

The Determination of the Impact Level of Life Satisfaction, Emotional Intelligence and Participating in Recreational Outdoor Sports on Ecological Perception: Turkey Case

Mehmet Mert^a, Faik Ardahan^b

^a Akdeniz University, Department of Econometrics, Turkey
mmert@akdeniz.edu.tr

^b Akdeniz University, School of Physical Education and Sport, Recreation Department, Turkey
ardahan@akdeniz.edu.tr

Abstract: The aim of this research is to determine by using regression model, the impact level and direction of variables like life satisfaction, emotional intelligence, gender, marital status, monthly income, age, education, occupation and participating in recreational outdoor sports on ecological perception. Sampling group consists of Recreational Outdoor Sport participants like cyclists, mountaineers/rock climbers and hikers whose number is not determined exactly in Turkey and non-participant of any recreational outdoor sports. In this study, electronic questionnaire form which consists of demographics variables, Emotional Intelligence Scale which was used in Chan's (2004, 2006) study and adapted into Turkish by Aslan and Ozata (2008), RNEP scale which was revised by Dunlap et al. (2000) and adapted into Turkish by Erdogan (2009) and Life Satisfaction Scale which was developed Diener, Emmons, Larsen and Griffin (1985) was used to collect the data. Electronic questionnaire form has been sent to all members of clubs which are bound to Turkish Cycling Federation (TCF) and Turkish Mountaineering Federation (TMF). As a result of this regression model, it is determined that gender, age, monthly income, education level, life satisfaction level, emotional intelligence level, participating in recreational outdoor sports like mountaineering/rock climbing, cycling and trekking have effect on one's ecological perception.

Key Words: Ecological perception, Emotional Intelligence, Life Satisfaction, Recreational Outdoor Sports, Regression Model

Introduction

Recently, even though individual do not cause, because of the products they demand or which are provided by the system to be used, also including second and third houses, the increasing visits to nature with recreational purposes lead pollution (as air, water, earth, appearance and light) on environment The activities such as changing curriculum and changing education processes, focusing on more concerned individuals, campaigns via media, systematic works by volunteer organizations and non governmental organizations, to enhance the sensitiveness of individuals towards nature, and in order to raise awareness have changed people's environmental value, environmental value orientations, environmental attitude, environmental normative value, environmental behavior positively (Homer ve Kahle, 1988; Rokeach, 1973, 1979). This situation naturally has a positive affect on people's ecological sense and conscious.

So far the factors which affect ecological sense and conscious namely environmental value, environmental value orientations, environmental attitude, environmental normative value, have been taken up and examined by a lot of researchers. To sum up, the factors which affect this process positively or negatively are gender, income, type of school, education, age, the place of living, personality, the individual's life paradigm, the affect of environment, ethnicity, family, life style, level of awareness, political opinion, the main politics, level of development in the country, relations, values of friends, belief and religion (Dunlap, Grieneeks ve Rokeach, 1983; Dunlap, Van Liere, Mertig ve Jones 2000; Kim, 1999; Mohai ve Bryant, 1998; Rokeach, 1973; Taskin, 2009; Zinn and Graefe, 2007).

The relation between Recreational Outdoor Sports (ROS) and ecological perception has been examined by a lot of researchers and a meaningful relationship has been found. Dunlap and Heffernan (1975) who are first researchers to advocate the hypothesis “participating in recreational outdoor sports increases the level of ecological perception” has been supported by researchers namely Jackson (1986), Thapa and Graefe (2003), Bjerke, Thrane and Keiven (2006), Berns and Simpson (2009). According to these researchers participating in ROS creates and develops awareness relating environment. So far, no study has been conducted about if there is relationship between ecological perception and Life Satisfaction (LS) Emotional Intelligence (EQ). However, there is a meaningful relation between LS and EQ. The purpose of this study is to build a relation between these variables and ecological perception.

Material and Method

In this study besides demographic variables such as gender, marital status, income, education, the variables such as life satisfaction (LS), the level of emotional intelligence (EQ), rock/mountain climbing, hiking and cycling which were not taken up in other studies but which we think they have an affect on the ecological perception of individuals have been examined and questioned if there is participating in these activities cause an affect on ecological perception of individuals. ROS is restricted by mountaineering, rock climbing, cycling and hiking. The scope of the study consists of individuals who participate in mountaineering, rock climbing, cycling, hiking and non-participants in these activities. The number of these participants is not determined in Turkey. In this study sampling has been conducted and an electronic survey has been send to all members of Turkish Mountaineering Federation (TMF) and to Turkish Cycling Federation between 1st December 2011 and 31st March 2012. The completed 1181 surveys which were sent back have been assessed. The sampling of study consists of 1719 individuals mountain/rock climbers ($n=426$, $\bar{X}_{age}=36.12\pm 10.10$), cyclists ($n=373$, $\bar{X}_{age}=31.36\pm 9.73$), hikers ($n=382$, $\bar{X}_{age}=39.92\pm 10.30$) non-participants ($n=382$, $\bar{X}_{age}=39.92\pm 10.30$). In this study besides questions to learn the demographic characteristics of participants in mountain/rock climbers, cyclists, hikers, and not-participants, the study includes articles in following studies : The EQ scale which was used by Chan (2004,2006) and adapted in Turkish by Aslan and Özata (2008), the New Ecological Paradigm (NEP) scale which was revised by Dunlap and others (2000) and adapted in Turkish in the study of Erdogan (2009), LS scales which were developed by Diener, Emmons, Larsen and Griffin.

The variables used in this study are as following;

HH- Human Hegemony,

EC- the level of believing in ecological crisis,

CN- the level of believing in capability of nature,

HN- the level of supporting superiority of nature,

CYC- If individual cycles 1 otherwise the value is 0,

MNT- If individual is mountain/rock climber 1 otherwise the value is 0,

TRK- if individual tracks 1 otherwise the value is 0,

GEN- Gender, if individual is male 1 otherwise the value is 0,

MS- Marital Status, if individual is single 1 otherwise the value is 0,

Income2- if the income is between 1001-2000 1 otherwise the value is 0,

Income3- If the income is between 2001-3000 1 otherwise the value is 0,

Income4- If the income is between 3001-4000 1 otherwise the value is 0,

Income5- If the income is between over 4000 TL 1 otherwise the value is 0,

Education2- If the education level is high school or equivalent 1 otherwise the value is 0,

Education3- If the education level is university 1 otherwise the value is 0,

Education4- If the education level is post-graduate 1 otherwise the value is 0,

Profession1- If individual works in private sector 1 otherwise the value is 0,

Profession2- If individual works in public sector 1 otherwise the value is 0,

Profession3- If individual runs his/her own place 1 otherwise the value is 0,

Profession4- If individual is self-employed 1 otherwise the value is 0,

Profession5- If individual is a student 1 otherwise the value is 0,
 Profession6- If individual is retired 1 otherwise the value is 0,
 Age- the age of individual,
 LS- The level of life satisfaction,
 EA- The level of emotional assessment,
 ES- The level of emphatic sensitiveness,
 PEM- The level of positive emotional management,
 UEP- the level of utilization of emotions positively,

The HH, EC, CN, HN variables are the name of factors which were found by comparing NEP sense of participants and non-participants in outdoor sports, these variables are the result of correcting factor analysis in Ardahan's (2012) study and same set of data has been used. EA, ES, PEM, UEP are the name of factors which were found by comparing EQ of participants and non-participants in outdoor sports and the results have been reached by using correcting factor analysis. In this study the four sub-dimensions (HH, EC, CN, and HN) of ecological perception have taken up as dependent variables and the estimated regression models are as following:

$$\begin{aligned} \text{LnHH} = & a_0 + a_1\text{CYC} + a_2\text{MNT} + a_3\text{TRK} + a_4\text{GEN} + a_5\text{MS} + a_6\text{Income2} + a_7\text{Income3} + a_8\text{Income4} + a_9\text{Income5} \\ & + a_{10}\text{Education2} + a_{11}\text{Education3} + a_{12}\text{Education4} + a_{13}\text{Profession1} + a_{14}\text{Profession2} \\ & + a_{15}\text{Profession3} + a_{16}\text{Profession4} + a_{17}\text{Profession5} + a_{18}\text{Profession6} \\ & + a_{19}\text{LnAGE} + a_{20}\text{LnLS} + a_{21}\text{LnEA} + a_{22}\text{LnES} + a_{23}\text{LnPEM} + a_{24}\text{LnUEP} + u_1 \quad (1) \end{aligned}$$

$$\begin{aligned} \text{LnEC} = & b_0 + b_1\text{CYC} + b_2\text{MNT} + b_3\text{TRK} + b_4\text{GEN} + b_5\text{MS} + b_6\text{Income2} + b_7\text{Income3} + b_8\text{Income4} + b_9\text{Income5} \\ & + b_{10}\text{Education2} + b_{11}\text{Education3} + b_{12}\text{Education4} + b_{13}\text{Profession1} + b_{14}\text{Profession2} \\ & + b_{15}\text{Profession3} + b_{16}\text{Profession4} + b_{17}\text{Profession5} + b_{18}\text{Profession6} \\ & + b_{19}\text{LnAGE} + b_{20}\text{LnLS} + b_{21}\text{LnEA} + b_{22}\text{LnES} + b_{23}\text{LnPEM} + b_{24}\text{LnUEP} + u_2 \quad (2) \end{aligned}$$

$$\begin{aligned} \text{LnCN} = & c_0 + c_1\text{CYC} + c_2\text{MNT} + c_3\text{TRK} + c_4\text{GEN} + c_5\text{MS} + c_6\text{Income2} + c_7\text{Income3} + c_8\text{Income4} + c_9\text{Income5} \\ & + c_{10}\text{Education2} + c_{11}\text{Education3} + c_{12}\text{Education4} + c_{13}\text{Profession1} + c_{14}\text{Profession2} \\ & + c_{15}\text{Profession3} + c_{16}\text{Profession4} + c_{17}\text{Profession5} + c_{18}\text{Profession6} \\ & + c_{19}\text{LnAGE} + c_{20}\text{LnLS} + c_{21}\text{LnEA} + c_{22}\text{LnES} + c_{23}\text{LnPEM} + c_{24}\text{LnUEP} + u_3 \quad (3) \end{aligned}$$

$$\begin{aligned} \text{LnHN} = & d_0 + d_1\text{CYC} + d_2\text{MNT} + d_3\text{TRK} + d_4\text{GEN} + d_5\text{MS} + d_6\text{Income2} + d_7\text{Income3} + d_8\text{Income4} + d_9\text{Income5} \\ & + d_{10}\text{Education2} + d_{11}\text{Education3} + d_{12}\text{Education4} + d_{13}\text{Profession1} + d_{14}\text{Profession2} \\ & + d_{15}\text{Profession3} + d_{16}\text{Profession4} + d_{17}\text{Profession5} + d_{18}\text{Profession6} \\ & + d_{19}\text{LnAGE} + d_{20}\text{LnLS} + d_{21}\text{LnEA} + d_{22}\text{LnES} + d_{23}\text{LnPEM} + d_{24}\text{LnUEP} + u_4 \quad (4) \end{aligned}$$

In the equations (1), (2), (3) and (4); $a_i, b_i, c_i, d_i, i=0$, are constant terms; $a_i, b_i, c_i, d_i, i=1, \dots, 18$ are the regression coefficients of dummy variables; $a_i, b_i, c_i, d_i, i=19, \dots, 24$ are the regression coefficients of covariates and $u_i, i=1, \dots, 4$, are error terms.

In order to estimate coefficients, ordinary least square (OLS) estimator have been used. To find out if there is heteroskedasticity, Breusch-Pagan/Cook Weisberg test has been performed for each model. Since for all four models constant variance hypothesis have been rejected the robust standard errors of coefficients have been calculated.

Results

In Table-1, the results of the estimated regression models in equation (1), (2), (3), (4) have been given. The estimated four models are significant. The results about demographic variables could be seen in the table, cycling has a positive affect on EC, CN, HN but it does not have a significant affect on HH. While the affect of mountaineering and rock climbing has negative on HH, it has positive significant effect on EC, CN, and HN. Participating in trekking activities decreases HH, HN level of participants. While this variable has a negative and significant effect on HH and HN, it does not have a significant affect on EC and CN.

Table 1: Regression Model Results

Depended Variables	Ln HH		Ln EC		Ln CN		Ln HN	
	Coefficient	P	Coefficient	P	Coefficient	P	Coefficient	P
Cons.	1.15025 *** (0.1417)	0.000	0.47895 *** (0.1094)	0.000	0.39487 *** (0.1231)	0.001	0.50534 *** (0.1141)	0.000
CYC	-0.00807 (0.0191)	0.674	0.06585 *** (0.0140)	0.000	0.05569 *** (0.0154)	0.000	0.06030 *** (0.0133)	0.000
MNT	-0.0502 *** (0.0189)	0.004	0.04948 *** (0.0139)	0.000	0.05813 *** (0.0139)	0.000	0.05438 *** (0.0129)	0.000
TRK	-0.04700 ** (0.0190)	0.013	0.00625 (0.0121)	0.607	-0.01576 (0.0139)	0.258	-0.03504 *** (0.0132)	0.008
GEN	-0.00757 (0.0154)	0.624	-0.00429 (0.0102)	0.675	-0.01309 (0.0105)	0.215	-0.2448 ** (0.0102)	0.017
MS	0.00261 (0.0162)	0.872	0.01634 (0.0115)	0.155	-0.01260 (0.0111)	0.256	-0.00891 (0.0095)	0.347
Income2	-0.02398 (0.0202)	0.235	0.00535 (0.0148)	0.717	0.00783 (0.0179)	0.662	-0.02528 * (0.0129)	0.051
Income3	-0.05342 ** (0.0237)	0.024	-0.02662 (0.0181)	0.141	-0.00230 (0.0196)	0.906	-0.01539 (0.0143)	0.284
Income4	-0.03256 (0.0291)	0.264	-0.01318 (0.0204)	0.518	0.02030 (0.0237)	0.392	-0.02616 (0.0191)	0.171
Income5	-0.04422 (0.0316)	0.162	-0.02525 (0.0239)	0.290	-0.03948 (0.0258)	0.126	-0.03346 * (0.0199)	0.093
Education2	-0.09660 ** (0.0384)	0.012	-0.02190 (0.0222)	0.323	-0.03679 (0.0325)	0.259	0.03449 (0.0279)	0.216
Education3	-0.11017 *** (0.0364)	0.003	0.00423 (0.0203)	0.835	0.00949 (0.0279)	0.734	0.03257 (0.0267)	0.224
Education4	-0.14615 *** (0.0421)	0.001	0.00590 (0.0243)	0.808	0.02053 (0.0311)	0.509	-0.00358 (0.0302)	0.906
Profession1	-0.02514 (0.0337)	0.456	-0.03264 * (0.0197)	0.098	0.03682 * (0.0223)	0.099	-0.02025 (0.0165)	0.220
Profession2	-0.01877 (0.0366)	0.609	-0.01686 (0.0208)	0.419	0.02261 (0.0256)	0.377	-0.01234 (0.0185)	0.504
Profession3	-0.04228 (0.0375)	0.260	0.00460 (0.0221)	0.835	0.00506 (0.0339)	0.881	-0.02949 (0.0206)	0.152
Profession4	0.03903 (0.0428)	0.363	-0.01831 (0.0252)	0.467	0.05195 ** (0.0273)	0.057	-0.00170 (0.0218)	0.938
Profession5	-0.02297 (0.03597)	0.523	-0.05437 ** (0.0216)	0.012	0.05103 ** (0.0268)	0.057	-0.03513 * (0.0206)	0.088
Profession6	0.08887 ** (0.0393)	0.024	0.05119 ** (0.0248)	0.039	0.04146 (0.0274)	0.131	-0.00027 (0.0214)	0.990
Ln AGE	-0.09601 *** (0.0344)	0.005	0.02937 (0.0255)	0.249	0.07504 *** (0.0261)	0.004	-0.00084 (0.0232)	0.971
Ln LS	0.08387 *** (0.0243)	0.001	0.00096 (0.0193)	0.960	-0.06181 *** (0.0185)	0.001	-0.01983 (0.0192)	0.302
Ln EA	0.04269 (0.0558)	0.444	0.17119 *** (0.0555)	0.002	0.17744 *** (0.0667)	0.008	0.26873 *** (0.0608)	0.000
Ln ES	0.11459 ** (0.0539)	0.034	0.06093 (0.0423)	0.150	0.05436 (0.0389)	0.162	0.10974 *** (0.0357)	0.002
Ln PEM	0.10259 ** (0.0466)	0.028	-0.03872 (0.0444)	0.383	-0.03670 (0.0427)	0.391	-0.01440 (0.0424)	0.734
Ln UEP	-0.09642 * (0.0513)	0.060	0.31965 *** (0.0505)	0.000	0.33293 *** (0.0649)	0.000	0.32547 *** (0.0589)	0.000
N	1719		1719		1719		1719	
F(24,1694)	6.42		10.67		9.70		23.12	
Prob>F	0.000		0.000		0.000		0.000	

R-squared	0.07	0.21	0.21	0.36
Root MSE	0.263	0.190	0.205	0.170

Robust st. Error are given in parentheses * Significant at 0.10 level, ** Significant at 0.05 level, *** Significant at 0.01 level

Discussion

The negative affect of Demographic variables gender and being male on the HN which is one of four sub-dimensions of NEP scale measuring ecological perception supports that females are much more sensitive to nature than males and this can be found in the studies of Steger and Witt (1989), Ardahan (2012b). Besides, so far a correlation between MS and environmental awareness has been mentioned in studies. The results of this study are in line with this fact. Income and ecological perception have been examined in a lot of studies. As Öztürk (2005) mentions in his study, most of the time, increasing income is not seen as changing recourse of income, it is seen as an upward process relating education and profession. In the profession pyramid the income of the individual could change because of external factors such as having better education. Having better education means having higher income and getting older leads to upward trend relating career. According to Milbrath (1984) even though the income is related to education most of the time income could show a different line than education. In the recreational studies too having better income and education leads to visits far places or participating activities alone or with friends (Kalkan, 2012; Kalkan and Ardahan, 2012; Ardahan and Lapa, 2010). Because of the increasing income and educations, the general consciousness of people increase, and as a result of this, it is normal that in natural sciences the decrease in believing human superiority, this result is in line with the general facts. As Vaske, Donnelly, Williams and Lonker (2001) emphasized the relation between age and environment awareness should be seen in two dimensions. First, the environment awareness of youth maybe because of the education they gained or because of the campaign on media most of the time out and beyond of traditional environmental awareness living with higher environmental awareness second is changing paradigms and learning a lot of things over the time. The results of this study overlap with this fact. The older someone gets the lower the level of HH gets and the higher the level of CN gets. Even though there are a lot of factors which affect LS it is normal that people with low or average incomes have lower LS. (Ardahan, 2012a; Dagdelen, 2008; Otacıoglu, 2008, Schmitter, 2003). Even though participants in ROS have higher level LS than non-participants and even though this difference is meaningful participants in this study have average LS. When it is thought that this result is related personal characteristics of individuals living in their hectic life having positive environment awareness in HN level, and negative in CN, in the situation of having high LS it is expected to have reverse results and it is normal in the light of demographic data. As Buttel and Flinn (1978) and Nelson (1999) mentioned in their studies the fact that negative inclined movements are conducted by people who have low income is in line with the result. The relation between EQ and environmental awareness could be explained by the definition which is related skills about managing feelings and senses or being a mature person which leads to a desirable behavior (Goleman 2007). This theoretical fact could be seen in the relation between the four sub-dimensions EA, EC, CN, HH and the in the relation between ES and HN and in the relationship between MNT, EC, CN, and HN. Considering environmental awareness it is expected that people having high level of EQ have negative level of HH. As Dunlap and others (2000) mentioned in the NEP scale humans are a part of environment and they have same rights as other creatures. Given this fact the results of ES and PEM do not have a negative affect as expected but they describe and an environmental awareness which defends human superiority. This could be because of not having sufficient environmental awareness, not having internalized the role the individuals they play or because of the Islamic teachings that humans are the owners of the universe that everything has been created for them. Even though according to Islam humans are seen as the obsolete owners of the universe and even though this has been repeated several times in Ku'ran this situation authorizes people with managing recourses wisely, and protecting environment (Kula, 2000; Yıldıırım 2012). This situation should be taken up in Friday prays and it should be put in curriculum and in every instance public should be educated about this situation. The results of the study supports the facts which were examined by Dunlap and Hefferman (1975), Jackson (1986), Thapa and Graefe (2003), Bjerke and others (2006), Berns and Simpson (2009), Ardahan (2012b) that participants in ROS have higher level ecological perception non-participators and participating in ROS leads to a positive affect on ecological perception, ecological behavior and ecological attitude. Even though hikers have lower level of ecological perception than participants in ROS cycling, mountaineering, hiking strengthen and increase ecological perception.

In conclusion, when ecological perception is thought as a result which is affected by a lot of independent variables excluding marital status, gender, marital status, income, education, age, the level of LS and EQ, cycling, mountaineering, hiking affect ecological perception, attitude and behavior.

References

- Ardahan, F. (2012a). Examining Relation between Emotional Intelligence and Life Satisfaction on the Example of Outdoor Sports Participants, *Pamukkale Journal of Sport Sciences*. 3(3), 20-33.
- Ardahan, F. (2012b). Comparison of the New Ecological Paradigm (NEP) Scale's Level of Participants and Non Participant of Outdoor Sports with Respect to Some Demographic Variables: Turkey Case , *TOJRAS, The Online Journal of Recreation and Sport*. 1(3), 8-18.
- Ardahan, F., ve Lapa Yerlisu, T. (2010). Outdoor recreation: the reasons and carried benefits for attending outdoor sports of the participants of cycling and/or trekking activities, *International Journal of Human Sciences*. 8(1), 1327-1341.
- Aslan, Ş., ve Özata, M. (2008). Duygusal Zeka ve Tükenmişlik Arasındaki İlişkilerin Araştırılması: Sağlık Çalışanları Örneği, *Erciyes Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, Ocak-Haziran. 30, 77-97.
- Berns, G.N., & Simpson, S. (2009). Outdoor recreation participation and environmental concern: A research summary. *Journal of Experiential Education*, 32. 79–91. doi: 10.5193/JEE.32.1.79.
- Bjerke, T., Thrane, C. ve Keiven, J. (2006). Outdoor recreation interests and environmental attitudes in Norway. *Managing Leisure*. 11, 116–128. doi: 10.1080/13606710500520197.
- Buttel, F.H., ve Flinn, W.L. (1978). Social class and mass environmental beliefs: A reconsideration. *Environ. Behav.* 10, 434-450.
- Chan, D.W. (2004). Perceived Emotional Intelligence and Self-Efficacy Among Chinese Secondary School Teachers in Hong Kong, *Personality and Individual Differences*. 36, 1781–1795.
- Chan, D. W. (2006). Emotional Intelligence and Components of Burnout Among Chinese Secondary School Teachers in Hong Kong, *Teaching and Teacher Education*. 22, 1042–1054.
- Dağdelen, M. (2008). Üretim ve Hizmet Sektöründe Çalışan İşçilerde Ruhsal Sağlık Düzeyi, Ruhsal Belirti Dağılımı, Algılanan Sağlık, İş Doyumu, Yaşam Doyumu ve Sosyo demografik Özelliklerinin Karşılaştırılması. İnönü Üniversitesi, Tıp Fakültesi Uzmanlık Tezi.
- Diener, E., Emmons, R.A., Larsen, R.J., ve Griffin, S. (1985). The Satisfaction With Life Scale, *Journal of Personality Assessment*. 49, 71-75.
- Dunlap, R.E., veHeffernan, R.B. (1975). Outdoor recreation and environmental concern: An empirical examination. *Rural Sociology*. 40(1), 18–30.
- Dunlap, R.E., Grieneeks, J.K., Rokeach, M., 1983. Human values and pro-environmental behavior, in WD. Conn (ed) *energy and material resources: Attitudes, values, and public policy*, Boulder, CO:Westview.
- Dunlap, R.E., Van Liere, K.D., Mertig, A.G., Jones, R.E., 2000. Measuring endorsement of the new ecological paradigm: A revised NEP scale. *J Soc Issues*, 56, 425–442.
- Erdogan, N. (2009). Testing the new ecological paradigm scale: Turkish case. *African J Agricul Res*. 4, 1023–1031.
- Goleman, D. (2007). *Emotional Intelligence*, Bloomsbury Business Library – Management Library.
- Homer, P.M., ve Kahle, L.R. (1988). A structural equation test of the value- attitude-behavior hierarchy. *J. Personal. Social Psychol.* 54, 638-646.
- Jackson, E.L. (1986). Outdoor recreation participation and attitudes to the environment. *Leisure Studies*. 5,1–23, doi: 10.1080/02614368600390011.
- Kalkan, A. (2012). Outdoor Recreation, Reasons For Individuals Participation In Nature-Based Sports Whit in The Province of Antalya, Akdeniz University, Social Sciences Institute, Sport Management Department, Master Thesis.
- Kalkan, A. ve Ardahan, F. (2012). The Profile of the Outdoor Sports Participants and the Reason and the Benefits of Participating Outdoor Sports: Antalya Case, 12 th International Sport Science Congress, December 12-14, Denizli, Turkey.
- Kim, D., 1999. Environmentalism in developing countries and the case of a large Korean city. *Soc Sci Quarterly*. 80, 810–829.

- Kula, N. (2000). Kur'an Işığında İnsan-Çevre İlişkisinin Ruh Sağlığı Açısından Önemi, Uludağ Üniversitesi, İlahiyat Fakültesi Dergisi. 9(9), 1-10.
- Milbrath, L.W. (1984). Environmentalists: Vanguard for a new society. Albany: State University of New York Press.
- Mohai, P. (1992). Men, women, and the environment: An examination of the gender gap in environmental concern and activism. *Society Nat. Resources*. 5, 1-19.
- Mohai, P., Bryant, B., 1998. Is there a "race effect" on concern for environmental quality? *Public Opinion Quarterly*. 62, 475-505.
- Nelson, P.B. (1999). Quality of life, nontraditional income, and economic growth: New development opportunities for the rural west. *Rural Dev. Perspect*. 14, 32-37.
- Otacıoğlu, G.S. (2008). Analysis Of Job And Life Satisfaction Of Music Teachers, *Turkish Journal Music Education*, The Refereed Scholarly journal of the Muzik Eğitim Yayınları, January. 1(1), 37-45.
- Öztürk, N., (2005). The Role of Education in Economic Development. *Sosyo Ekonomi*. 1, 27-44.
- Rokeach, M. (1973). The nature of human values. New York: Free Press.
- Rokeach, M. (1979). Understanding human values. New York: Free Press.
- Schmitter, C. (2003). Life Satisfaction In Centenarians Residing In Long-Term Care. (21 Şubat, 2003). <http://www.mmhc.com/articles/NHM9912/cutillo.html>, 19 Nisan 2011.
- Steger, M. A., ve Witt. S. (1989). Gender differences in environmental orientations: A comparison of publics and activists in Canada and the US. *West. Polit. Q.* 42, 627- 650.
- Taskin, O., 2009. The environmental attitudes of Turkish senior high school students in the context of postmaterialism and the new environmental paradigm. *Int J Sci Edu.*, 31, 481-502.
- Thapa, B., & Graefe, A.R. (2003). Forest recreationists and environmental attitudes and behaviors among forest recreationists. *Journal of Park and Recreation Administration*. 21(1), 75-103.
- Vaske, J.J., Donnelly, M.P., Williams, D.R., ve Lonker, S. (2001). Demographic Influences on Environmental Value Orientations and Normative Beliefs About National Forest Management, *Society and Natural Resources*, 14:761-776.
- Yıldırım, Z. (2012). Kur'an ve Çevre Sorunları, Atatürk Üniversitesi İlahiyat Fakültesi Dergisi. 38, 67-100.
- Zinn, H.C., Graefe, A.R., 2007. Emerging adults and the future of wild nature. *Int J Wilderness*. 13, 16-23.