



ECORECREATIONAL ATTITUDE OF PARTICIPANTS IN SPORTIVE RECREATION ACTIVITIESⁱ

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Abstract:

The aim of this research is to develop an attitude scale for ecorecreation and to investigate the effect of variables on the level of ecorecreational attitudes of the individuals participating in sportive recreation activities with the measurement tool obtained. During the scale development phase of the study, data were collected from students who were trained at different faculties of Gazi University by test re-test method. Qualitative data were analyzed by content analysis and literature survey was conducted. The test form was applied on 544 students in the first application and it was found that the obtained data were suitable for the factor analysis of the number of the resultant samples of KMO (.95) and Barlett (17536.301, $p < 0.001$). After the EFA, 31 factorial structure was obtained with factor loadings ranging from .47 to .84 (consisting of individual, social, behavior, antipathy, environmental sensitivity and nature communication sub-dimensions) and 60% of the total variance was explained. The internal consistency coefficient is .91 for the entire scale. The CFA after the second administration is evidence of construct validity (RMSA .061, SRMR 0.56, NFI 0.95, CFI 0.97, NNFI 0.96, χ^2 / df 2.416). 415 participants involved in sportive recreation activities in different cities by means of the obtained measurement and analyzes were made on the level of attitude towards ecorecreation. 415 participants who attended in sportive recreation activities in different cities by means of the obtained measurement were analyzed by descriptive statistics, Independent Sampling T Test, ANOVA and Tukey (HSD-LSD) tests on the level of attitude towards ecorecreation and whether certain variables affected this level. At this stage, the internal consistency coefficient was .92 for the entire measurement instrument. It is seen that the level of attitude toward ecorecreation is high, the highest attitude score is in the antipathy subdimension and the lowest attitude score is in the behavior subdimension. Statistically significant differences were found in the total scores and subdimensions of ATES

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between gender, age, education level, marital status, plant growth, feeding animals, daily leisure, adequacy of weekly leisure, efficiency leisure, the frequency of visits to natural areas within the last year, the duration of participation in ecorecreational activities and also it is observed that there is no significant difference between the occupation group, perceived income variables and ATEs. As a result, when the data collected by the measurement tool are analyzed, the research reveals that the ecorecreational attitudes of those who spend more time with the nature and communicate with the nature increase but not reflected in the behavior.

Keywords: ecorecreation, attitude, scale development

1. Introduction

With the clarification of the concepts of environment and ecology, the importance of the environment in recreational use emerges due to the mutual interaction of environment and recreation. The concept of eco is described as a form of combining representing the environment. Ecorecreation includes an interdisciplinary definition, a field of study in which the concepts of environment and recreation are intertwined. Today, when interdisciplinary studies have gained importance in the literature, the emergence of this innovative concept in our country emphasizes the issue of environmentally sensitive leisure activities, which are evaluated using a specific environment. According to Karaküçük and Akgül (2016: 100), ecorecreation is defined as the general name given to environmentally friendly leisure activities, while it can also be expressed as taking necessary precautions by staying within the ecological rules and ecosystem of recreational activities. According to another definition, ecorecreation is the realization of leisure activities by using natural resources responsibly, preserving, not changing and destroying them or it has been called ecorecreation, the name given to leisure planning and implementation policies.

Ecorecreational activities refer to all environmentally friendly recreational activities that can be applied inside and outside the city. These activities, which are mostly used as outdoor recreation in the literature, can be practiced both indoors and outdoors. These activities using a specific environment are generally considered as activities performed in nature. Sports activities in nature are different depending on the risk factors and auxiliary elements used, such as "outdoor sports", "outdoor recreation", "adventure sports", "adventure recreation" classified by names (Koçak & Balcı, 2010). Among these concepts, the main factor that distinguishes ecorecreation from the concept of outdoor recreation is the state of participation in recreational activities with environmental protection awareness, emotion and behavior. It is clear that not every outdoor recreation can qualify as an ecorecreation. Ecorecreation constitutes a special area in itself and differs from other descriptions because it prioritizes environmental protection.

Environmental sustainability for sports and recreation areas, the use of facilities for human happiness and quality life, the creation of organizations that can be sustained

for generations with their functional and qualitative features and the management of all of them (Balci & Koçak, 2014), coincides with the idea that constitutes the starting point of ecorecreation. Ecorecreation supports the individual, who interacts with the environment, to participate and maintain recreational activities without harming the environment. Sports recreation can be explained as the individuals' evaluation of their leisure time by doing sports activities based on physical activity. In this context, sports recreation activities can be considered as all sports-related activities that participate in voluntary and free times, away from professional meaning (Ergül, 2008: 13). Sportive recreation is a form of action that provides the physical, spiritual and social development of the individual, and although it looks like an individual, it is social with its possibility, setting, goal and way of doing it and it is done in a social environment (Demirel, 2013: 23-24). The mentioned social environment also includes the physical environment. For the realization of sportive recreational activities, a certain environment and the environment should be used with a sustainable use logic. Therefore, it is important to develop an ecorecreational attitude. In this context, attitudes are abstractions or generalizations that are identified by the individual, which are expressed as tendencies to evaluate an object, concept or symbol (Kahle, 1984: 5). Attitude is described as responses given as the expression of emotions (Kahle, 1984: 2). Attitudes; showing an attitude towards something or a person is a way to determine all feelings and thoughts such as liking or disliking, approving or disapproving, trust or insecurity (Eiser, 1986: 11).

Within the scope of the study, it was aimed to develop an attitude scale in order to measure the attitudes of individuals towards environmentally friendly leisure activities, after the 5-Likert type measurement tool was developed, the data were collected with the measurement tool and the data were analyzed and the attitude levels of individuals participating in sports recreational activities were determined. and it was tried to determine the direction in which certain variables change this level. At this stage of the research, the study methodology is included.

3. Material and Methods

The research consists of two parts. While the scale development phase constituted the first phase, the data were collected and analyzed with the final form obtained and the findings were revealed. The research has been prepared by quantitative method and single scanning model has been used from general scanning models. It is a model used in many areas such as determining habits for health, education, work, leisure and similar situations (Karasar, 2004: 79). In the study, scale development steps were included within the scope of Study I, and the attitudes of individuals participating in sports recreational activities during Study II were analyzed in line with certain variables with the obtained measurement tool.

3.1 Sample

In the scale development phase of the research, students who are educated in various departments of Gazi University and have received pedagogical formation training were

preferred as the study group. Through easily accessible sampling during the scale development phase of study I (Yıldırım & Şimşek, 2008: 113) data were obtained from students. In the study group, 61 pedagogical formation students at the stage of collecting qualitative data, 50 students in order to test the clarity and understandability of the questions, and then 544 Gazi University Faculty of Education, Faculty of Economics and Administrative Sciences, Faculty of Tourism, Faculty of Art and Design and Faculty of Science were included in the first application. As a result of the analysis, data were collected again with the test-retest method with 386 students from the same group in which the first application was made at the end of 6 weeks and evidence of the construct validity was sought.

Individuals participating in sportive recreational activities as a result of obtaining evidence that it is a valid and reliable measurement tool, thus developing ATES. It is aimed to collect data through purpose-based typical case sampling. Purposive sampling is selected as a subgroup of samples that are decided or believed to best represent the main mass according to the available information. The results obtained from the observations made on this group are then generalized to the whole mass (Seydioğlu, 1997: 41). In cases where a new application or innovation is desired to be introduced in typical case sampling, one or a few of the most typical situations in which these practices are performed and innovation can be studied (Yıldırım and Şimşek, 2008: 110), based on the definitions, Bursa Bursagücü Sports Club, Bursa Mountain 415 participants participating in sports recreational activities in clubs such as Cycling Youth and Sports Club Association, Nilüfer Elit Youth and Sports Club, Education and Health Volunteers Association, Muğla Fethiye Pedals and Can Cycling Group, Erzurum Ski Club, Ankara Orienteering Sports Club and Ankara Run for Run Community It is included in the second part of the research. A second confirmatory factor analysis was conducted with the sample group included in the second part of the study in order to provide evidence for the measurement of attitude towards ecorecreation, and it was observed that the obtained data provided evidence that the attitude scale towards ecorecreation was also a useful measurement tool for individuals participating in sports recreational activities.

3.2 Instrument

A preliminary study was conducted by collecting qualitative data in order to create a form in which quantitative data will be collected in the development of the scale of attitude towards ecorecreation. Qualitative data were collected with the answers given to the single open-ended question asked by the students who received pedagogical formation training in Gazi University. The data were analyzed with content analysis and items were added to the question pool. In the light of qualitative data and literature review, a large sample of items was considered to provide the basis for the content validity of the final test (Kan, 2013: 244), and a 95-item question pool was created. By analyzing the question pool with 5 academicians who are experts in the field, the question pool was reduced 68 items, then made ready for the first application as 61 items. In order to test the applicability of the research, a pilot study was conducted with 50 students and the comprehensibility of the questions was tested. As a result of the pilot study, it was

observed that the items were understandable, and the first application was initiated. Data were collected from 544 university students.

3.3 EFA (Exploratory factor analysis)

The suitability of the data obtained after the application of the scale to factor analysis was tested with KMO (Kaiser-Meyer-Olkin) coefficient and Bartlett's test of Sphericity. The KMO-MSA measure indicates the scale's adequacy in measuring property. As KMO-MSA value approaches 1 value, it indicates that the current scale is a highly efficient scale in measuring feature. Bartlett's Sphericity test determines whether the items of the current scale are related to each other and whether the scale consists of at least one or more sub-dimensions. A level of $p < 0.05$ means that the scale is effective in measuring the sub-dimensions of the feature (Alpar, 2014: 529; Özdamar, 2016: 150-151). Values of these results are shown in Table 1.

Table 1: KMO and Bartlett's test results

KMO ve Bartlett's Tests	
Kaiser-Meyer-Olkin Sample Group Size	0,950
Bartlett Sphericity Test	χ^2 17536,301
	sd 1830
	p 0,000

As a result of the exploratory factor analysis, the measurement tool, which was observed to be collected in 6 sub-dimensions from 61 items to 31 items, was made ready for the second application. The following analyzes are included in order to provide evidence for the validity and reliability of the measurement tool; The trial form was applied on 544 students in the first application, and the result of KMO (.95) and Bartlett (17536.301, $p < 0.001$) tests made with the obtained data was found to be suitable for factor analysis. After EFA, a 31-item structure with 6 factors (consisting of individual, social, behavior, antipathy, environmental sensitivity and nature communication sub-dimensions) with factor loads varying between .47 and .84 was obtained, 60% of the variance in total was explained. The internal consistency coefficient is .91 for the whole scale. and confirmatory factor analysis was used to verify the structure that emerged as a result of this analysis.

Table 2: Rotated Components Analysis

	I.	II.	III.	IV.	V.	VI.	Cronbach Alpha	Açıklanan Varyans
ER2	0,762						0,87	%31,67
ER1	0,751							
ER3	0,740							
ER4	0,709							
ER5	0,676							
ER6	0,658							
ER7	0,618							
ER8	0,578							
ER54		0,745					0,88	%10,09

ER53	0, 716			
ER57	0, 686			
ER55	0, 681			
ER58	0, 668			
ER52	0, 612			
ER59	0, 583			
ER35	0, 801		0, 78	%6, 10
ER34	0, 726			
ER20	0, 706			
ER51	0, 606			
ER61	0, 555			
ER15	0, 849		0, 84	%5, 07
ER16	0, 814			
ER14	0, 799			
ER18	0, 656			
ER37	0, 732		0, 77	%3, 79
ER38	0, 705			
ER36	0, 615			
ER39	0, 472			
ER44	0, 785		0, 70	%3, 41
ER43	0, 746			
ER41	0, 523			
Toplam			0, 91	%60

After the exploratory factor analysis, it was observed that the scale consists of 6 dimensions, and these dimensions were named as individual, social, behavior, antipathy, environmental sensitivity and nature communication.

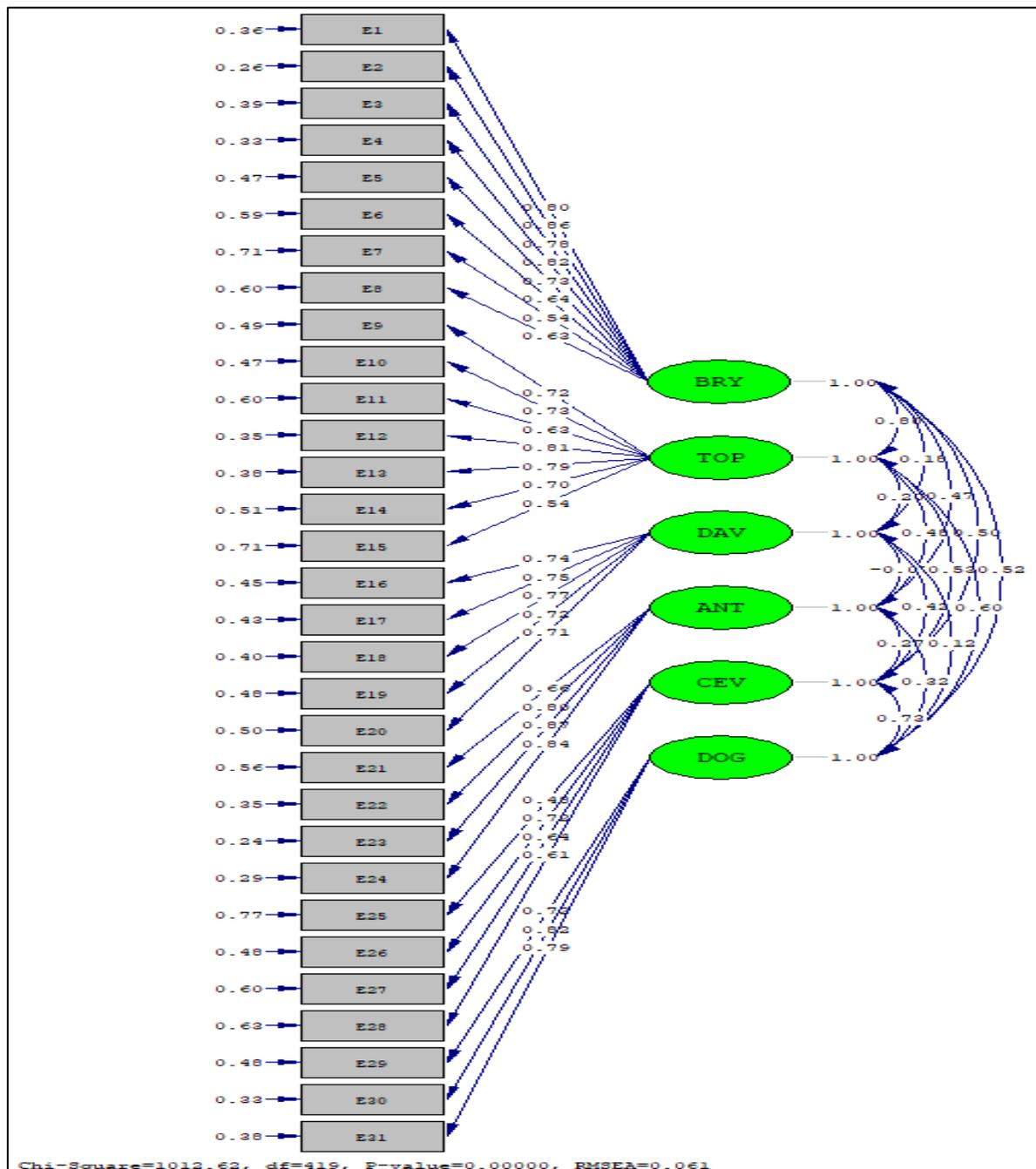
3.4 CFA (Confirmatory factor analysis)

Confirmatory factor analysis was performed to test the validity and accuracy of the structure obtained after the exploratory factor analysis. It is seen that the DFA made after test-retest provides evidence for the construct validity (RMSA .061, SRMR 0.56, NFI 0.95, CFI 0.97, NNFI 0.96, χ^2 / df 2.416). With the findings obtained, it is seen that the structure is confirmed within the framework of fit indices.

Table 3: Fit indices and model fit for limit values

Fit Index	Ideal Fit Values	Acceptable Values	Incompatible	Obtained Values
RMSA	0-0.05	0.05-0.09	> 0.10	0.61
CFI	1	0.90-0.99	<0.90	0.97
NNFI	1	0.95-0.99	<0.95	0.96
χ^2/df	≤ 2	2-5	5+	2.416

Kaynak: Özdamar, 2016:185; Özdamar, 2013:242.



3.5 Reliability

Table 4: Cronbach-Alpha internal consistency coefficients for sub-dimensions of the scale of attitude towards ecorecreation

Factors	Names	α
F1	Individual	.87
F2	Social	.88
F3	Behaviour	.78
F4	Antipathy	.84
F5	Environmental sensitivity	.77
F6	Nature communication	.70
Total		.91

3.6 Analysis of the data

Validity and reliability studies of the scale were conducted in line with the answers from 544 students for the first application that participated in the study. In the second application, 386 students from the same group were reached with the test-retest method, and evidence for construct validity was sought. Since the CFA results were verifying the structure, the final application was started and the attitude levels of 415 participants participating in sports recreation activities were tested on certain variables. The obtained data were analyzed using SPSS 23.0 and Lisrel 8.7 package programs, and in the second part of the study, descriptive statistics, Independent Sample T Test, One-Way Analysis of Variance ANOVA were used.

4. Results

The participants that make up the study group of the research; mostly male (62.9%), over 36 years old (48.4%), private sector employee (50.6%), usually undergraduate (54.9%), perceived medium income (53.5%) mostly married (56.6%), plant growing (81.7%), animal feeding (81.2%), describing the daily leisure time as 3-4 hours (37.3%), finding the weekly leisure time insufficient (32.0%), who thought they did not have productive leisure time (50.1%), who stated that they rarely went to natural areas in the last 1 year (34.2%) and who participated in ecorecreational activities for less than 1 year (34%, 2) consists of participants. In order to apply the developed measurement tool on individuals participating in sports and recreational activities, evidence for the construct validity was sought with CFA and the findings obtained were verified at a level that would provide evidence for the construct validity.

Table 5: Arithmetic mean and standard deviation values of the scale of attitude towards ecorecreation

N=(415)	\bar{x}	sd	Min	Max.
ETAS	128, 48	17, 39	47, 00	155, 00
Individual	35, 13	5, 29	8, 00	40, 00
Social	31, 26	4, 46	7, 00	35, 00
Behaviour	15, 67	5, 59	5, 00	25, 00
Antipathy	18, 08	3, 51	4, 00	20, 00
Environmental sensitivity	15, 79	3, 52	4, 00	20, 00
Nature communication	12, 52	2, 54	3, 00	15, 00

When the total scores of the scale of attitude towards ecorecreation are examined, it is seen that the sample group participating in the study has a high level of attitude towards ecorecreation, the highest attitude score is in the antipathy sub-dimension and the lowest attitude score is in the behavior sub-dimension.

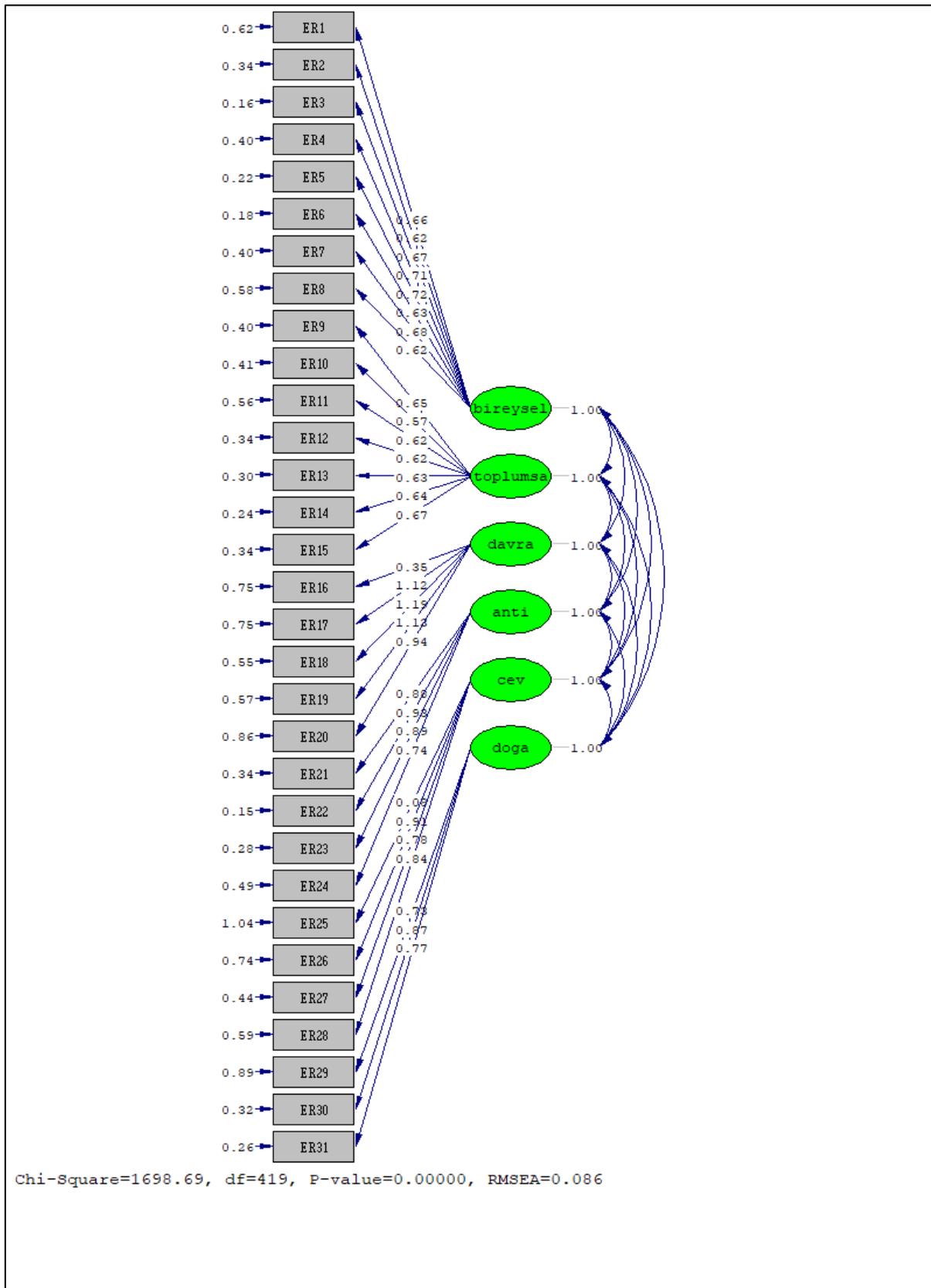


Table 6: Independent sample T test results between the attitude scale towards ecorecreation and the gender variable of the participants

	Gender	N	\bar{x}	sd	t	p
ETAS	Male	261	127, 27	18, 89	-1, 861	0, 063
	Female	154	130, 55	14, 32		
Individual	Male	261	34, 73	5, 86	-2, 031	0, 043*
	Female	154	35, 82	4, 09		
Social	Male	261	30, 81	4, 90	-2, 648	0, 008*
	Female	154	32, 01	3, 49		
Behaviour	Male	261	15, 63	5, 72	-0, 190	0, 849
	Female	154	15, 74	5, 37		
Antipathy	Male	261	18, 03	3, 57	-0, 412	0, 680
	Female	154	18, 18	3, 41		
Environmental sensitivity	Male	261	15, 67	3, 72	-0, 898	0, 370
	Female	154	16, 00	3, 15		
Nature communication	Male	261	12, 37	2, 67	-1, 629	0, 104
	Female	154	12, 79	2, 28		

* p <0.05 is statistically significant.

According to the t test results between the attitude towards ecorecreation and gender, statistically significant relationships were found between gender and individual and social sub-dimensions. Women's attitude levels towards ecorecreation were found to be higher than men in individual and social sub-dimensions.

Table 7: Results of ANOVA test between the attitude scale towards ecorecreation and age variable of the participants

	Age	N	\bar{x}	sd	F	p
ETAS	25<	79	126, 35	19, 79	1, 051	0, 351
	25-35	135	129, 91	16, 91		
	36>	201	128, 37	16, 68		
	Total	415	128, 48	17, 39		
Individual	25<	79	34, 32	6, 14	1, 904	0, 150
	25-35	135	35, 76	4, 68		
	36>	201	35, 03	5, 30		
	Total	415	35, 13	5, 29		
Social	25<	79	30, 20	5, 68	3, 252	0, 040*
	25-35	135	31, 80	3, 86		
	36>	201	31, 31	4, 24		
	Total	415	31, 26	4, 46		
Behaviour	25<	79	16, 94	5, 52	4, 550	0, 011*
	25-35	135	16, 10	5, 99		
	36>	201	14, 88	5, 23		
	Total	415	15, 67	5, 59		
Antipathy	25<	79	17, 30	4, 29	4, 635	0, 010*
	25-35	135	17, 79	3, 89		
	36>	201	18, 59	2, 76		
	Total	415	18, 08	3, 51		
Environmental	25<	79	15, 00	4, 13	2, 514	0, 082

sensitivity	25-35	135	15, 97	3, 52		
	36>	201	15, 99	3, 23		
	Total	415	15, 79	3, 52		
Nature communication	25<	79	12, 56	2, 82	0, 046	0, 955
	25-35	135	12, 47	2, 68		
	36>	201	12, 54	2, 33		
	Total	415	12, 52	2, 54		

* p <0.05 is statistically significant.

According to the results of the ANOVA test between the age variable of the participants and the EATS, there was no significant difference between the total scores, individual, environmental sensitivity and nature communication sub-dimensions and the age variable, while there was a significant difference between the social, behavior and antipathy sub-dimensions of the ATE sub-dimensions and the age variable. According to Tukey analysis; In the societal sub-dimension, in favor of participants aged between 25 and 35 years, in the behavior sub-dimension, in favor of participants under 25 and over 36, in the antipathy sub-dimension, in favor of participants aged under 25 and 36. According to the results of the analysis among the participants above the age of 36, it is seen that there are significant differences in favor of the participants.

Table 8: Independent sample T test results between the attitude scale towards ecorecreation and the plant growing status variable of the participants

	Growing Plant	N	\bar{x}	sd	t	p
ETAS	Yes	339	131, 01	15, 33	6, 557	0, 000*
	No	76	117, 22	21, 27		
Individual	Yes	339	35, 81	4, 66	5, 681	0, 000*
	No	76	32, 13	6, 74		
Social	Yes	339	31, 77	3, 84	5, 058	0, 000*
	No	76	28, 98	6, 10		
Behaviour	Yes	339	15, 99	5, 52	2, 491	0, 013*
	No	76	14, 23	5, 71		
Antipathy	Yes	339	18, 35	3, 19	3, 319	0, 001*
	No	76	16, 89	4, 51		
Environmental sensitivity	Yes	339	16, 18	3, 29	4, 825	0, 000*
	No	76	14, 07	4, 00		
Nature communication	Yes	339	12, 89	2, 23	6, 486	0, 000*
	No	76	10, 89	3, 16		

* p <0.05 is statistically significant.

It is seen that the answers given to the question about whether the participants grow plants and the total scores and all sub-dimensions of the scale of attitude towards ecorecreation are found to be significantly different. Accordingly, it is revealed that the majority of the participants grow plants and the participants who grow plants have a higher attitude towards ecorecreation in all sub-dimensions and total scores than those who do not.

Table 9: Results of the independent samples T test between the attitude scale towards ecorecreation and the animal feeding status variable of the participants

	Feeding animal	N	\bar{x}	sd	t	p
ETAS	Yes	337	130,49	16,45	5,018	0,000*
	No	78	119,83	18,76		
Individual	Yes	337	35,64	4,99	4,107	0,000*
	No	78	32,96	6,00		
Social	Yes	337	31,73	4,17	4,594	0,000*
	No	78	29,21	5,11		
Behaviour	Yes	337	15,89	5,61	1,698	0,000*
	No	78	14,70	5,43		
Antipathy	Yes	337	18,38	3,30	3,627	0,000*
	No	78	16,80	4,07		
Environmental sensitivity	Yes	337	16,00	3,51	2,518	0,012*
	No	78	14,89	3,44		
Nature communication	Yes	337	12,82	2,43	5,090	0,000*
	No	78	11,24	2,61		

* p <0.05 is statistically significant.

According to the results of the independent sample T test between the animal feeding status of the participants and the scale of attitude towards ecorecreation, it was observed that there were significant differences in favor of those who kept animals with all the sub-dimensions of ATES and total ATES. Accordingly, it can be stated that animal feeding status triggers a positive attitude towards ecorecreational leisure activities.

Table 10: Independent sample T test results between the attitude scale towards ecorecreation and participants' productive leisure time

	Productive leisure	N	\bar{x}	sd	t	p
ETAS	Yes	207	130,92	15,35	2,868	0,004*
	No	208	126,06	18,93		
Individual	Yes	207	36,05	4,43	3,553	0,000*
	No	208	34,23	5,90		
Social	Yes	207	31,69	3,97	1,977	0,049*
	No	208	30,83	4,87		
Behaviour	Yes	207	15,89	5,51	0,822	0,412
	No	208	15,44	5,67		
Antipathy	Yes	207	18,55	3,07	2,690	0,007*
	No	208	17,62	3,85		
Environmental sensitivity	Yes	207	15,92	3,45	0,748	0,455
	No	208	15,66	3,60		
Nature communication	Yes	207	12,79	2,44	2,160	0,031*
	No	208	12,25	2,62		

* p <0.05 is statistically significant.

According to the results of the T test between the participants' having productive leisure time and the ATES, it is seen that the participants who stated that they have productive

leisure time in all sub-dimensions and total scores except the behavior and environmental sensitivity sub-dimension had significantly higher attitude towards ecorecreation. Although there is no significant difference in the behavior and environmental sensitivity sub-dimensions, it is observed that the averages result in favor of the participants who think they have productive leisure time.

Table 11: Results of the ANOVA test between the attitude scale towards ecorecreation and the duration of the participate in ecorecreational activities

	Duration of the participation	N	\bar{x}	sd	F	p
ETAS	Less than 1 year	142	123, 62	20, 48	7, 339	0, 000*
	1-2 years	55	126, 14	14, 24		
	3-4 years	45	131, 55	13, 50		
	5-6 years	37	126, 59	17, 85		
	7 years and more	136	134, 01	14, 20		
	Total	415	128, 48	17, 39		
Individual	Less than 1 year	142	33, 67	6, 60	6, 004	0, 000*
	1-2 years	55	34, 96	3, 93		
	3-4 years	45	35, 91	4, 24		
	5-6 years	37	34, 62	4, 63		
	7 years and more	136	36, 62	4, 22		
	Total	415	35, 13	5, 29		
Social	Less than 1 year	142	30, 27	5, 69	5, 355	0, 000*
	1-2 years	55	30, 94	3, 61		
	3-4 years	45	31, 44	3, 55		
	5-6 years	37	30, 43	4, 45		
	7 years and more	136	32, 58	3, 09		
	Total	415	31, 26	4, 46		
Behaviour	Less than 1 year	142	14, 96	6, 05	1, 303	0, 268
	1-2 years	55	15, 81	5, 51		
	3-4 years	45	16, 37	5, 24		
	5-6 years	37	15, 02	5, 29		
	7 years and more	136	16, 29	5, 28		
	Total	415	15, 67	5, 59		
Antipathy	Less than 1 year	142	17, 35	3, 92	7, 048	0, 000*
	1-2 years	55	16, 78	4, 10		
	3-4 years	45	18, 44	3, 67		
	5-6 years	37	18, 64	2, 11		
	7 years and more	136	19, 11	2, 64		
	Total	415	18, 0	3, 51		
Environmental sensitivity	Less than 1 year	142	15, 22	4, 07	2, 691	0, 031*
	1-2 years	55	15, 40	3, 34		
	3-4 years	45	16, 35	2, 48		
	5-6 years	37	15, 48	3, 46		
	7 years and more	136	16, 45	3, 18		
	Total	415	15, 79	3, 52		
Nature communication	Less than 1 year	142	12, 12	2, 97	2, 447	0, 046*
	1-2 years	55	12, 23	2, 59		
	3-4 years	45	13, 02	1, 78		

5-6 years	37	12, 37	1, 93
7 years and more	136	12, 94	2, 33
Total	415	12, 52	2, 54

* p <0.05 is statistically significant.

According to the results of the ANOVA test between the duration of the participants' participation in ecorecreational activities and ATEs it is seen that there are significant differences in all sub-dimensions and total scores except the antipathy sub-dimension. According to this; When the total score and sub-dimensions were examined, the highest ATEs score among the groups was obtained by participants who participated in ecorecreational activities for 7 years or more, while the participants who participated in ecorecreational activities for less than 1 year had the lowest ATE scores and the sub-dimensions also increased. It was observed that there was an increase at the same rate in the level of attitude.

5. Discussion and Conclusion

Determining the ecorecreational attitude levels of individuals participating in sports recreation activities with the measurement tool obtained by developing an attitude scale towards ecorecreation and researching how various variables affect this level, according to the findings of the study, 6-factor (individual, social, behavior, antipathy, environmental sensitivity and nature communication sub-dimensions), 31-item structure was obtained, 60% of the variance in total was explained. The internal consistency coefficient at the scale development stage is .91 for the whole scale. DFA made after the second application provides evidence of construct validity (RMSA .061, SRMR 0.56, NFI 0.95, CFI 0.97, NNFI 0.96, χ^2 / df 2.416). Analyses were made with 415 participants who participated in sports recreation activities in different provinces with the measurement tool obtained, regarding the level of attitude towards ecorecreation and whether certain variables affect this level, and at this stage, the internal consistency coefficient was determined as .92 for the whole measurement tool. Considering the findings of the study, it is seen that the attitude level towards ecorecreation is high, the highest attitude score is in the antipathy sub-dimension and the lowest attitude score is in the behavior sub-dimension.

The level of attitude towards ecorecreation, gender, age, educational status, marital status, plant breeding status, animal feeding status, daily leisure time, weekly leisure time, having productive leisure time, the frequency of visiting natural areas in the last year, There were statistically significant differences between variables such as the duration of participation in ecorecreational activities and the total scores and sub-dimensions of ATEs, besides, it was observed that there was no significant difference between the job group, perceived income variables and ATEs. As a result, the measurement tool analyzed in the study is a valid and reliable measurement tool in measuring the attitude towards ecorecreation, when the data obtained with the measurement tool are analyzed, it is stated that among the participants, women, those

who are 36 years of age or older, those who have a postgraduate education level, those who grow plants and keep animals, Those who stated that they had 7 hours or more per day, those who described their weekly leisure time as absolutely sufficient, those who thought they spent their leisure time productively, those who stated that they went to natural areas very often in the last year, and those who participated in ecorecreational activities for 7 years or more were It can be stated that it is higher than the groups.

The scale of attitude towards ecorecreation is considered as attitude towards environment and attitude towards leisure time scales in the literature. Among the environmental attitude scales, Yaşaroğlu and Akdağ's (2013) attitude scale towards the environment for the first grade of primary education can be shown. When the validity and reliability studies of the scale are examined, it is concluded that there is sufficient internal consistency in all dimensions, the scale is confirmed as a model according to the confirmatory factor analysis result, and the developed scale is valid and reliable (.84). The .92 Cronbach alpha value in our study is in parallel with the environmental attitude scale, which has a value of .84, in terms of reliability. As a result of the exploratory factor analysis, a 3-factor 21-item structure was reached and it was seen that 49.676% of the total variance was explained. The three dimensions obtained in the measurement tool as a result of EFA were named as environmental concern, cleanliness and savings, and love for animals, respectively. RMSEA value after DFA was found as .066, GFI .92 and AGFI as .89. As a result of the research, which obtained parallel values with our research, it was determined that the scale consisting of 3 dimensions and 21 items can be used in measuring 4th and 5th grade students' attitudes towards the environment.

Considering the total scores of attitude towards ecorecreation within the scope of the research, it was determined that the individuals participating in sports recreation activities have high attitude scores towards ecorecreation. Similar to this finding, in the study examining the attitudes of geography teacher candidates towards sustainable environment, it was concluded that the participants' attitudes towards sustainable environment were positive and high (Aydın & Ünaldı, 2013). In another study, Bostancıoğlu, Varol Saraçoğlu, and Öztürk (2017) investigated the environmental awareness and attitude levels of students and the factors affecting them, and in the study using the environmental attitude scale, it was observed that the participants showed a high environmental attitude in parallel with this research. In the study to examine the environmental attitudes and knowledge levels of teacher candidates in terms of various variables, it was very positive in terms of environmental thinking, medium in environmental knowledge, close to negative in terms of environmental behavior, and showed a parallel table with the responses of our study group, which had the lowest average in the behavior sub-dimension. At the same time, Öcal (2013) found that, in his research on determining the attitudes of social studies teacher candidates towards environmental problems, teacher candidates' attitudes towards environmental problems were positive in parallel with our research, that the teacher candidates were generally conscious of the environment, followed environmental issues and were positive about this issue. It was observed that they were in attitude. It was revealed that as the teacher candidates' level of interest in environmental issues increased, the average of their

attitude scores towards the environment increased, and this increase was significant. Significant differences have emerged between the frequency of following environmental issues from the press and their attitudes towards the environment. In a similar study, Kayalı examined the attitudes of social studies, Turkish and primary school teacher candidates towards environmental problems using the environmental attitude scale, and found that the participants had a positive attitude towards environmental problems similar to our study. In another study, pre-service teachers' attitudes towards environmental problems were analyzed, and the attitudes of pre-service teachers who participated in the study were found to be moderately high, unlike our study (Polat & Kırpık, 2013). Within the scope of the nature education project in Ihlara Valley (Aksaray) and its surrounding, which is the TÜBİTAK project carried out by Keleş, Uzun and Varnacı-Uzun in 2010, it was aimed to determine the effectiveness and permanence on environmental awareness, attitude towards the environment, thought and behavior. The study group consisted of 25 teacher candidates, and the environmental attitude scale, which was developed by Uzun and Sağlam (2006), consisting of environmental thought and behavior sub-dimensions, was used to collect data.

As a result of the study, it was determined that the nature education program significantly affected the environmental awareness, attitudes and behaviors of the individuals and provided their permanence. In another study, the relationship between public participation in outdoor recreation and environmental attitudes was examined and no significant relationship was found. In this study, the environmental paradigm scale was used and a high level of attitude was found in parallel with our research on the environmental attitude of the participants. In the study conducted by Alnıaçık and Koç (2009), university students' attitudes towards the environment were measured with the new environmental paradigm scale, and students' attitudes were found to be above average, parallel to our study. In the study conducted by Sargın et al. In 2016, pre-service teachers' environmental knowledge, attitudes towards the environment, and environmental behaviors were investigated depending on five different variables. As a result of the research conducted with 985 students, it was determined that the participants have high environmental sensitivity and even risk changing their habits to contribute to the solution of environmental problems. Aydın, Şahin, and Korkmaz (2013) aimed to determine and compare the environmental attitude levels of elementary science, classroom and preschool teacher candidates, and the environmental attitude levels of pre-service science teachers were found to be higher. On the other hand, as a result of the research carried out by Atasoy and Ertürk in the form of a field research on environmental attitude and environmental knowledge of primary school students in 2008, it was determined that the students were not at a sufficient level in terms of environmental knowledge and environmental attitude. Çelik et al. (2016) examined the attitudes of nursing and medical students towards environmental problems and found that the students showed a good environmental attitude score. In the studies conducted with different sample groups, it is stated in the literature that the environmental attitudes of the participants are generally positive and high, and in this sense, they have knowledge and emotion especially in cognitive and affective terms in order to protect

and sustain the environment. In addition to knowing a phenomenon, individuals' deficiencies in structuring the attitudes towards the implementation of the known without moving away from the realistic image appear in the light of other studies. In this context, it can be said that there is a need for basic change and development in the social structure in terms of transforming environmental protection sensitivity into real attitudes.

Considering the studies examining the relationship between the gender variable in our research findings and environmental attitude, generally, in parallel with our research findings, significant differences are revealed in favor of 82 female participants. Environmental attitudes were measured with a short version of the new ecological paradigm scale. Environmental attitude scores were found to be higher in women than men, similar to our research results (Bjerke, Thrane, & Kleiven, 2006). In another study, there is a significant difference in favor of female participants in terms of environmental attitude total scores and sub-dimensions of human-centered approach, eco-centered approach and population growth (Çetinkaya, 2015). However, when looking at the study of Üstün et al. (2013), it is seen that environmental attitude does not differ significantly according to gender, contrary to our study. Polat and Kırpık (2013) tested pre-service teachers' attitudes towards environmental problems with the attitude scale towards environmental problems, and there was no difference between gender variable and environmental attitude contrary to our research. Likewise, in a study examining the attitudes of biology teacher candidates towards the environment, it was determined that environmental attitudes did not differ according to gender (Altın, Bacanlı, & Yıldız, 2002). In another study in which environmental attitude and environmental awareness were analyzed, it was determined that in parallel with our research, the mean scores vary in favor of female students in gender, with factors such as being interested in environmental issues, talking about environmental issues in the family, feeling individual sensitivity to environmental issues and people's sensitivity to environmental problems in the society we live in (Bostancıoğlu, Varol-Saraçoğlu, and Öztürk (2017) .Gürbüz and Çakmak (2012) investigated the attitudes of students from the biology education department towards the environment, and contrary to our research, no significant difference was found between the attitude scores of the students towards the environment in terms of gender. In the study conducted, a significant difference was obtained in favor of female participants in the same gender as our study (Aydın & Ünaldı, 2013). In the study in which the attitudes and sensitivities of students studying in different academic fields towards environmental problems and the factors affecting them were determined, a significant difference was found in favor of female students in terms of gender, in parallel with our research, according to the findings between the variables of demographic characteristics of the participants and the measurement tool (Ek et al., 2009). Again in the study of Şama (2003); Attitudes of teacher candidates towards environmental problems were examined, and parallel to our research, it was determined that female students' environmental attitudes were more positive than male students. In another study, Öcal (2013) determined the attitudes of 83 social studies teacher candidates towards environmental problems and found a significant difference in favor of female

participants. Similarly, in the study conducted, the attitudes of social studies, Turkish and primary school teacher candidates towards environmental problems were examined, and it was determined that female participants revealed a higher environmental attitude score than male participants (Kayalı, 2010). In the study examining the attitudes of nursing and medical students towards environmental problems, unlike our study, no significant difference was found according to gender, but the environmental attitude scores of female students were found to be higher than men, although not statistically (Çelik et al., 2016). In Önder's (2015) study, which examined the environmental attitudes of primary school students, it was determined that the environmental attitudes of female students were more positive than male students, in line with our study. In another study, Nalçacı and Beldağ (2012) examined the environmental attitudes of 7th and 8th grade primary school students in Erzurum province, and in parallel with our research, it was found that the environmental attitudes of female students were higher than that of male students. At this point, it is also supported by the literature that female participants are more sensitive and sensitive than male participants in terms of environmental awareness and understanding of environmental protection. The fact that women are at the forefront of the environment in terms of making the environment livable and sustainable can be read as a positive result in order to be effective in terms of the environmental protection approach that should be carried over to generations. It is seen that by adopting the right approaches in terms of women's environmental attitudes, it has an important place in developing approaches towards the use of natural resources.

As a result; In line with the concept of ecorecreation discussed within the scope of the research, researching the attitudes of individuals towards environmentally friendly leisure activities constitutes the starting point of the study. Since it is thought that conducting interdisciplinary studies, which are rarely encountered in the literature, will contribute to the field, a measurement tool that combines the concept of ecorecreation with the phenomenon of environment and recreation has been developed. Based on this, the measurement tool analyzed was found to be valid and reliable, and then, data were collected with the obtained measurement tool and analyzes were made on various variables. As a result, a valid and reliable measurement tool was introduced, and in the analysis of the data, it was seen that the participants exhibited a high ecorecreational attitude and many variables changed this level in a statistically significant way.

6. Recommendations

It is thought that environmental and recreational information is not only in formal education, but more field studies are needed for individuals to learn by applying this information, and also, education programs should include practical applications that ensure being intertwined with nature and adopt environmentally friendly approaches.

Especially, it should be adopted that ecorecreational activities, which provide integration with nature, serve the environment-friendly behavior network to a great extent, increasing participation and making ecorecreational experiences into habit with

different sample groups of qualified ecorecreational activities and organizations should be ensured.

In the field of ecorecreation, which is an interdisciplinary field, organizing qualified recreational organizations by using ecologists may be among the suggestions. The transfer of environmental information during the activities should be considered as studies that will increase the knowledge and awareness of the ecosystem of the region and the sensitivity towards ecorecreation.

It is thought that these organizations should be introduced to large masses by making use of media organs, the recreational activities that should be done with ecological sensitivity should be made attractive and the importance of ecorecreation should be conveyed to the society.

In order to support recreational organizations that appeal to large masses, it is important to make the necessary sponsorship and marketing agreements as the financing pillar of the organizations, as well as to organize activities by coming together with non-governmental organizations, and to sign projects by collaborating with different institutions and organizations.

In order to measure the attitude towards ecorecreation or different components towards ecorecreation, studies should be carried out by expanding on different sample groups such as children, parents, individuals with socio-economic differences, individuals from different occupational groups, individuals with different ethnic origins and later on different societies.

At the same time, it can be said that ecorecreation studies with different recreational activity groups are needed in a qualitative and experimental context, in this direction, the literature is increased by increasing qualitative, experimental and interdisciplinary studies. It is thought that the expansion of the area will contribute to the field.

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