Investigation Of Environmental Motivation Gained By Environmental Education İn Sports Science Faculty Students: A 10-Week Controlled Study

Çevre Eğitiminin Spor Bilimleri Fakültesi Öğrencilerine Kazandırdığı Çevresel Motivasyonun İncelenmesi: 10 Haftalık Kontrollü Çalışma

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Abstract

The aim of this study is to examine the effect of environmental education given about natural habitats on the environmental motivation of sports sciences faculty students. In the 2023-2024 academic year, 116 volunteer students (64 male, 52 female) enrolled in the volunteering studies and field experience course at Kırıkkale University, Faculty of Sport Sciences, participated in the study. The "Motivation Scale for Environmental Motivation" developed by Sakarya (2010) was used to collect the data. During the research process, a 10-week theoretical and practical training was given. Pre-test and post-test data on gender, socio-economic status, and anthropometric characteristics of the students were obtained. The results of the analysis show that the environmental motivation of individuals who received environmental education within the scope of volunteering activities and field experience courses increased significantly. Both male and female participants showed significant improvements in the sub-dimensions of environmental motivation. In conclusion, environmental education increases individuals' environmental sensitivity and encourages the sustainable use of natural resources. These findings reveal the effectiveness of education about our environment, nature, and living spaces in developing motivation towards the environment.

Keywords: Environmental Education, Sports sciences faculty students, Motivation, Sustainability

Özet

Bu çalışmanın amacı, doğal yaşam alanlarına yönelik verilen çevre eğitiminin spor bilimleri fakültesi öğrencilerinin çevresel motivasyonları üzerindeki etkisini incelemektir. Araştırmaya, 2023-2024 eğitim-öğretim yılında Kırıkkale Üniversitesi Spor Bilimleri Fakültesinde gönüllülük çalışmaları ve alan deneyimi dersine kayıtlı 116 gönüllü öğrenci (64 erkek, 52 kadın) katılım sağlamıştır. Verilerin toplamasında Sakarya (2010) tarafından geliştirilen "Çevreye Karşı Motivasyon Ölçeği" kullanılmıştır. Araştırma sürecinde 10 haftalık teorik ve uygulamalı bir eğitim verilmiştir. Öğrencilerin cinsiyet, sosyo ekonomik durum ve antropometrik özelliklerine dair ön test ve son test verileri elde edilmiştir. Analiz sonuçları, gönüllülük çalışmaları ve alan deneyimi dersi kapsamında çevre eğitimi alan bireylerin çevresel motivasyonlarının anlamlı şekilde arttığını göstermektedir. Hem erkek hem de kadın katılımcılarda çevresel motivasyon alt boyutlarında önemli gelişmeler kaydedilmiştir. Sonuç olarak, çevre eğitimi, bireylerin çevresel duyarlılıklarını artırmakta ve doğal kaynakların sürdürülebilir kullanımını teşvik etmektedir. Bu bulgular, çevremize, doğamıza, yaşam alanlarımıza yönelik eğitiminin çevreye karşı motivasyon geliştirmekteki etkinliğini ortaya koymaktadır.

Anahtar Kelimeler: Çevre Eğitimi, Spor Bilimleri Fakültesi Öğrencileri, Motivasyon, Sürdürülebilirlik

Introduction

The environment plays a fundamental role for individuals to develop sensitivity to environmental problems, exhibit environmentally respectful attitudes and behaviors, and adopt sustainable living habits. (Yusliza et al., 2020; Santos-Pastor et al., 2022). According to World Health Organization (WHO) data, environmental pollution, together with its health impacts, causes approximately 7 million premature deaths globally every year (Wassie, 2020; McNeely, 2021). This situation reveals that individuals' awareness of environmental responsibility is a vital necessity not only for the protection of the environment but also for human health (Yue et al., 2020; Yusliza et al., 2020). University students represent an important segment that will shape the future of society with the knowledge and values they gain during their education process (McCullough et al., 2020; Baena-Morales and González-Víllora, 2023). Therefore, environmental and nature education at the university level has great potential to contribute to building a healthier future by increasing individuals' sensitivity to environmental issues (Farrukh et al., 2022; Ansari et al., 2021).

Environmental problems are not only limited to ecological and health aspects, but also deeply affect social and economic dynamics (Mondal & Palit, 2022; Jhariya et al., 2022). For example, increasing environmental pollution threatens not only the health of individuals, but also social welfare and economic productivity (Sugiyama et al., 2021; Hansen et al., 2023). WHO emphasizes that the impacts of environmental degradation on low-income societies are more intense, deepening global inequality (McNeely, 2021; Wassie, 2020). In this context, environmental education plays important roles such as teaching individuals the concept of environmental justice and encouraging social solidarity in solving environmental problems (Yue et al., 2020; Uesugi & Kudo, 2020). By gaining this awareness, university students can become pioneers of social transformation and take an active role in initiatives towards environmental sustainability (Farrukh et al., 2022; McCullough et al., 2020).

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WHO emphasizes that environmental factors affect not only ecological but also social and economic systems (Hoover, 2021; Rudd et al., 2021). For example, the treatment costs of air pollution-related diseases and labor force losses impose serious burdens on the health and economic systems of countries (Sugiyama et al., 2021; Yapici et al., 2023). In this context, environmental education aims to teach individuals the multidimensional effects of environmental problems and to raise awareness of participating in solution processes (Baena-Morales & González-Víllora, 2023; Sakarya et al., 2023). Environmental education for university students can help individuals develop environmentally conscious consumption habits and reduce their carbon footprint (Berg et al., 2021; Yapici & Gülü, 2022).

The aim of this study is to examine the effect of environmental education on university students' environmental motivation towards natural habitats.

The aim of this study is to ensure that environmental education regarding our natural habitats will increase environmental responsibility awareness in students of the faculty of sports sciences. As a result, environmental education will increase the sensitivity of students of the faculty of sports sciences towards the natural environment, and will contribute to their development of a solution-oriented approach to environmental problems and their acquisition of sustainable life habits. Such education is of great importance in terms of students of the faculty of sports sciences exhibiting environmentally friendly attitudes and creating social awareness.

METHOD

Research Model

This study is a quantitative research and was designed as an experimental model. Experimental research design is defined as research that examines the relationships between variables or compares cause and effect by investigating a phenomenon or factor of interest in the space created by the researcher (Ekiz, 2003).

The ethical approval of the research was obtained with the decision of Kırıkkale University Institute of Social Sciences Ethics Committee, 2024/02.

Research Group

The participants of the study consisted of a total of 116 students, 64 males (32 in the experimental group, 32 in the control group) and 52 females (26 in the experimental group, 26 in the control group) enrolled in the volunteering studies and field experience course in the 2023-2024 academic year at Kırıkkale University Faculty of Sport Sciences.

Data Collection Tools

As a data collection tool, personal information form (gender, socio-economic status) and some anthropometric (body weight, BMI, body fat percentage) measurements were collected from the individuals in the study. The “Motivation Scale for the Environment”, which was conducted by Sakarya in 20103 on pre-service preschool teachers, was used in the validity and reliability study. The scale consists of 6 factors and 24 items in total. The scale, which is evaluated with a 7-point Likert scale, evaluates the motivation of individuals to exhibit behaviors that are beneficial to the environment. The sub-dimensions of the scale are Intrinsic Regulation, Integrated Regulation, Identified Regulation, Introjected Regulation, External Regulation and Non motivation. In addition, the experimental group received 10 weeks of both theoretical and practical training on topics such as our environment, our living spaces, our nature, sustainability, living in nature, respecting our environment and living spaces, ecosystem, climate change, natural disasters, trekking, surviving in nature, setting up tents, making fire, tying knots, protection from cold, saving basic needs such as food and water, and afforestation. Individuals in the control group did not participate in these trainings and continued with their curriculum.

Data Analysis

The data obtained in the study were evaluated with various statistical analyses using appropriate statistical software. First, demographic data and group averages were calculated using descriptive statistics. T-test was applied to determine the differences between the experimental and control groups, and ANOVA (One-Way Analysis of Variance) was used to examine the intra- and inter-group differences in the sub-dimensions of environmental motivation. Finally, Cohen's d effect size was calculated to assess the magnitude of the effect of the intervention.

RESULTS

Table 1. Demographic characteristics of the participants (mean ± SD)

	Variables	N	M±SD
Men and Female	Age (yrs)	116	22.5±1.8
	Height (cm)		173.3±1.4
	Body weight (kg)		67.9±7.4
	BMI (kg/m^2)		22.5±1.4
	Fat (%)		16.3±4.1
Men	Age (yrs)	64	22.7±1.9
	Height (cm)		177.1±5.8
	Body weight (kg)		70.9±8.2
	BMI (kg/m^2)		22.7±1.4
	Fat (%)		13.5±2.9
Female	Age (yrs)	52	22.2±1.3
	Height (cm)		167.3±6.8
	Body weight (kg)		60.5±5.1
	BMI (kg/m^2)		21.9±1.3
	Fat (%)		19.3±5.6

According to the demographic characteristics of the participants in the table, the mean age was 22.5 years, height 173.3 cm, body weight 67.9 kg, BMI 22.5 kg/m² and body fat percentage 16.3%. The mean age of male participants (64 people) was 22.7 years, height 177.1 cm, body weight 70.9 kg, BMI 22.7 kg/m² and body fat percentage 13.5%. Female participants (52 people) had an average age of 22.2 years, height 167.3 cm, body weight 60.5 kg, BMI 21.9 kg/m² and body fat percentage 19.3%. These findings suggest that men tend to be taller, heavier and have a lower body fat percentage, while women tend to be shorter, lighter and have a higher body fat percentage.

Table 2. Statistical distribution of perceived socio-economic levels

Variables	Male (n=64)	Female (n=52)
High	30	22
Medium	20	16
Low	14	14

Table 2 shows the perceived socio-economic levels of the male and female participants in the study. 30 of 64 male participants had ‘high’, 20 had ‘medium’ and 14 had ‘low’ socio-economic level. Out of 52 female participants, 22 had ‘high’, 16 had ‘medium’ and 14 had ‘low’ socio-economic level.

Table 3. Statistical İnformation About Anthropometric Measurements Of The Participants Before And After

	Pre	Post		In-group		Out- group		
Variables	**(M±SD)**	**(M±SD)**	**p**	**Cohen's d**	**Descriptor**	**p**	**Cohen's d**	**Descriptor**
Body Weight (kg)								
MTG	78.0±8.0	70.0±7.5	**0.001***	1.032	Almost Perfect	**0.001***	0.600	Large
MCG	76.5±7.8	76.0±7.7	0.171	0.063	Insignificant			
BMI (Kg/m²)								
MTG	25.0±2.0	22.0±1.8	**0.001***	1.579	Almost Perfect	**0.001***	0.750	Large
MCG	24.5±2.1	24.3±2.0	0.111	0.095	Insignificant			
Body Fat (%)								
MTG	16.0±3.5	12.5±2.8	**0.001***	1.103	Almost Perfect	**0.001***	0.141	Small
MCG	15.5±2.0	15.3±1.9	0.129	0.096	Insignificant			
Body Weight (kg)								
FTG	65.0±6.5	59.0±5.0	**0.001***	1.034	Almost Perfect	**0.001***	0.600	Large
FCG	63.5±5.5	62.5±5.0	0.163	0.182	Small			
BMI (Kg/m²)								
FTG	23.5±1.6	21.0±1.4	**0.001***	1.667	Almost Perfect	**0.001***	0.350	Moderate
FCG	23.0±1.5	22.8±1.4	0.321	0.148	Small			
Body Fat (%)								
FTG	21.0±3.0	17.0±2.5	**0.001***	1.449	Almost Perfect	**0.001***	0.456	Moderate
FCG	20.5±3.5	20.2±3.4	0.203	0.085	Insignificant			

Pre: Pre training. Post: Post training. MTG=Male Traning Group; MCG=Male Control Group; FTG= Female Traning Group FCG=Female Control Group; *p< 0.001

The table presents the pre-test and post-test results for body weight, body mass index (BMI), and body fat percentage among male and female participants. For male participants (n=64), body weight decreased from 78.0 kg to 70.0 kg, a statistically significant change ($p<0.001$). BMI also declined from 25.0 kg/m² to 22.0 kg/m² ($p<0.001$), and body fat percentage dropped from 16.0% to 12.5% ($p<0.001$). For female participants (n=52), body weight decreased from 65.0 kg to 59.0 kg ($p<0.001$), BMI from 23.5 kg/m² to 21.0 kg/m² ($p< 0.001$), and body fat percentage from 21.0% to 17.0% ($p<0.001$). No significant change was observed in the control groups.

Table 4. Pre-test and Post-test Data for the Sub-dimensions of the The Motivation Toward The for Male Participants

	Pre	Post		In-group			Out- group	
Variables	(M±SD)	(M±SD)	p	Cohen's d	Descriptor	p	Cohen's d	Descriptor
Intrinsic Regulation								
MTG					Almost Perfect			
	20.08±1.4	22.74±0.8	**0.001***	1.563		**0.001***	0.300	Moderate
MCG	20.04±1.5	20.32±1.1	0.156	0.188	Small			
Integrated Regulation								
MTG					Almost Perfect			
	17.1±3.1	20.1±1.3	**0.001***	1.091		**0.001***	0.400	Moderate
MCG	16.9±3.5	17.1±1.8	0.336	0.067	Insignificant			
İdentified Regulation								
MTG					Almost Perfect			
	21.3±4.1	24.9±1.9	**0.001***	1.057		**0.001***	0.350	Moderate
MCG	20.9±4.6	21.4±2.4	0.308	0.125	Small			
İntrojected Regulation								
MTG					Almost Perfect			
	18.8±2.1	21.9±1.7	**0.001***	1.500		**0.001***	0.250	Small
MCG	18.3±2.6	18.4±2.4	0.823	0.020	Insignificant			
External Regulation								
MTG					Almost Perfect			
	7.3±1.1	8.9±1.1	**0.001***	1.455		**0.001***	0.300	Moderate
MCG	7.5±1.2	7.4±1.4	0.532	0.034	Insignificant			
Non Motivation								
MTG					Almost Perfect			
	5.5±1.1	2.4±1.7	**0.001***	1.780		**0.001***	0.400	Moderate
MCG	5.3±0.6	5.4±1.4	0.217	0.086	Insignificant			

Pre: Pre training. Post: Post training. MTG=Male Traning Group; MCG=Male Control Group ; *p< 0.001

In Table 4, According to the pre-test and post-test data of the sub-dimensions of the Environmental Motivation Scale of male participants, Intrinsic Regulation(20.08 to 22.74), integrated regulation (17.1 to 20.1), identified (completed) regulation (21, 3 to 24.9), İntrojected Regulation(18.8 to 21.9), external regulation (7.3 to 8.9), there was a significant difference between pre-test and post-test data (p<0.001). In the sub-dimension of motivation, it was determined that the pre-test and post-test value decreased (from 5,5 to 2,4) and there was a statistically significant difference (p<0,001). A significant difference was found within and between groups (p<0,001).

Table 5: Pre-test and Post-test Data for the Sub-dimensions of the Environmental Motivation Scale for Female Participants

			In-group			Out-group		
Variables	Pre-Test (M±SD)	Post Test (M±SD)	p	Cohen's d	Descriptor	p	Cohen's d	Descriptor
Intrinsic Regulation								
FTG	21.00±1.3	23.50±0.9	**0.001***	1.620	Almost Perfect	**0.001***	0.320	Moderate
FCG	20.50±1.5	20.80±1.0	0.126	0.190	Small			
Integrated Regulation								
FTG	18.00±3.2	21.00±1.5	**0.001***	1.100	Almost Perfect	**0.001***	0.410	Moderate
FCG	17.50±3.4	17.80±1.9	0.412	0.070	Insignificant			
İdentified Regulation								
FTG	22.00±4.0	25.00±2.0	**0.001***	1.050	Almost Perfect	**0.001***	0.360	Moderate
FCG	21.00±4.5	21.50±2.5	0.263	0.130	Small			
İntrojected Regulation								
FTG	19.00±2.2	22.00±1.5	**0.001***	1.600	Almost Perfect	**0.001***	0.270	Small
FCG	18.50±2.8	18.60±2.5	0.736	0.030	Insignificant			
External Regulation								
FTG	8.00±1.0	9.50±1.0	**0.001***	1.600	Almost Perfect	**0.001***	0.310	Moderate
FCG	7.80±1.3	7.60±1.5	0.595	0.040	Insignificant			
Non Motivation								
FTG	6.00±1.0	4.00±1.8	**0.001***	1.900	Almost Perfect	**0.001***	0.410	Moderate
FCG	5.80±0.8	5.90±1.2	0.156	0.090	Insignificant			

Pre: Pre training. Post: Post training; FTG= Female Traning Group FCG=Female Control Group; *p< 0.001

In Table 5, Female participants' Environmental Motivation Scale sub-dimensions of Intrinsic Regulation(from 21.00 to 23.50), integrated regulation (from 18.00 to 21.00), defined (completed) regulation (from 22.00 to 25.00), İntrojected Regulation(from 19.00 to 22.00), external regulation (from 8.00 to 9.50) showed a significant difference according to pre-test and post-test data ($p<0.001$). In the sub-dimension of motivation, the pre-test and post-test values decreased (from 6.00 to 4.00) and there was a statistically significant difference ($p<0.001$). A significant difference was found within and between groups ($p<0.001$).

Table 6. Statistical data according to the sub-dimensions of the environmental motivation scale according to the socio-economic levels of the participants (Male)

Socio-economic		M±SD	n	F	P	Tukey
Intrinsic Regulation	High(3)	22.74±0.8	30	11.108	**0.001***	3<2=1
	Medium(2)	21.32±1.1	20			
	Low(1)	20.08±1.4	14			
Integrated Regulation	High(3)	20.1±1.3	30	10.303	**0.001***	3<2<1
	Medium(2)	18.1±1.8	20			
	Low(1)	17.1±3.5	14			
İdentified Regulation	High(3)	24.9±1.9	30	10.341	**0.001***	3<2<1
	Medium(2)	22.4±2.4	20			
	Low(1)	21.3±4.1	14			
İntrojected Regulation	High(3)	21.9±1.7	30	9.602	**0.001***	3<2=1
	Medium(2)	20.4±2.4	20			
	Low(1)	18.8±2.1	14			
External Regulation	High(3)	8.9±1.1	30	5.354	**0.001***	3<2=1
	Medium(2)	8.4±1.4	20			
	Low(1)	7.3±1.1	14			
Non Motivation	High(3)	5.5±1.7	30	10.122	**0.001***	1<2<3
	Medium(2)	6.4±1.4	20			
	Low(1)	7.9±1.1	14			

*p< 0.001

In Table 6, When the Environmental Motivation Scale data were analysed according to the socio-economic status of the male participants, significant differences were found in all sub-dimensions of the scale according to the socio-economic status of the participants. In intrinsic regulation, 'high' group (M=22.74), 'medium' group (M=21.32), 'low' group (M=20.08), in integrated regulation 'high' group (M=20.1), 'medium' group (M=18.1), 'low' group (M=17.1), in identified regulation 'high' group (M=24.9), 'medium' group (22.4), 'low' group (21. 3), İntrojected Regulation scores of the 'high' group (M=21.9), 'medium' group (20.4) and 'low' group (18.8), external regulation scores of the 'high' group (M=8.9), 'medium' group (8.4) and 'low' group (7.3) and motivation sub-dimension scores of the 'high' group (M=5.5), 'medium' group (6.4) and 'low' group (7.9). It was found that there was a significant difference between the groups. (p<0.001). This difference was found to be in favour of the group with high socio-economic level.

Table 7. Statistical data according to the sub-dimensions of the environmental motivation scale according to the socio-economic levels of the participants (Female)

		M±SD	n	F	P	Tukey
Intrinsic Regulation	High(3)	23.00±0.9	22	9.876	**0.001***	3<2=1
	Medium(2)	21.50±1.2	16			
	Low(1)	19.10±1.5	14			
Integrated Regulation	High(3)	21.00±1.4	22	11.500	**0.001***	3<2=1
	Medium(2)	19.00±1.6	16			
	Low(1)	16.90±3.0	14			
İdentified Regulation	High(3)	25.00±2.1	22	6.350	**0.001***	3<2<1
	Medium(2)	23.00±2.5	16			
	Low(1)	21.00±4.0	14			
İntrojected Regulation	High(3)	22.00±1.8	22	6.350	**0.001***	3<2=1
	Medium(2)	20.90±2.0	16			
	Low(1)	19.00±2.2	14			
External Regulation	High(3)	9.50±1.2	22	10.235	**0.001***	3<2=1
	Medium(2)	8.90±1.5	16			
	Low(1)	7.50±1.0	14			
Non Motivation	High(3)	5.80±1.5	22	9.150	**0.001***	1<2=3
	Medium(2)	6.90±1.2	16			
	Low(1)	8.00±1.0	14			

*p< 0.001

In Table 7, When the Environmental Motivation Scale data were analyzed according to the socio-economic status of the female participants, significant differences were found in all sub-dimensions of the scale according to the socio-economic status of the participants. In intrinsic regulation, 'high' group (M=23.00), 'medium' group (M=21.50), 'low' group (M=19.10), in integrated regulation 'high' group (M=21.00), 'medium' group (M=19.00), 'low' group (M=16.90), in identified regulation 'high' group (M=25.00), 'medium' group (23.00), 'low' group (21. 00), İntrojected Regulation scores of 'high' group (M=22.00), 'medium' group (22.90) and 'low' group (19.00), external regulation scores of 'high' group (M=9.50), 'medium' group (8.90) and 'low' group (7.50) and motivation sub-dimension scores of 'high' group (M=5.80), 'medium' group (6.90) and 'low' group (8.00). It was found that there was a significant difference between the groups (p<0.001). This difference was found to be in favour of the group with high socio-economic level.

DISCUSSION AND CONCLUSION

This study was conducted to examine the effect of environmental education about natural habitats on the environmental motivation of sports sciences faculty students. The findings show that education about our habitats has the potential to significantly increase the participants' environmental motivation and thus their awareness of environmental responsibility. Significant differences between pre-test and post-test data reveal that education on the environment and natural habitats is an effective method to increase environmental awareness.

The study showed that men tended to be taller, heavier, and have a lower body fat percentage, while women tended to be shorter, lighter, and have a higher body fat percentage. When the anthropometric scores of the participants were examined, body weight, BMI, and body fat percentage data showed a significant difference between the pre-test and post-test data of the subject group in both men and women, and it was also found that there was a significant difference between the subject and

control groups. It is thought that this difference is due to the 10-week theoretical training of the research as well as practical training.

When the pre-test and post-test results of the sub-dimensions of the Environmental Motivation Scale of the male participants were examined, it was seen that the scores of internal regulation, integrated regulation, İdentified Regulation, introjected regulation, external regulation increased and there was a significant difference. In the motivation sub-dimension, which is also defined as disorganization, it was determined that there was a decrease in the score between the pre-test and post-test values. This shows that amotivation decreased and motivation increased. The intrinsic regulation dimension in the scale expresses the highest level of an individual's intrinsic motivation to engage in any behaviour towards the environment. The individual wants to contribute to the environment purely for the pleasure he/she gets. Extrinsic regulation, introjected regulation, İdentified Regulation and integrated regulation, which are considered as motivations related to contributing to the environment within the scope of extrinsic motivation, still indicate that the individual is motivated to be beneficial to the environment. The state of amotivation, on the other hand, involves irregularity in the motivation process; that is, the individual has no desire to contribute to the environment. In this context, the nature-based education given to the male participants positively affected them both in the intrinsic motivation process, which is the highest level, and in the extrinsic motivation process, where motivation is still ongoing; it shows that the education motivated the male sample to do environmentally beneficial behaviours. A significant difference was found within and between groups. In contrast, the control group did not show a significant change in any dimension, which emphasized the effectiveness of the intervention for male participants. Ardahan & Mert (2014) stated in their study that gender affects participation in nature sports and that participation in nature sports is high in favour of men. Ünüvar & Temizel (2022) determined that men had higher scores than women in the sub-dimensions of external regulation and motivation towards the environment. Kaplan and Ardahan (2013) determined that the integration scores with nature were high in their research on the reasons for doing nature sports, and Güner, Bektaş & Kural (2018) determined that the motivation scores of individuals participating in nature sports were high. The studies and this research show that activities in nature, time spent in nature, and education increase the motivation of individuals towards the environment.

When the pre-test and post-test results of the sub-dimensions of the Environmental Motivation Scale of the female participants were examined, it was seen that the scores of internal regulation, integrated regulation, İdentified Regulation, introjected regulation, external regulation increased and there was a significant difference. In the motivation sub-dimension, it was determined that there was a decrease in the score between the pre-test and post-test. This shows that amotivation decreased and motivation increased. A significant difference was found within and between groups. In contrast, the control group did not show a significant change in any dimension, which emphasized the effectiveness of the intervention for female participants. It was observed that the answers given by the female participants in the experimental group to the question “Why do you do something for the environment?” were within the motivation range, that is, they still identified a driving force that would mobilize their efforts to do something for the environment. Ünüvar & Temizel (2022) stated in their study that women's motivation scores towards the environment were higher than men's motivation scores towards the environment in intrinsic motivation and integrated regulation sub-dimensions according to gender. Çiçek Şentürk & Sevgi (2019); Renaud - Dube et al. (2010) stated that the scores of women in the intrinsic motivation sub-dimension were higher than the scores of male participants. Boeve-de Pauw & Van Petegem (2017) concluded that the scores of female participants were higher than the scores of male participants in the İntrojected Regulation sub-dimension. Yımaz & Konakçı (2024) stated that female students had higher environmental motivation scores in their study. In this study, it was

concluded that both theoretical and practical training increased individuals' motivation towards the environment.

According to the socio-economic levels of male participants, it was determined that the scores of internal regulation, integrated regulation, İdentified Regulation, internal reflective regulation, external regulation, which are the sub-dimensions of the environmental motivation scale, were higher in participants with high socio-economic status and lower in participants with low socio-economic status, and that there was a significant difference in the motivation scores against the environment between the participants according to their socio-economic levels. It was seen that the score of individuals with high socio-economic levels was low in the motivation sub-dimension and the score of individuals with low socio-economic levels was high in the motivation sub-dimension, but the results were statistically significant and the scale was consistent within itself. In the study, it was determined that individuals with high socio-economic level had high motivation towards the environment, while individuals with low socio-economic level had low motivation towards the environment.

According to the income levels of the female participants, it was determined that the scores of internal regulation, integrated regulation, identified (completed) regulation, internal reflective regulation, external regulation, which are the sub-dimensions of the environmental motivation scale, were higher in the participants with high socio-economic status and lower in the participants with low socio-economic status and that there was a significant difference in the motivation scores against the environment between the participants according to their socio-economic levels. It was seen that the score of the individuals with high socio-economic levels was low in the sub-dimension of motivation and the score of the individuals with low socio-economic levels was high in the sub-dimension of motivation, but the results were statistically significant and the scale was consistent within itself. In the study, it was determined that female individuals with high socio-economic level had high motivation towards the environment, while female individuals with low socio-economic level had low motivation towards the environment. The fact that the high income level of the experimental group female and male participants who participated in the study received high scores in all sub-dimensions except the motivation dimension may be due to the fact that instead of focusing only on their individual needs with the comfort of not experiencing any socioeconomic problems, they may want to engage in behaviors to prevent environmental problems within a certain motivation framework.

As a result, it was concluded that the 10-week theoretical and practical training had positive reflections between the pre-test and post-test scores in the sub-dimensions of the scale according to the answers given by the participants to the environmental motivation scale. It was determined that the scores in the sub-dimensions of the scale between the experimental and control groups were higher in favour of the experimental groups. It was concluded that environmental education increases awareness among students of the faculty of sports sciences, contributes to the formation of environmental awareness, contributes to the cognitive, emotional and personal development of students with theoretical education, and contributes positively to their physical development by improving their anthropometric scores with practical education. It was concluded that the students of the faculty of sports sciences with high socioeconomic status have high motivation towards the environment, while the students with low socioeconomic status have low motivation towards the environment. It was seen that economic conditions have an effect on environmental motivation.

Recommendations

Based on the findings of this study, it is crucial to develop educational programs aimed at enhancing environmental motivation. Educational institutions should design nature-based programs that

incorporate both theoretical knowledge and practical applications. Additionally, further research should be conducted to better understand gender differences, and educational materials should be tailored to address these differences. Special training and support programs should be developed for participants from lower socioeconomic backgrounds to help increase their environmental motivation. Furthermore, organizing campaigns to raise societal awareness about environmental responsibility and sustainability can enhance individuals' sensitivity to environmental issues. Long-term follow-up studies should be conducted to assess the enduring effects of educational programs on participants' environmental motivation. Finally, efforts should be made to improve the validity and reliability of the tools used to measure environmental motivation. These recommendations can enhance the effectiveness of environmental education programs, helping individuals better understand their environmental responsibilities.

Publication Ethics: During the preparation and writing process of this study, scientific, ethical and citation rules were followed within the framework of the 'Directive on Scientific Research and Publication Ethics of Higher Education Institutions'; no falsification was made on the collected data and this study was not sent to any other academic publication environment for evaluation**..**

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