for the first three factor items are above 0.7. 390 surveys were involved in this analysis.

Table 6.Overall satisfaction total variance

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2,421	60,513	60,513	2,421	60,513	60,513
2	,676	16,898	77,411			
3	,531	13,279	90,690			
4	,372	9,310	100,000			

Table 7.Overall satisfaction factor loads

Factor name	Factor items	Factor load	Variance	Reliability
OVERALL SATISFACTION	NP natural environment quality	,833	60,513	0,776
	NP social environment quality	,816		
	Satisfaction with overall visiting experience	,768		
	Possibility of joining in favorite activities in NP	,687		

Satisfaction Scale Factor Analysis

Factor analyses have been implemented by combining the questions that were prepared to measure satisfaction. As a result of the analyses, it was found that the reliability coefficient (Cronbach alpha) for the satisfaction dimensions of the national park visitors is α=0,936. The coefficients for this research are high, which shows that the designed scale has a high level of reliability. 285 survey forms, in which all the questions received valid answers, were included in this analysis. As a result of KMO analysis, which was made to test the suitability of this scale for the factor analysis, a KMO value of 0,898 was found, which is a remarkably high value. As a result of the factor analysis, a quadruple factor structure has emerged according to Eigen values. These four factors explain 69,4 (%) of the total variance.

The first factor is called satisfaction with the physical qualities and, alone, explains 41.057% of the total variance. It may, therefore, be claimed that satisfaction with the physical qualities is the most significant factor in the measurement of satisfaction. This factor is composed of 6 items, and the factor, load of the first four items is above 0.7.

The second factor is called satisfaction with the service quality of the historical areas and explains 13.989% of the total variance by itself. This factor, too, is composed of 6 items and the factor, load of the first three items is above 0.7.

The third factor is called satisfaction with the equipment and explains 8.315% of the total variance by itself. The factors show a gradual decrease after the 2nd factor. This factor is composed of 7 items, and the factor, load of only the first 2 items is above 0,7 but the rest also scored remarkably close to scored 0,7.

The fourth factor is called satisfaction with function areas and explains 6.158% of the total variance. This factor is comprised of 4 items, and the first 2 items have factor loads above 0,7.

Table 8 shows the satisfaction scale sub-factors, factor loads and the variance they explain. Besides, reliability analyses for each factor were implemented separately, and reliability coefficients for each factor were found as high.

In order to find whether satisfaction sub-factor averages of the national park visitors who joined the survey display any significant difference in terms of gender variable, a T-test was done and, as a result of the analysis, no difference was found. One Way Anova tests were carried out in order to identify whether satisfaction sub-factors display significant difference in terms of the age variable. As a result, it was found that the factors, statistically, display no significant difference in terms of the age variable.

When the analysis was carried out in terms of the income groups, the difference between group averages and points for satisfaction with the physical qualities and points for satisfaction with function areas is, statistically significant (F=5,910; p=0,000<0,05 and F=3,757; p=0,005<0,05). The points of the middle income group for satisfaction with the physical qualities are higher than those of the upper-middle and the high income groups. The scores of the middle income group for satisfaction with the function areas are higher than those of upper middle, income group.

Table 8.Satisfaction scale factor structure

Factor name	Factor items	Factor load	Variance	Reliability
Satisfaction With The Physical Qualities	Natural life	,876	41,057	0,884
	Natural beauties	,865		
	Landscape	,826		
	Quietness	,791		
	Historical assets	,634		
	Lively environment	,583		
Satisfaction With The Servie Quality Of Historical Areas	Archaeological areas	,897	13,898	0,878
	The Outdoor museum	,884		
	Information service	,775		
	Martyrs' cemeteries	,610		
	Service building	,608		
	Services provided	,574		
Satisfaction With The Acquipment	Garbage cans	,803	8,315	0,849
	Toilets	,799		
	Restaurant/cafe	,683		
	Illumination	,664		
	Information signboards	,661		
	Orientation signs	,552		
	Reception	,492		
Satisfaction With The Function Areas	Resting area	,750	6,158	0,851
	Picnic area	,726		
	Landscape watching spots	,693		
	Camping areas	,516		
TOTAL VARIANCE			69,428	

Satisfaction with physical qualities and function areas displays a significant difference in terms of educational status, whereas satisfaction with the service qualities of historical places and satisfaction with equipment display no significant difference in terms of educational status. As a result of the supplementary post-hoc analysis which was carried out to identify the sources of the differences, it was found that the differences have their source in the primary school graduates and university graduates. The averages of the points of primary school graduates for satisfaction with physical qualities are higher than those of high school and university graduates and those with master degrees (F=6,208; p=0,000<0,05). When the averages for satisfaction with functional qualities are evaluated, we can see that the scores of high school graduates are higher than those of university graduates and postgraduates (F=3,951; p=0,009<0, 05). In this context, it appears that as educational status rises satisfaction level decreases. As expectations rise along with the educational level, it is only normal that the satisfaction level should go down as educational status goes up.

Table 9. Averages for satisfaction scale factors

	N	Min.	Max.	Average.	S.s.
Satisfaction with physical qualities	399	1,00	5,00	4,0339	,71428
Satisfaction with the service quality of historical areas	398	1,00	5,00	3,4448	,82251
Satisfaction with equipment	398	1,00	5,00	3,2060	,79830
Satisfaction with function areas	390	1,00	5,00	3,6947	,81662

Regression Analysis

Deciphering the relationship between overall satisfaction, and the factors that constitute the satisfaction scale and identifying the other variables that affect satisfaction have been the main objective of this study. In order to unfold these relations, multiple linear regression analyses have been carried out. Firstly, overall satisfaction was analyzed in terms of the obtained satisfaction factors. All the variables included, the analysis was carried out with enter method on 278 survey forms. R^2 value was found to be 0.182 and Durbin-Watson coefficient was calculated as 1.962, which shows that there was no autocorrelation in the analysis. The fact that the significance level of F value is smaller than 0.05 means that the relation among the variables as a whole is concordant with the linear regression model.

Table 10. Regression model summary

					Change Statistics					
Model	R	R^2	R^2_d	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	,427[a]	,182	,170	,85127841	,182	15,225	4	273	,000	1,962

Since all the variables in the model have the same unit of measurement, the B, and BETA values are remarkably close to each other, and their order does not change. In this analysis, it was observed that, even when all the variables are included, only 2 variables have a remarkable effect on overall satisfaction. "Satisfaction with the Service Quality of Historical Places" and "Satisfaction with Function Areas" variables were, in all the tried methods, excluded from the analysis. When the effect sizes of the two variables that affect overall satisfaction are evaluated, we can see "satisfaction with equipment" is on the first rank with a 0,323 effect size, and "Satisfaction with Physical Qualities" is on the second rank with an effect size of 0,234. Thus, when equipment satisfaction increases by 1 unit, overall satisfaction increases by a measure of 0,323, and, when satisfaction with the physical qualities increases by 1 unit, overall satisfaction increases by a measure of 0,234. Accordingly, the equation should be as follows:

GM = 0,234FOM + 0,323EM

Table 11.Table of coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	CONSTANT	-,085	,051		-1,672	,096
	Satisfaction with physical Qualities	,234	,051	,251	4,582	,000
	Satisfaction with The service Quality of Historical Areas	,032	,051	,034	,620	,536
	Equipment satisfaction	,323	,051	,346	6,328	,000
	Satisfaction with Function Areas	,010	,051	,011	,204	,839

Then, control variables, sub-factors and the variables, which were assumed to have effect on overall satisfaction, "Feeling Secure in NP" and "Access to NP is Easy"- were included, and the whole analysis was repeated. Finally, the analysis was repeated with 11 variables and by means of Backward method. The analysis covered 268 survey forms. The R^2 values obtained at every step is given in Table 12 It can be seen that, as the number of variables decrease the R^2 values go down too. The analysis is concordant with the linear model and is significant. This analysis was completed in 7 steps, and 5 variables were included in the model in these steps. They are satisfaction with physical qualities, equipment satisfaction, feeling secure in the national park, income state, and educational status. Although all the other independent variables display positive effect in this model, education displays negative effect; that is, as overall satisfaction increases for 1 unit educational status decreases for a measure of 0,101. Table 13.

Table 12. Regression model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	,515[a]	,265	,233	,82252572	,265	8,384	11	256	,000	
2	,515[b]	,265	,236	,82092894	,000	,003	1	256	,955	
3	,515[c]	,265	,239	,81938878	,000	,033	1	257	,856	
4	,514[d]	,264	,241	,81813324	-,001	,207	1	258	,650	
5	,513[e]	,264	,244	,81687112	-,001	,198	1	259	,656	
6	,512[f]	,262	,245	,81596222	-,001	,420	1	260	,518	
7	,509[g]	,259	,245	,81640546	-,004	1,285	1	261	,258	2,012

Table 13. Table of coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
7	(Constant)	-1,313	,356		-3,688	,000
	Satisfaction with physical Qualities	,138	,053	,149	2,619	,009
	Equipment satisfaction	,254	,051	,272	4,977	,000
	Education	-,104	,044	-,127	-2,347	,020
	Do you feel secure in this NP?	,254	,059	,241	4,292	,000
	Income	,201	,077	,142	2,608	,010

As a result of all these analyses, the model in Figure 1 has been devised to account for the overall satisfaction. The **R^2** values obtained in these analyses is low. This means there may be other independent variables that are not included in this study and can affect satisfaction, but, for researches in the field of social sciences, these R^2 values are considered normal.
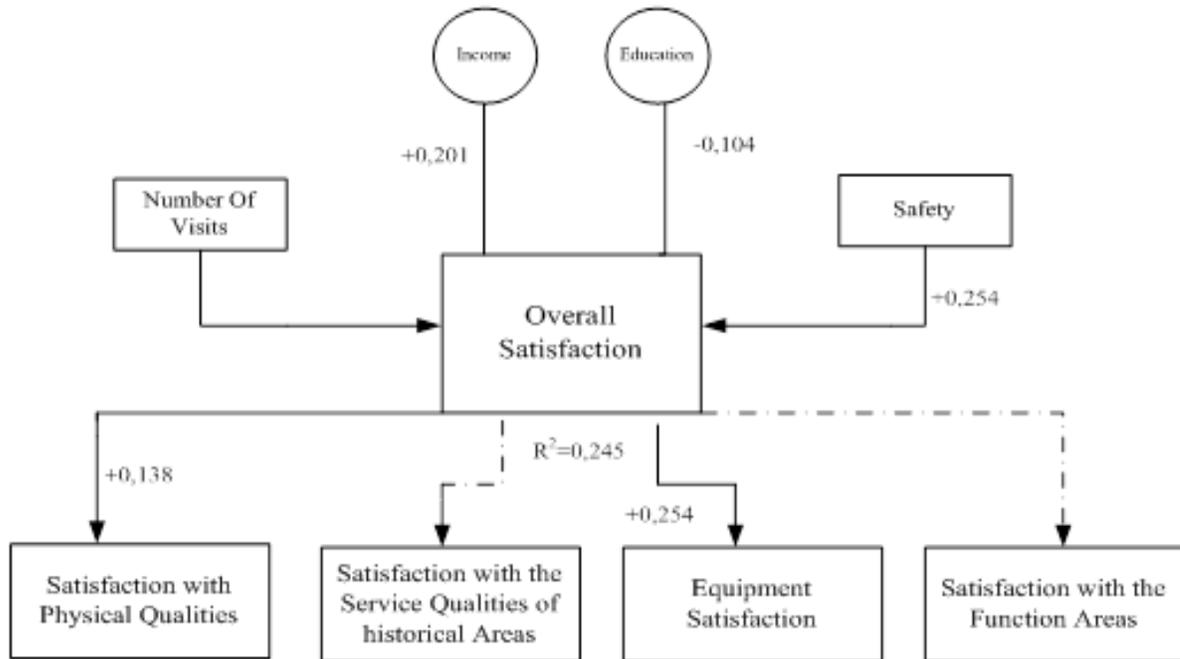

Figure 1.Regression model

Only two of the factors obtained in satisfaction scale ranked as independent variables in the regression analyses: satisfaction with equipment and satisfaction with physical qualities. It was, however, observed that equipment satisfaction has a more dominant influence on satisfaction than the other factors. This situation can be, also, seen as the effect of the provided service quality on satisfaction. Although the other two factors obtained through factor analyses, that is satisfaction with the service quality of historical areas and satisfaction with function areas, do not appear in the regression analysis, they, nevertheless, are in indirect relationship.

The model includes both the relations obtained from correlation analyses and the relations obtained from regression analyses. Educational status, on the other hand, displayed a constant negative effect on satisfaction in all analyses. Satisfaction, normally, decreases as educational status rises. As higher education means higher expectations, when these expectations are not fully satisfied, a drop in the satisfaction level is fairly normal. Works on the relevant literature also support this claim. Income state, however, has a positive influence on satisfaction. It can be assumed that, as the income level rises the activities in the area become more accessible, opportunities for participating in more activities increase and conditions of access to the area get better.

Feeling secure in the national park has, also, positive effect on satisfaction. Finally, after the correlation analyses, the relation between the number of visits to the national park and satisfaction was examined and, it was found that when satisfaction increases the number of visits increase too.

CONCLUSION

In the framework of the perceptual evaluation of national park users and by examining user satisfaction, we tried, in this study, to explain the concept of satisfaction and the sub-dimensions that constitute the concept, and investigated the relations between them and the other factors that are assumed to have influence on satisfaction. National parks are natural, recreational protection areas and contribute to the economies of the countries. As the study area, out of 7 national parks in the Marmara

Region, the most developed region of our country, 5 national parks with different characteristics and highest user density rates have been chosen. These chosen national parks are, also, valuable in terms of meeting recreational needs.

User satisfaction is a concept that lies at the core of many sectors and work areas today. In order to secure loyalty and increase attachment, sectors finance works on customer satisfaction and try to identify usage preferences. Understanding recreational user satisfaction provides managers with vital data for developing various services to meet expectations of visitors and make them satisfied with their visiting experiences. User satisfaction is one of the factors that determine management performance of recreational areas. There is, also, a positive association between tourist satisfaction and the long-term economic success of an area. When recreational satisfaction is achieved, user attitudes towards the environment begin to change and the quality of social life increases. Thus, a well-managed national park will contribute to the economic development of the settlements. A satisfied visitor will visit again, recommend the place to others, want to know more about the area and may, in time, become a loyal frequenter. This will also contribute to increase the rates of protecting the area in question and, indirectly, to the realization of economic objectives for the area.

In this study, various analyses have been carried out, and the presumptions have been tested in order to identify the relations that were presumed in the hypotheses. The satisfaction questions that were devised for that purpose were subjected to a factor analyses and, as a result, 4 sub-factors, which had high reliability values and which reflect overall satisfaction and satisfaction sub-dimensions, were obtained. They are named as *Satisfaction with Physical Qualities, Satisfaction with the Service Quality of the Historical Areas, Equipment Satisfaction, and Satisfaction with Function Areas.* The highest mean values, in the analyses, were obtained for satisfaction with physical qualities factor and this factor, alone, accounts for the biggest part of the variance.

Satisfaction with physical qualities and equipment satisfaction, the factors obtained in the satisfaction scale, have been included in the conceptual relation model designed on the basis of the results obtained from many analyses. Equipment satisfaction is more dominant influence on overall satisfaction than the other factors. This situation is attributed to the influence of the provided service quality on satisfaction. Feeling secure in the national park, also, has a positive effect on satisfaction. When the relation between satisfaction and the number of visits is examined, it can be seen that when satisfaction increases the number of visits increase too. Thus, satisfaction is a source of motivation for subsequent visits and is effective in creating attachment and loyalty to the visited area.

It was found, on the other hand, that satisfaction and satisfaction sub-factors do not display a significant change in relation with gender and age. However, a significant differentiation was observed in relation with income and educational status. Satisfaction scores dropped as educational status increased. Since, in direct proportion to this variable, the expectations for the visited area will increase, dissatisfaction is unavoidable if these expectations are not met duly. Income state, on the other hand, has a positive effect on satisfaction. It can be assumed that, as the income level rises the activities in the area become more accessible, opportunities for participating in more activities increase and conditions of access to the area get better.

As mentioned before, the best way to measure the performance of a recreational area or service industry is to conduct customer satisfaction surveys. With these surveys, the management and service performance of the national park can be identified, and user involvement in the area and management can be achieved. In today's world, where participative management plans are a necessity, the human-environment relation and the factors that increase satisfaction need to be taken into consideration in recreational planning. In this way, services will be developed for the needs and expectations of national park users and these expectations will be met as much as possible. Finally, involvement of society in planning and management will, thus, be achieved.

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