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DETERMINATION OF THE PEOPLE'S SATISFACTION WHO GO TO THE ZOO FOR RECREATIONAL ACTIVITY

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ABSTRACT

This study done for the determination of the people's satisfaction who go to the Gaziantep Zoo in their leisure time for recreational activity. The population consists of 1316 people who came to the Gaziantep Zoo in 2014 for recreational activity. The survey done by Uysal (2005) used for data collection. The datas obtained in this study statistically analysed by using SPSS 16.0 packaged software. In data analysing; frequency, percentage, average, standard deviation used as statistical method, student t-test used for comparing two independent groups having variables with normal

distribution, ANOVA and Tukey multiple comparison tests used for comparing more than two independent groups having variables with normal distribution. As a result of the study, people who come to zoo in their lesiure time mostly inhabit in Gaziantep province, high school graduates and students prefer more to visit zoo, mostof the participants come with the advice of acquaintances, most of them spend more than an hour and a great mojority of them are pleased with the quality of services.

Key Words: Recreation, Leisure, Zoo, Satisfaction

INTRODUCTION

The zoos undoubtedly bring together people with wild and domestic animals all over the world. The zoos are designed for the exhibition of animals who are living creatures (Mason, 2000). Many zoos with various features founded in our country and world throughout the history. In ancient times animals are exhibited for fun and identified as creatures used in fairs, arenas and circuses for amuse and satisfy the curiosity of emperors and royals (Gunergun, 2006).

These areas where the animals taken from the nature and raised, provide information to people about animals and their natural life. The zoos are the best source of information about animals that people can reach. Designing the zoos properly are very important for informing the visitors truthfully (Yilmaz et al.,2010). The zoos are the places where people and animals meeting and interacting , there are many curriculum and informing tours in it and also it can changes existing knowledge and behaviours of the visitors (Falk et al.,2007).

The visitors can reach many information about animals and nature consciously or unconsciously while they having a good time in zoos, which are designed properly to their natural habitat(Yılmaz, 2007).One of the important aim of the zoos is education and recreation (Ulgen and Tekin, 2000). Zoos mean cultural and educational areas and another important formation intent of the zoos is scientific researchesb (Akbaba, 2001).

Exhibition methods in zoos which had the aims such as; education, recreation and protection, varied along the history. A lot of design studies done for make visitors feel them in natural habitat of the animals and keep their interaction with animals at high levels. Certain zoo typologies came up as a result (Yilmaz and Ozbilen, 2011).

Modern zoos serve four puposes in brief. These are recreation, education, protection and research. Our research topic is recreation activity and forming one of the four main purposes of the zoos (Jones, 1989; Ozgucan and Bekdemir, 2008; Yilmaz and Ozbilen, 2011). Being one of the section of natural life and wild animals that reach to people, recreational and educational use of the zoos are at the forefront (Morgan and Hodgkinson, 1999).According to educators, while animal spectacles and special case of the animals ensure the amusement of the visitors, it also ensure the continuity of their learning interest (Wylson, 1994).

The zoos which are one-day recreation activities, have an important effect on decreasing backbreaking effects of working tempo and crowded habitations and psychological pressure on people (Berkyez, 1992). A natural and complete environment has been created in zoos with trees, ponds and animals exhibited properly to their natural habitats and this environment resembles a green island within the city, which is full of cold buildings. (Fradich, 1998). Considering these features it attracts visitors of all ages and create both relaxing and entertaining impression on people which are main themes of the recreation (Acikkol, 1984).

The zoos have an important effect on visitors, which are the places uniting education and recreation. These environments must exist especially while educating the children (Kenneth, 1987). A certain part of the visitors prefer zoos to relieve entire week of tiredness. Because zoos have an impressive environment uniting natural beauties and animals and composing the most strange manner of performing recreation in open fields.

If we shortly examine the preference reasons of Gaziantep Zoo for this study; recreation area works started in 1998. It put into service on 1000 decares land within the Burç Forest by Gaziantep Metropolitan Municipality in 2001. It is the biggest zoo in Turkey and middle east, third in the world and second in Europe (<http://zoo.gaziantep.bel.tr/>, 2014). Millions of people visiting zoos for make use of their spare time and as a recreation activity is an affecting factor for this study so this is a scientific study done for searching the reasons why people come to Gaziantep Zoo for make use of their spare time, how long time they are spending there and if they are pleased with this recreation activity.

Research objectives: This study aims to determine if people are pleased who come to zoos in their leisure time as a recreation activity. Within the scope of this reason we aim to determine the visitors preference of coming zoo in their spare time, how often they visit zoos, how long time it takes, if they have come any zoo before, with whom they come, how they heard about the zoo, their purpose of visit and if they are pleased with the services in zoo.

Importance of research: When considered as a recreation activity, it is seen that there is scarcely any working for zoo visitors. The aim of this study is determining the visitors way of visit, reason of the visit and if they are pleased with the services in the zoo and informed the visitors who will visit the zoo as a recreation activity. This study will be supportive to zoo administration for giving better services and contribute to develop a strategy

for make more people come to the zoo. In the light of these results, we aim to help next other scientific studies which will be done.

MATERIAL AND METHOD

When examined the result of satisfaction scale factor analysis, Kaiser-Meyer-Olkin measure of sample adequacy found as 0.868. Considering this value, sample extensity is sufficient and above average for factor analysis. In addition to this, it was seen that value of Bartlet sphericity test found statistically significant ($p=0.001$). It is a indicator of availability of the scale.

Population and Sample: The population consists of the visitors of Gaziantep Zoo in 2014. The sample group consists of 1316 people (536 women, 780 men). Personal informations about research group are given in Table 1.

Table 1: Personal Informations about the Research Group

		N	%
Gender	Women	536	40.7
	Men	780	59.3
Age	10-14 aged	136	10.3
	15-19 aged	228	17.3
	20-24 aged	384	29.2
	25-29 aged	188	14.3
	30-34 aged	92	7.0
	35-39 aged	132	10.0
	40 aged and over	156	11.9
Habitation	In Gaziantep	612	46.6
	In Southeastern Anatolia Region	288	22.0
	Other regions	412	31.4
Educational Status	Primary and Secondary	460	35.1
	High School	512	39.1
	University and over	336	25.7
	Housewife	208	15.9
Occupation	Civil Servant	180	13.8
	Private Sector Employee	208	15.9
	Owner of the Business	40	3.1
	Student	576	44.0
	Retired	72	5.5
	Unemployed	24	1.8

n=1316

The distribution of the answers given in Table 1, which are about personal informations of research group. According to table; population of the research who visit zoo, consists of 536 (40.7%) women and 780 (59.3%) men, most of them aged between 20-24 (29.2%), 384 (29.2%) of them live in Gaziantep and 512 (39.1%) of them graduated from high school, 576 (44%) of them are students and 24 (1.8%) of them are unemployed.

Data Collection Tool: The survey developed by Uysal (2005) used in research to reveal the thoughts and satisfaction of the visitors who come to Gaziantep Zoo in their lesiure time. Required changes, based on literature, made on the survey by the researcher. On the first day of the research, pretesting made on 70 people and passed to main survey after seeing the survey's working. The survey form consists of 15 question, used in data collection.

Analysis of Data: The datas obtained in this survey statistically analysed in electronic environment by using SPSS 16.0 packaged software. Reliability co-efficient gets value between 0-1 and reliability increase when these values approach to 1 (Ural and Kiliç, 2005:258). According to this, satisfaction scale measured as 0,872 Cronbach's Alpha value. Thus reliability of the scale was determined. In data analysing; frequency, percentage, average, standard deviation used as complementary statistic, student t-test used in satisfaction scale for comparing two independent groups having variables with normal distribution, ANOVA and Tukey multiple comparison tests used for comparing more than two independent groups having variables with normal distribution.

FINDINGS

Table 2: Recreational Activities of the research group which were done in last 12 months

	Frequency	Percentage (%)
Cinema	400	34.5
Museum	164	14.1
Theatre	108	9.3
Art gallery	68	5.9
Sport Activities	256	22.1
Zoo	144	12.4
Modern dance/ festival, carnival	20	1.7

When examined the recreational activities done in last 12 months in Table 2, it is seen that 400 (34.5%) of the participants mostly prefer to go to the cinema, 144 (12.4%) of them go to the zoos and 20 (1.7%) of them prefer to go to modern dance, festival or carnival.

Table 3: How the participants heard about Gaziantep Zoo

	Frequency	Percentage (%)
Brochure, Guidebook, Book, Tourist Office	132	10.1
Newspaper, Radio, TV, Magazine	144	11.0
Internet	116	8.9
With the advice of acquaintances	688	52.8
Accidentally	96	7.4
From the road signs belong to zoo	16	1.2
From school	92	7.1
Other	20	1.5

When examined the Table 3 and considering how the participants heard about Gaziantep Zoo, it is seen that most of them, 688(52.8%) people, heard it with the advice of acquaintances, while 16 (1.2%) people heard it from the road signs belong to zoo.

Table 4: The time spend in the zoo on research day

	Frequency	Percentage (%)
Less than half an hour	84	6.4
Between half an hour and an hour	160	12.3
More than an hour	1060	81.3

When examined Table 4 and considered the time spend in the zoo on research day, 1060(81.3%) people mostly spend more than an hour and 84 (6.4%) people at minimum rate spend less than half an hour in the zoo.

Table 5: Descriptive Statistics for Satisfaction Evaluation of Zoo Services According to Participants

	N	Average	Std. Deviation
Transportation	1308	4.4251	1.5705
Parking area	1300	4.5969	1.4062
Working hours	1288	4.3261	1.3365
Directional Signs	1304	4.1963	1.5107
Illumination	1296	4.0247	1.5971
Cleaning and Maintenance	1292	3.8142	1.8401
Interest of the employees	1292	3.8452	1.8107
Recreation Facilities	1284	4.1121	1.6972

Participants gave 5 points for “very good”, 4 points for “good”, 3 points for “normal”, 2 points for “bad”, 1 point for “very bad” and 0 point for “I have no idea”. Considering the average of the points, “very good” and “good” preferred mostly but only the questions for “cleaning, maintenance” and “interest of the employees” got 4 or 3 points from the participants.

Table 6: Satisfaction Evaluation according to gender

	Women	Men	P
Transportation	4.46±1.43	4.39±1.65	0.434
Parking area	4.65±1.24	4.55±1.50	0.188
Working hours	4.22±1.32	4.39±1.33	0.031*
Directional Signs	4.25±1.44	4.15±1.55	0.239
Illumination	4.04±1.45	4.01±1.69	0.698
Cleaning and Maintenance	3.77±1.82	3.84±1.85	0.516
Interest of the employees	3.86±1.83	3.83±1.79	0.776
Recreation Facilities	4.23±1.62	4.02±1.73	0.028*

$p < 0.05$

When examined Table 6, there is a significant difference between working hours and recreation facilities of women and men according to gender (Respectively $p = 0.031$, $p = 0.028$). Considering the answers, satisfaction level of the women is higher than men's ($p < 0.05$).

There is not a significant difference between age and satisfaction ($p < 0.05$).

Table 7: Evaluation of Educational Status and Satisfaction

	Gruplar	N	Ort.	S.s.	f	p	Tukey
Transportation	Primary and Secondary School (A)	452	4.20	1.54			A-B,B-C
	High School (B)	512	4.56	1.47			
	University and over (C)	336	4.48	1.71	6.75	0.001*	
Parking area	Primary and Secondary School (A)	456	4.47	1.40			
	High School (B)	500	4.68	1.33	2.90	0.550	
	University and over (C)	336	4.60	1.51			
Working hours	Primary and Secondary School (A)	452	4.15	1.38			A-B, B-C
	High School (B)	492	4.43	1.33	5.87	0.003*	
	University and over (C)	336	4.33	1.25			
Directional Signs	Primary and Secondary School (A)	452	4.17	1.49	0.26	0.769	
	High School (B)	508	4.24	1.49			
	University and over (C)	336	4.19	1.54			
Illumination	Primary and Secondary School (A)	452	4.15	1.59	7.10	0.001*	A-B, A-C
	High School (B)	500	4.09	1.50			
	University and over (C)	336	3.75	1.71			
Cleaning and Maintenance	Primary and Secondary School (A)	456	3.38	1.78			
	High School (B)	496	3.79	1.87			
	University and over (C)	332	3.85	1.85	0.13	0.872	
Interest of the employees	Primary and Secondary School (A)	448	3.92	1.72			A-B, B-C
	High School (B)	504	3.97	1.83			
	University and over (C)	332	4.12	1.84	5.77	0.003*	
Recreation Facilities	Primary and Secondary School (A)	448	4.38	1.57			A-B, B-C
	High School (B)	500	4.28	1.63			
	University and over (C)	332	3.70	1.85	16.2	0.000*	

Considering the evaluation of educational status and satisfaction of the participants, significant difference observed according to working hours, illumination, interest of the employees and recreation facilities in Table 7 (Respectively $p=0.001$, $p=0.003$, $P=0.001$, $p=0.003$, $p=0.000$). Tukey test done for determining source of the distinction.

According to these results, it is seen that high school graduates are satisfied with transportation, working hours and service of the recreation facilities more than primary / secondary school graduates and university and over graduates; primary / secondary school graduates are satisfied with illumination services more than high school and university and over graduates; high school graduates are satisfied with interest of the employees more than primary / secondary school and university and over graduates.

RESULTS AND DISCUSSION

Population of the research who visit zoo, consists of 536 (40.7%) women and 780 (59.3%) men, most of them aged between 20-24 (29.2%), 384 (29.2%) of them live in Gaziantep and 512 (39.1%) of them graduated from high school, 576 (44%) of them are students and 24 (1.8%) of them are unemployed. These results are similar with some other studies, while they are different from the others, 63.3% of the visitors who participated in the study done by Ozgoren (2007) are aged between 19-30. When considered their occupations, it is seen that 33.5% of the participants are sivil cervant, 38.8% of them are students, 43.6% of them are university student and 22.9% of them are high school students. Thus, it is seen that university and high school students geta more share (66.5%) than other group of visitors (Ozgoren, 2007). As a result of the study done by Uysal, most of the visitors aged between 25-34, 56.5% of them mostly live in Ankara where the study conducted, 48.0% of the participants are university gradaute and students are the visitors who visit the zoos more than others at the rate of 28.8% (Uysal, 2005).

As a results of the study done by Ozturk, it is seen that %26 of the participants are civil servant and they live in Ankara where the study conducted at the rate of 74.7% (Ozturk, 2012). Considering the educational status of the participants in the study done by Yavuz, it is seen that most of them are university graduates at the rate of 35,7% and most of the visitors consist of students (25.3%) and retirees (15.3%) (Yavuz, 2012). Gumus et al. (2017) reported that recreational areas are used by individuals in the most intensive 25-30 years of age in the study they conducted. As a result of the study done by Kurt and related to natural life and zoos, it is observed that 64.6% of the participants are under the age of 35 (Kurt, 2011). The study done by Couch for the satisfaction of Detroit and Potter Park Zoo, the average age of the visitor found between 20-39 (Couch, 2013). As a result of the study done by Kutsa, Saaymanand Slabbert, it is seen that women participated more than men (Kutska, 2009; Saaymanand Slabbert, 2004). As a result of the study done by Andereckand Caldwell, the visitors who visit the zoos have higher educational level (Andereckand Caldwell, 1994).

Gaziantep province has a young population and most of the participants are students so it can be thought that their curiosity and eagerness to learn are much more than the others. So we can say that visiting zoos in their spare time will contribute to their academic success.

Some other studies done about this topic are supportive to these results (Kenny, 2009; Randler, Baumgärtner, Eisele and Kienzle, 2007; Randler, Kummer and Wilhelm, 2012; Falk and Adelman, 2003; Lukas and Ross, 2005). Another study in the literature indicated that using zoos as a out-of-school education environment has positive effects on remembering level and points of persistency test (Pace and Tesi, 2004). When examined the recreational activities done by participants in last 12 months, it is seen that 400 (34.5%) of the participants mostly prefer to go to the cinema. These results are similar with some other studies, while they are different from the others. Considering the distribution of the visited places and recreational activities done by participants in last 12 months, who participated in the study done by Uysal, it is seen that most of the visitors prefer to go to the cinema at the rate of 69.4% (Uysal, 2005).

According to results of study done by Özgören 59.6% of the participants spend their spare time by reading, while 59% of them listening to music and 51.1% of them watching tv (Ozgoren, 2007). Gumus (2016) indicate that most of the individuals who went to the recreation area preferred these areas in order to have any physical activity. Spare time activities improving fastly nowadays and there is a huge competition, however visiting zoos is one of the most favorite recreational activity as to results. 3 million people visit the zoos all the year round and it supports our thoughts ([zoo Gaziantep.bel.tr](http://zoo.Gaziantep.bel.tr), 2014).

It is seen that 688 (52.8%) participants heard about Gaziantep Zoo with the advice of acquaintances. These results are similar with some other scientific studies, while they are different from the others. In the study done by Uysal 27.5% of the participants indicated that they come to the museum with the advice of someone (Uysal, 2005). As a result of the Özgören's study, 75.5% of the participants are informed about Museum of the Topkapı Palace by favour of newspapers and magazines (Ozgoren, 2007). According to the study done by Öztürk, 43.3% of the participants indicated that the most effective factor in Beypazarı visits is the advice of the friends. People talk with the other people around them about their zoo visits and experiences. If they are pleased with their visit, they will give positive advices to their acquaintances. Visiting zoos in their spare time is placed on the top of the participants' recreational activity list and it is indicated the reason of their satisfaction (According to datas of Gaziantep Zoo, 3 million people visit the zoo every year).

Considering the time spend in the zoo on research day, it is seen that 1060 (81.3%) people mostly spend more than an hour. These results are similar with some other scientific studies, while they are different from the others. As a result of the study done by Uysal, it is reported that 89.3% of the participants spend more than an hour at the museum (Uysal, 2005). Spending more than an hour at the zoo visit indicated that the zoo found significant by the participants.

Considering the average of the points, “very good” and “good” preferred mostly about satisfaction but only the questions for “cleaning, maintenance” and “interest of the employees” got “normal” or “good” answers from the participants. These results are similar with some other scientific studies, while they are different from the others. In the study done by Uysal, the participants answer “very good” and “good” to the questions about services of the museum. Park service and interest of the employees got “very bad” and “bad” answers to the questions(Uysal, 2005). As a result of the study done by Karanikola et al. about participants of Selanik Zoo, it it seen that visitors are leaving contently (Karanikola et al., 2014). According to results of the Turley’s study on wishes and experiences of the children about zoos, children are happy with their zoo visits (Turley, 2001).As a result of the study done by Oduro et al. about evaluation of the zoo visitors, it is seen that they all satisfied about the zoo(Oduro et al., 1987). The study done by Rajack et al.and Andereck et al., about zoo visiting of the children as a recreational activity indicated that children are pleased with their visit (Rajack et al., 1996, Andereck et al., 1994). According to the results of the study done by Robinson indicated that visitors leaving satisfied from the zoo, as well (Robinson, 1982).

CONCLUSION

Spare time activities improving fastly nowadays and there is a huge competition, however visiting zoos is one of the most preferred recreational acitvity between other options, this is because 3 million people visit the Gaziantep Zoo all the year round and it is increasing every single day (when considered the previous years) and this increase the preferation of zoo visits as a recreation activity.

As a result of the study, it is seen that students are visiting zoos at the high rate. Considering this result, zoos are the places where children spend their spare time efficiently

and important for the education. So we can say that encouraging and supporting the students more for visiting zoos in their spare time will contribute to their academic and social improvement. Some other studies done about this topic are supportive to these, using zoos as a out-of-school education environment and associated zoos with science and technology programs while teaching science to students will help them to understand their lessons better, materialise the terms and learn permanently (Randler, Kummer and Wilhelm, (2012); Braund and Reiss, 2006). There are studies indicated that using zoos as a out-of-school education environment provide success, motivation and problem solving ability and effect their attitude positively (Bozdogan and Yalcin, 2006; Ramey and Gassert, 1997; Braund and Reiss, 2006;Gumus et al., 2017; Paris, Yambor and Packard, 1998; Falk and Adelman, 2003).

Consequently, zoos are important factors in providing academic success to children. For instance the study done by Tofield and et al. supports this result (Tofield, Coll, Vyle and Bolstad, 2003). So as to provide positive change in cognitive and affective features of the students, the tours done in the zoos must be done with purpose, planned and repeated at regular intervals. There are a lot of supportive scientific studies (Bozdogan, 2007; DeWitt and Osborne, 2007; Jarvis and Pell, 2005; Rix and McSorley, 1999).

When examined the purpose of the zoo visits, people want to amuse themselves and have a great time and in addition to these they are coming for educational activities as well. When considered these pluses, zoos are important places for education and recreation. 3 million people visit the Gaziantep Zoo all the year round and it is increasing every single day. To increase this potential, managers must do studies about increasing satisfaction of the visitors, thus zoos will continue to exist, expand and improve.

SUGGESTIONS

In addition to being huge recreation places where people spend their spare time efficiently, zoos are also give us the opportunity to recognizing the nature. It helps children to be succesfull in their education and social life. Leaving satisfied from the zoos, coming again and suggest to others will increase the visitors of the zoo. Administration of the zoos must care these topics more and do studies about them, it will make more people come to the zoos.

REFERENCES

- Acikkol, C. (1984). Master Plan for Ankara Zoo and The Planning of Aquatic Exhibition Building, Master Thesis, O.D.T.U. Ankara, Turkey.
- Akbaba, G. (2001). Hayvanat bahçelerimiz. *Bilim ve Teknik dergisi*, 408:28-33.
- Andereck, K., Caldwell, LL. (1994). Motive-based segmentation of a public zoological park market. *Journal of Park and Recreation Administration*, 12(2):19-31.
- Andereck, KL., Caldwell, LL. (1994). Variable Selection in Tourism Market Segmentation Models. *Journal of Travel Research*, 33; 40-46.
- Berkyez, S. (1992). Hayvanat Bahçesi Fiziksel Planlamalarda Göz Önünde Bulundurulması Gerekli Genel Prensipler, Yüksek Lisans Tezi, Adana, Turkey.
- Bozdoğan, AE., Yalçın, N. (2006). Bilim merkezlerinin ilköğretim öğrencilerinin fene karşı ilgi düzeylerinin değişmesine ve akademik başarısına etkisi: Enerji parki. *Ege Eğitim Dergisi*, 2(7):95-114.
- Braund, M and Reiss, M. (2006). Towards a more authentic science curriculum: The contribution of out-of-school learning. *International Journal of Science Education*, 28(12):1373-1388.
- Couch, AS. (2013). Zoo Visitor Satisfaction With Animal Visibility. Community, Agriculture, Recreation, And Resource Studies Master Of Science Submitted To Michigan State University In Partial Fulfillment The Requirements For The Degree Of.
- Falk, JH and Adelman, LM. (2003). Investigating the impact of prior knowledge and interest on aquarium learning. *Journal of Research in Science Teaching*, 40 (2):163-176.
- Falk, JH., Reinhard, EM., Vernon, CL., Bronnenkant, K., Deans, NL., and Heimlich, JE. (2007). Why zoos & matter: Assessing the impact of a visit to a zoo or aquarium. *Silver Spring MD: Association of Zoos and Aquaria*, 51(1): 55-79.
- Fradich, H. (1988). Guide Book to The Berlin Zoological Garden and its Aquarium, H. Heenemann GmbH and Co, West Germany, Pp.133-144.
- Gumus, H., Alay Ozgul, S. and Karakılıç, M. (2017). The factors that has an effect on the attendance and location choice of the visitors to the parks and recreations centers for physical activities. *Spormetre*. 15 (1), 31-38.
- Gumus, H. (2016). Investigation of Effects of Recreational Areas Usage. Doctoral thesis, Gazi University Health Sciences Institute.

Gumus, H., Gurbuz, B. and Yildirim Y. (2017). The Investigation of the Relationship Between Preference Factor of Recreation Area and Mood of Recreation Area. 3rd International Conference on Social Sciences & Education Research. 27-29 April, Rome-Italy.

Gunergun, F. (2006). Turkiye’de hayvanat bahceleri tarihine giris. I. Ulusal Veteriner Hekimligi Tarihi ve Mesleki Etik Sempozyumu Bildirileri. Elazig, pp.185-218.

<http://www.gaziantep.com/tr/sehir/gaziantep-hayvanat-bahcesi> (Erisim Tarihi:10.11.2014).

Jarvis, T and Pell, A. (2002). Effect of the Challenger experience on children’s attitudes to science. *Journal of Research in Science Teaching*, 39(10): 979-1000.

Jones, TW. (1986). What Are Zoos, *Garten-und-Landschaft*, 85(1):19-23.

Karanikola, P., Tampakis, S., Tsantopoulos, G and Digbasani, C. (2014). The public zoo as recreation and environmental education area: Visitor’s perceptions and management implications. *Wseas Transactions On Environment and Development*, Greece, 10.2224-3496.

Kenneth, JP. (1987). Zoo Design: The Reality of Wild Illusions, The University of Michigan School of Natural Resources, Washington, pp.193.

Kenny, HA. (2009). Monkeying around: Examining the effects of a community zoo on the science achievement of third graders. Unpublished dissertation. The University of Toledo, Ohio, USA.

Kurt, E. (2011). Sasali Dogal Yasam Parki Orneginde Hayvanat Bahceleri Uzerine Bir Arastirma. Yuksek Lisans Tezi.Ege Universitesi Fen Bilimleri Enstitusu, İzmir, Turkey.

Kutska, D. (2009). Variation in Visitor Perceptions of a Polar Bear Enclosure Based on the Presence of Natural vs. Un-Natural Enrichment Items. *Zoo Biology*, 28: 292-306.

Lukas, KE and Ross, SR. (2005). Zoo visitor knowledge and attitudes toward gorillas and chimpanzees. *The Journal of Environmental Education*, 36(4); 33-48.

Mason, P. (2000). Zoo tourism: The need for more research. *Journal of Sustainable Tourism*, 8(4); 333-339.

Morgan, JM and Hodgkinson, M. (1999). The motivation and social orientation of visitors attending a zoological park. *Environment and Behavior*, 31(2): 227-239.

Oduro, C., Antwi-Boasiako, C., Yao, F.C.A. (2001). Visitorassessment of Accra Zoo from Ghana *Journal of Forestry*, 10 (1):27-33.

Ozgoren, F. (2007). Bos Zaman Pazarlamasi ve Muzecilikte BirUygulamaAdli Yuksek Lisans Tezi. Marmara Universitesi Sosyal Bilimler Enstitusu, İstanbul, Turkey.

Ozguç, E and Bekdemir, A. (2008). Hayvanat bahçelerinin peyzaj planlama ve tasarım ilkeleri. İstanbul Üniversitesi Orman Fakültesi Dergisi, 59(1): 59-73.

Ozturk, Y. (2012). Turizmde Destinasyon Markalaşması Üzerine Bir Araştırma:Beypazarı Orneđi Yüksek Tezi. Gazi Üniversitesi Eğitim Bilimleri Enstitüsü Turizm İşletmeciliđi Eğitimi Ana Bilim Dalı, Ankara, Turkey.

Pace, S and Tesi, R. (2004). Adult's perception of field trips taken within grades K-12: Eight case studies in the New York metropolitan area. Education, 125(1): 30-40.

Paris, SG., Yambor, KM and Packard, BW. (1998). Hands-on biology: A museum-school-university partnership for enhancing students' interest and learning in science. *Elementary School Journal*, 98(3): 267-288.

Rajack, L., Waren, N. (1996). The modern zoo: How do people perceive zoo animals? *Applied Animal Behaviour Science*, 47:109-118.

Randler, C. (2010). Animal related activities as determinants of species knowledge. *Eurasia Journal of , Science & Technology Education*, 6(4): 237-243.

Randler, C., Baumgartner, S., Eisele, H and Kienzle, W. (2007). Learning at workstations in the zoo: A controlled evaluation of cognitive and affective outcomes. *Visitor Studies*, 10(2):205-216.

Randler, C., Kummer, B and Wilhelm, C. (2012). Adolescent learning in the zoo: Embedding a non-formal learning environment to teach formal aspects of vertebrate biology. *Journal of Science Education and Technology*, 21(3):384-391.

Rix, C and McSorley, J. (1999). An investigation into the role that school-based interactive science centres may play in the education of primary-aged children. *International Journal of Science Education*, 21(6):577-593.

Robinson, E. (1982). The behavior of the museum visitor. New Series No. 5. Washington, DC: American Association of Museums.

Saayman, M and Slabbert, E. (2004). A Market Analysis of Visitors to the Pretoria National Zoo. *South African Journal for Research in Sport, Physical Education and Recreation*. 26:89-96.

Tofield, S., Coll, RK., Vyle, B and Bolstad, R. (2003). Zoos as a source of free choice learning. *Research in Science & Technological Education*, 21(1): 67-99.

Turley, SK. (2001) .Children and the demand for recreational experiences; The case of zoos. *Leisure Studies*, 20(1):1-18.

Ural, A and Kilic, I.(2005).“Bilimsel Araştırma Süreci ve SPSS ile Veri Analizi”, Detay Yayıncılık, Ankara

Uysal KC. (2005). Muze Egitimi ve Muze Ziyaretçilerinin Atatürk ve Kurtulus Savasi Muzesi Ziyaretçi Profili Araciligiyla İncelenmesi adli Yuksek Lisans Tezi. Ankara Universitesi Sosyal Bilimler Enstitusu Muze Anabilim dali, Ankara, Turkey.

Ulgen, A and Tekin, A. (2000). Gunumuzde degisen hayvanat bahcesi anlayisina onculuk yapan Bogazici Hayvanat Bahcesi. V. Turkiye Ziraat Muhendisligi Teknik Kongresi, Ankara, 1:301-310.

Wylson, A. (1994). Theme Parks, Leisure Centres, Zoos and Aquaria, Longman Harlow, New York, pp.183.

Yavuz, M. (2012). Fen egitiminde Hayvanat Bahcelerinin Kullaniminin Akademik Basari ve Kaygiya Etkisi ve Ogretmen-Ogrenci Gorusleri Yuksek Lisans Tezi. Sakarya Universitesi Egitim Bilimleri Enstitusu ilkogretim Anabilim Dali Fen Bilgisi egitim bilimi Dali, Sakarya, Turkey.

Yilmaz, S. (2007). Hayvanat bahcelerinin doga korumadaki rolu. VII. Ulusal Ekoloji ve Cevre Kongresi, Malatya.

Yilmaz, S and Ozbilen, A. (2011). Hayvanat bahceleri tasarim ilkeleri ve tipolojileri. Suleyman Demirel Universitesi Orman Fakultesi Dergisi, 12 (1):47-56.

Yilmaz, S., Ozbilen, A. and Mumcu, S. (2010). Effects of spatial differences on visitor perceptions at zoo exhibits. Scientific Research and Essays, 5(16): 2327-2340.