

The Study of Whether Receiving A Pre-School Education Is A Predictive Factor in The Attitudes of High School Students Toward The Environment According to Their Environmental Ethics Approach

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Abstract

The aim of this research is to determine the predictive power of environmental ethics approaches of the development of high school students' environmental attitudes. In this sense, it is studied whether meaningful differences in significant predictive and dependent variants arise or do not arise when pre-school education is received. A total of 200 high school students constituted the sample of the study. The relational screening model was used in the study. Environmental attitude measurement and Environmental ethics approach measurement used as data collection tool. According to the results obtained from the study, while a meaningful relationship was found between approaches of environmental ethics which effect attitude towards the environment - ecocentric ethics, ecofeminist ethics and theocentric ethics, there was no meaningful relationship discovered with the anthropocentric ethics approach. In this context, one of the important results of this study is that a significant difference has been identified in the approaches of ecofeminist and ecocentric ethics of high school students who have received a pre-school education and those who have not. The fact that the significant difference is in favor of high school students who have received a pre-school education is a meaningful result.

Keywords: Environmental ethics, Environmental education, High school education, Ethical attitude, Pre-school education.

Introduction

The Worldbank has presented data verifying the increase of world population in the 20th century compared to the 19th century (Worldbank 2016). This has caused many environmental issues around the world.

Climate change, thinning of the ozone layer, extinction of animal and plant species, nuclear pollution, DDT pollution, oil and lead pollution in seas, acid rain, desertification, toxic waste can all be listed as the world's environmental problems observed today.

The ability of humanity to learn from their mistakes and change their ways is vital for the solution of these problems (Kıřlalođlu and Berkes 2005)

The objectives of environmental education can be identified as a positive transformation of individuals' environmental ethics, environmental consciousness, environmental knowledge, environmental attitudes and behaviors. People's environmental knowledge, their interest and attitude towards the environment are effective in their behavior towards the environment (Poortinga, Steg and Vlek 2004).

Education obtained during the early childhood period is a fundamental process in building environmental awareness. Environmental education obtained during the early childhood period is the most effective educational period for a child in relation to the environment. Social scientists conducting studies on environmental education (Legault 1999; Stapp 1978; Strong 1998; Tilbury 1994; Wilson 1996) have indicated that children who have not developed respect, interest and awareness towards the environment demonstrate the risk of not being able to develop these values later in life. Tilbury (1994) emphasizes that environmental education for children during the pre-school period is of critical importance. In instances which children develop a negative approach towards the environment, it is difficult to alter their approach and they are expected to act in accordance with this negative attitude in later years (Cohen 1984; Cited by: Chapman and Sharma 2001).

The knowledge, skills, interest and attitude of children in relation to the environment will form as a result of the interaction they have with the environment. To increase awareness, focus and support the skills, interest and positive attitude of children, it is essential to provide environmental education during pre-school and other stages of their education (Taylor, Kuo, & Sullivan, 2002; Mackenzie and Edwards 2013).

There is a moral sense of social equality and can be learned. Similarly, it has the ability to learn the necessity of respecting non-human beings (Kopnina, 2016). Learning about the environment will have a positive effect on their values and attitude in relation to the environment. Along with their developing and changing behavior, the child's level of knowledge, their perspective on the environment, their environmental consciousness, their values and attitudes towards the environment, are also prone to change and take shape (řimřekli 2001). This way, by acquiring knowledge concerning the deformations and their consequences in terms of the environmental issues of the world which they are faced with, individuals will be able to acknowledge the roles they play (Al-Rabaani and Al-Mekhlafi 2009). This way, they will reach a level in which they will demonstrate the ability to create different solutions.

Approaches from a variety of angles concerning environmental problems on a global scale have produced diverse environmental views. These different views, in turn, have caused people to develop different ethical approaches (Uygun 2006).

Environmental ethics deals with the correctness and incorrectness of the behavior people display towards other living things (Benson 2000). It discusses the moral conditions directed by humans toward living and non-living things. This way, the individual forms their belief system and their own set of values (Inglis 2008). A concept of environmental ethics, in this sense, must define which rules determine the moral relationship between humans and their natural surroundings, who and what humans are accountable for and must justify these (DesJardins 2006). For this reason, in decisions that need to be made regarding the environment, environmental ethics has a quality which influences the approaches and behaviors which guide the identifying process of actions and applications in relation to the environment (Mahmutođlu 2009).

Of the approaches of environmental ethics, the Anthropocentric approach argues that the protection of humans will lead to the protection of the environment and that the prevention of reducing the life quality of people in the future will be possible with balanced use of natural resources (Dunlap and Van Liere 1978; Callicott and Frodeman 2009). The biocentric approach states that all living things are equal

(Varner 1998); that they all have a value unto themselves, that humans have responsibilities towards them and that these living things have rights (Ertan 2004).

In the ecocentric approach, humans do not pursue their own personal interest when it comes to the protection of nature (Dunlap and Van Liere 1978), all living and non-living things are valued and this value is applied completely to nature itself (Ertan 2004). The metaphor of life is not organisms but rather the earth, because all organisms have developed from a sustained earth (Rowe 1994).

Together with and inclusive of these three approaches, there are also approaches such as animal welfare ethics, deep ecology, soil ethics, theocentric ethics, sustainable development ethics, post modern environmental ethics, ecofeminism (Rolston 2003), respect for nature ethics, earth ethics, ecological ethics (Mahmutoğlu 2009). Last of all, there is a new approach which has emerged, called the Futurist approach. Of these approaches, according to the ecofeminist approach, it can be observed that women and, interrelatedly, nature are oppressed due to patriarchal mentality; and the for this to be prevented as well as ensuring women obtain equality, the relationship between nature and humans must be a much healthier one (Scarce 1990; Tamkoç 1996). According to theocentrism, humans respect all living things in nature because they are created by God; and, as God has entrusted their welfare on humans, they are responsible for the nature's wellbeing (DesJardins 2006).

Reducing environmental issues to a minimum, determining the moral aspect of human-nature relationships and developing the sense of responsibility of humans towards the environment and other living things may define what the common ground is between all these approaches of environmental ethics (Önkal and Yağanak 2005). Therefore, along with developing the sense of responsibility in students towards the environment, environmental ethics will also guide us in determining the attitudes and behaviors which will be effective in reducing environmental issues.

According to Homer and Kahle (1988), an environmental value will open way to an environmental attitude, and this will in turn create environmental behavior.

In the literary research conducted, along with research which have studied the approach of students in regards to environmental issues (Erol and Gezer 2006; Al-Rabaani and Al-Mekhlafi 2009; Gürbüzöğlü Yalmançı and Gözüm 2011), in terms of environmental ethics, measurement development studies generally categorized under human, nature, environment, belief-oriented, antipathetic attitude, individualist and deep ecology factors, (Gagnon Thompson and Barton 1994; Dunlap et al. 2000; Ronald 2002; Erten 2007) and application studies which mention the balance between the human-nature relationship based on environmental ethics, research how internal motivation affects ethical approaches and how events which harm the environment are studied in terms of ethical approach, provide environmental ethics education with a collaborative approach, and determine which ethical understandings are harbored by students of different cultures (Horwitz 2001; Kortenkamp and Moore 2001; Aoyagi-Utsui, Vinken and Kuribayashi 2003; Shapiro and Takacs 2006; Erten 2008; Kortenkamp and Moore 2009; Erten and Aydoğdu 2011).

In the study of the levels of moral and emotional anxiety related to nature of western german students aged 12, 15, and 18, all age group found the harm done to an ecosystem as immoral and unacceptable (Szagun and Masenholl 2010).

Shultz, Simpson and Elfessi (2010) compares the environmental philosophies of students at an Midwestern University and it has been found that students have scientific backgrounds that are not anthropocentric or biocentric viewpoints.

In research conducted by Yumuşak and friends (2016), the attitude towards the concepts of ecocentrism and anthropocentrism of prospective teachers were studied; and while the ecocentric attitudes of the prospective teachers were low, it was concluded that it was higher than anthropocentrism.

Taking anthropocentric attitudes in modern societies into account in terms of climate change, Gribben and Fagan (2016) have stated that universities especially must raise

awareness concerning the fact that climate change is occurring due to anthropocentric attitudes, and that universities must also influence the attitudes and behaviors in which all species and their environment are evaluated. They have indicated that environmental issues have increased cumulatively with the increase of human population; and for this reason, ecologic-oriented attitudes are of importance.

Halkos and Matsiori (2017) have determined that environmental attitude scores of those who demonstrate environmentally friendly behavior are higher in their study on the relationship of environmental attitude, motivation and value for the protection of marine biodiversity.

Upon studying limited research, it was observed that many studies were focused on the relationship of environmental attitude with anthropocentric and ecocentric approaches. Apart from this, it has been noted that the relationship of the environmental approach with other ethical approaches have been overlooked. In this respect, it is believed that this research will contribute to literature in terms of both the relationship of environmental attitudes with approaches of environmental ethics as well as the study of these ethical approaches by means of studying their other sub categories rather than measuring the general environmental attitude.

The aim of this research is to determine the predictive power of environmental ethics approaches of the development of high school students' environmental attitudes. In this sense, it is studied whether meaningful differences in significant predictive and dependent variants arise or do not arise when pre-school education is received. For this reason, answers to two fundamental problems are sought. The first problem of the research, "What is the level and direction of the predictive relationship between the environmental attitudes of high school students and approaches of environmental ethics (anthropocentric, ecocentric, ecofeminist, theocentric)?" The second problem of the research is, "are there meaningful differences between the environmental attitude and approaches of environmental ethics according to whether high school students have obtained a pre-school education?"

Methodology

Sample

A total of 200 students from a science high school and four Anatolian high schools in the city of Kars during the 2016-2017 academic years constitute the sample of this research. 94 of these students are girls, and 106 of these are boys. The fact that these high school students were able to develop an environmental attitude and that they underwent an academic period during which they were able to develop an ethical understanding and receive lessons based on the environment were taken into consideration when choosing a sample. In this aspect, the high school years 2, 3 and 4 meet these measurements. Classroom students were worked with and criterion sampling was used. Similar education environments exist in the schools and classrooms where samplings were chosen.

Model

The relational screening model was used in the study. The aim of this model is to determine the relationship between variables (Sönmez and Alacapınar 2013) and the degree of change which arises between the variables (Karasar 2014). A variance was used in accordance with the model built, to try to determine the details of the model. A form consisting of measurements of environmental attitude, approach of environmental ethics, along with demographic information were given to students to fill out under the observation of their classroom teachers. Information was given to students about the

aim of the study and participation in the application was on a voluntary basis. Students were also informed that their information will be kept confidential.

Data Collection Tools

Environmental attitude measurement

Used in order to measure students' environmental attitude. The draft of the measurement developed by Şama (2003) consisted of a total of 43 items, 18 positive, 25 negative. A 5-point grading system was used in the measurement. To verify the validity of the measurement, a factor analysis and principal component analysis technique was applied. As a result of this analysis, the measurement factor loads were composed of the 22 items above 30; however, upon expert suggestion, one item was omitted from coding and the end measurement consisted of 21 items. The total correlation of the items in the validity verification process were identified as above 24 and were noted as significant in accordance with the $\alpha=.01$ significance level. The coefficient of consistence of the measurement was calculated to be .77.

Environmental Ethics Approach Measurement

Used in order to measure students' approach of environmental ethics. The measurement was developed by Gürbüzöğlü Yalmanlı (2015). The measurement's Kaiser Meyer Olkin (KMO) value was 0.837; the Bartlett globality results were also observed to be meaningful ($\chi^2= 11920.99$; $p<.05$). The measurement consisted of 33 items, four factors (Ecofeminist environmental ethics, Ecocentric environmental ethics, Anthropocentric ethics and Theocentric ethics). The factor load value of items under the first factor varies between .958 and .828, those under the second factor varies between .579 and .333, those under the third factor varies between .866 and .482, and those under the fourth factor varies between .805 and .724. The total contribution of these four factors to the variance was calculated to be 47.57%. In the Cronbach Alpha reliability analysis, the first factor's Cronbach Alpha coefficient was calculated as .8, the second factors' as .72, the third factor's as .82, the fourth factor's as .80 and the Cronbach Alpha coefficient for the whole measurement was calculated as .87. The verification factor analysis applied on the measurement supported the structural validity of the measurement tool ($\chi^2/df = 4.16$; CFI = .92; GFI = .76; NNFI = .91; RMSEA = .088).

Data Analysis

Multiple regression analyses were conducted on data to find the answer to the question: To what degree and in which sense are high school students' attitudes toward the environment related to their environmental ethics approach (anthropocentric, ecocentric, ecofeminist, theocentric)?

A t test independent of parametric tests was conducted for the data analysis belonging to the problem statement: Are there meaningful differences in high school student's attitudes toward the environment and their environmental ethics depending on whether they have received a pre-school education?

Findings

To what degree and in which sense are high school students' attitudes toward the environment related to their environmental ethics approach (anthropocentric, ecocentric, ecofeminist, theocentric)? Findings belonging to the above problem statement are presented in Table 1, Table 2 and Figure 1.

The correlation values in relation to high school students' approach to environmental ethics and their attitudes toward the environment are presented in table 1.

Table 1.
Correlation analysis values.

Variables	Attitude towards environment	Anthropocentric ethics	Ecocentric ethics	Ecofeminist ethics	Theocentric ethics
Attitude towards environment	1,000				
Anthropocentric ethics	-.258**	1.000			
Ecocentric ethics	.467**	-.021	1.000		
Ecofeminist ethics	.474**	-.369**	.224**	1.000	
Theocentric ethics	-.009	.032	.377*	.033	1.000
Total (N)	200	200	200	200	200

** 0.001 degree meaningful correlation, *0.05 degree meaningful correlation,

When examining the correlation values in table 1, the highest relationship with attitude towards the environment is observed to be between the ecofeminist environmental ethics (.474) and ecocentric ethics (.467), while the lowest relation is seen between theocentric (-.009) and anthropocentric ethics (-.258).

Results of the regression analysis and hypothesis test applied to the data are presented in table 2.

Table 2.
Regression analysis and hypothesis test

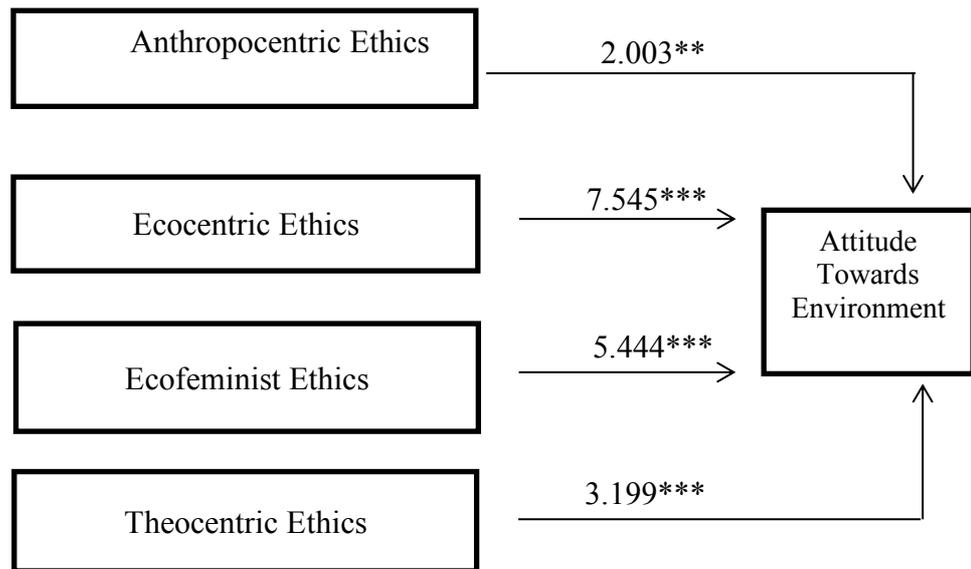
Independent Variable	Dependent Variable		
	Attitude towards environment		
	B	t	p
Constant		6.211	.000
Anthropocentric ethics	-.084	2.003	.047
Ecocentric ethics	.488	7.545	.000
Ecofeminist ethics	.228	5.444	.000
Theocentric ethics	-.128	3.199	.002
F	33.364		
R ²	.406		
corrected R ²	.394		

Of the regression model tested in order to put forth the effects of the levels of anthropocentric ethics, ecocentric ethics, ecofeminist ethics and theocentric ethics on the attitude towards the environment, its F value was recorded to be 33.364, its significance level was $p=.000$ $p<.01$.

It has been identified that the effects of all levels of anthropocentric ethics, ecocentric ethics, ecofeminist ethics and theocentric ethics on the attitude towards the environment is at a rate of 39.4% (corrected R²). This rate which was reached as a result of the study can be interpreted as a low rate for time series. However, when considering the fact that data belonging to variables in this study are horizontal section

data, even though the regression model built is appropriate, the R^2 rate can come out low (Tari 2005, 45).

When analysis results are examined, the level of ecocentric ethics which comprise the model is the most effective independent variable on the attitude towards the environment ($\beta = .488$; $p = .000$; $p < .01$). The effect of the ecofeminist ethics independent variable on attitude towards the environment presents a significant difference ($\beta = .228$; $p = .000$; $p < .01$). On the other hand, as anthropocentric ($\beta = -.084$; $p = .047$; $p < .050$) and theocentric ($\beta = -.128$; $p = .002$; $p < .01$) ethics variables show a negative correlation between the attitude towards the environment, they received a negative marker. A schematic display of analysis results are presented in figure 1.



*** $p < .01$ ** $p < .050$ —————> Accept> Reject
Figure 1: Schematic display of hypothesis result

Upon examining figure 1, it has been identified that ecocentric ethics, ecofeminist ethics and theocentric ethics variables are significant predictors in the $p < .01$ level of the Regression model. It has been observed that the anthropocentric ethics independent variable does not have a significant difference on the $p < .01$ level over attitude towards the environment, but it does demonstrate a significant difference on the $p < .05$ level. In this respect, as it has been identified that the model demonstrates a significant difference in terms of statistics, it can be accepted that the model has been verified.

Findings belonging to the problem statement: Are there meaningful differences in high school students' attitudes toward the environment and their environmental ethics depending on whether they have received a pre-school education? Are presented in Table 3 and Table 4.

Table 3.

The t test table of the points high school students have received from the Environmental ethics measurement, according to whether they have received a pre-school education.

Factor	Pre-School Education	N	X	SD	df	t	p
Anthropocentric ethic	Received	124	12.7581	3.52083	198	.870	.385
	Did not receive	76	12.3421	2.84513			
	Total	200	12.6000	3.27929			
Ecocentric ethic	Received	124	76.4758	7.54872	198	3.475	.001
	Did not receive	76	72.5132	8.26477			
	Total	200	74.9700	8.04254			
Ecofeminist ethic	Received	124	34.0565	6.19245	198	2.119	.035
	Did not receive	76	32.1842	5.84628			
	Total	200	33.3450	6.11662			
Theocentric ethic	Received	124	17.6613	2.91586	198	1.039	.300
	Did not receive	76	18.0921	2.72850			
	Total	200	17.8250	2.84691			

According to Table 3, when meaningful differences are examined between the sub factors of the environmental ethics measurement according to whether high school students have received a pre-school education, it has been discovered that there is no significant difference in the anthropocentric ethics factor [$t_{(198)} = .870$, $p = .385$, $p > .05$].

A significant difference in the ecocentric ethics approach has been identified. Upon examining the aspect of the significant difference, it has been discovered that it is in favor of high school students who have received a pre-school education [$t_{(198)} = 3.475$; $p = .001$; $p < .05$]. Upon examining the aspect of the significant difference in the ecofeminist ethics approach, it has been discovered that there is a significant difference in favor of high school students who have received a pre-school education [$t_{(198)} = 2.119$; $p = .035$; $p < .05$]. Upon examining the aspect of the significant difference in the theocentric ethics approach, it has been discovered that there is a significant difference in favor of high school students who have received a pre-school education [$t_{(198)} = 1.039$; $p = .300$; $p > .05$].

Table 4.

The t test table of the points high school students have received from the Environmental ethics measurement, according to whether they have received a pre-school education.

Attitude	Pre-School Education	N	X	SD	df	t	p
Environment	Received	124	90.8901	10.05651	198	2.339	.020
	Did not receive	76	87.4320	10.29315			
	Total	124	90.8901	10.05651			

According to Table 4, when meaningful differences are examined in terms of the points high school students have received from the measurement of attitude towards the environment according to whether they have received a pre-school education, it has been discovered that there are significant differences [$t_{(198)} = 2.339$; $p = .020$; $p < .05$]. Upon examining the aspect of the significant difference, it has been discovered that it is in favor of high school students who have received a pre-school education ($X_{(Received)} = 90.89$; $X_{(Did not received)} = 87.43$)

Discussion

According to the results obtained from the study, while a meaningful relationship was found between approaches of environmental ethics which effect attitude towards the environment - ecocentric ethics, ecofeminist ethics and theocentric ethics, there was no meaningful relationship discovered with the anthropocentric ethics approach. The variance explained by all other variables is that when kept under control the environmental approach which has the most powerful contribution on its own to attitude towards the environment is the ecocentric ethics approach. Results of studies conducted by Yumuşak et al.(2016), Gribben and Fagan (2016), Halkos and Matsiori (2017), which demonstrate that the ecocentric ethics approach is more important in terms of attitude towards the environment, are of a quality which support this conclusion.

Hence, it is a desirable result that ecocentric approaches are upheld. Returning to an ecocentric world view and the values of such a view is essential for the development of all life on earth (Washington et al., 2017). Those who uphold an ecocentric approach have a higher tendency to carry out environmentally friendly and sustainable actions (Thamson and Barton 1994; Kortenkamp and Moore 2001). The possibility of people who have an ecocentric tendency to act in accordance with the values they uphold is higher; in this respect, lessons should be designed to develop these ecocentric values (Kopnina 2017). It can be stated that the ecocentric ethics approach is the most effective predictor in the development of an environmentally friendly attitude. This conclusion has been reached in the study's model.

Approaches of ecofeminist ethics and theocentric ethics are also independent variables in this study which effect attitude towards the environment. The ecofeminist approach renders a less destructive and balanced relationship with the world mandatory (DesJardins 2006), the aim of those who have this approach stand against all causes for the destruction of natural living things, trees, land, plants and animals and against all actions which cause air and water pollution and soil degradation (Tamkoç 1996). In this respect, it can be stated that the independent variable of this study, ecofeminist environmental ethics, is a significant predictor in the development of environmentally friendly attitude.

A negative correlation was observed between anthropocentric ethics and theocentric ethics variables, and attitude towards the environment. The fact that anthropocentric approaches are high is an undesired situation. Because this approach may not serve to protect the environment in the long term (Erten 2011). In the study which Quinn, Castéra and Clément (2016) conducted with 201 teachers and prospective teachers, anthropocentrism was associated with negative attitudes towards nature and the environment. Henceforth, in the model of this study, the level of effect of anthropocentric and theocentric variables on attitudes toward the environment is lower than ecocentric and ecofeminist approaches. This situation is a desired one in terms of the development of an environmentally friendly attitude.

It is also not a desired state for people to have too much of a theocentric ethical understanding, because this ethical understanding is for those who share the religious presumptions underlying the values, and this is not universal or rational enough to bring forth ethical results (DesJardins 2006). In the study conducted with civil society organizations in Spain, Chuvieco and Burgui (2016) examined the effect of the religious beliefs of Spanish environmental activists on the environment. The study concluded that environmental values did not demonstrate significant differences between religious groups; in other words, religious beliefs did not affect environmental values. The conclusion can be derived from this that theocentric environmental ethics will not have a clear effect on attitudes towards the environment in a sense which can be accepted by all.

The results of this study is of a quality which partially supports previous studies. However, in order to reach a clearer judgment concerning the relationship of attitudes towards the environment with approaches to environmental ethics, many empirical studies must be conducted. In this study, only data obtained from high school students in the city of Kars were used. In future, similar studies can be conducted by ensuring a diversity of samples. This way, an increase in the ability to generalize findings will be ensured.

In the light of the findings obtained in the study, the environmental ethical approach which has the most powerful effect on the attitude towards the environment was found to be the ecocentric approach; therefore, in the development of positive attitude in environmental education, especially in the framework of education, developing ecocentric approaches is of importance and carrying out projects to increase this is essential. In the name of increasing positive attitude towards the environment in society and raising awareness concerning the environment, local and national political operations can be carried out in order to place ecocentric ethical behavior in the forefront. This is due to the fact that for those who uphold an ecocentric attitude, the idea of protecting nature for the sake of nature itself is in the foreground, and we can expect acts of benevolence toward the environment from such people (Erten and Aydogdu, 2011). It will be possible to develop a positive attitude and ecocentric ethical understanding as a result of education programs which are implemented in terms of the environment continuing throughout the early childhood education period. Researchers have identified a positive relationship between children attending environmental education programs and the development of their attitude and ethical understanding toward the environment. In a study conducted by Blanchard (1995), Weber (1995), as a result of applying an environmental education program to children, it was concluded that there was a significant difference between the pre and post tests taken by the children. It was identified that positive attitudes in terms of protecting the environment were maintained even after 7 years following the implementation of the program (Westphal and Halverson, 1986; Engels and Jacobson, 2007).

In this context, one of the important results of this study is that a significant difference has been identified in the approaches of ecofeminist and ecocentric ethics of high school students who have received a pre-school education and those who have not. The fact that the significant difference is in favor of high school students who have received a pre-school education is a meaningful result. Also, upon examining attitudes towards the environment, the fact that there are significant differences in the attitudes towards the environment between high school students who have received a pre-school education and those who have not, as well as the fact that the difference is in favor of those who have, prove the importance of pre-school education in the development of attitude toward the environment and environmental ethics.

The high school students participating in the study were placed in the Science high school and Anatolian high schools according to their academic success during primary school and middle school, after their pre-school education. Along with the important role that pre-school education plays in the development of students' ethical understandings and attitude toward the environment, the education and environmental awareness they are given during other phases of their education in order to maintain these attitudes are also important. The most critical result of the study is, however, that whilst the ecocentric ethic is a significant predictor in the development of an environmental attitude, the fact that high school students who have almost similar results throughout their academic success process have received a pre-school education in the development of their ecocentric ethical approach and attitude towards the environment, ensured a meaningful result to be obtained.

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Lise Öğrencilerinin Çevreye Yönelik Tutumlarının Çevre Etiği Yaklaşımlarına Göre Yordanmasında Okulöncesi Eğitimi Alıp Almama Durumunun İncelenmesi

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Özet

Bu araştırmanın amacı, lise öğrencilerinin çevre etiği yaklaşımlarının, çevreye yönelik tutumun oluşmasındaki yordama gücünü belirlemektir. Bu bağlamda anlamlı yordayıcı ve yordanan değişkenlerin okul öncesi eğitimi alma durumuna göre anlamlı farklılığın olup oluşmadığı araştırılmıştır. Araştırmanın örneklemini toplam 200 lise öğrencisi oluşturmuştur. Araştırmada ilişkisel tarama modeli kullanılmıştır. Araştırmada veri toplama aracı olarak çevreye yönelik tutum ölçeği ve çevreye yönelik etik tutum ölçeği kullanılmıştır. Araştırmadan elde edilen sonuçlara göre, çevreye yönelik tutumu etkileyen çevre etiği yaklaşımları içerisinde çevre merkezli etik, ekofeminist etik ve dinsel etik değişkenleriyle anlamlı bir ilişki bulunurken insan merkezli etik yaklaşımıyla anlamlı bir ilişki bulunamamıştır. Diğer tüm değişkenlerin açıkladığı varyans, kontrol altında iken kendi başına çevreye yönelik tutuma en güçlü katkıyı yapan çevre etiği yaklaşımı çevre merkezli etik olmuştur. Bu bağlamda araştırmanın önemli sonuçlarından biride okul öncesi eğitimi alan lise öğrencilerinin okul öncesi eğitimi almayan öğrenciler arasında ekofeminist ve çevre merkezli etik yaklaşımı açısından anlamlı farklılık tespit edilmesidir. Anlamlı farklılığın okul öncesi eğitimi alan lise öğrencilerinin lehine olması ise manidar bir sonuçtur. Ayrıca çevreye yönelik tutumlar incelendiğinde okul öncesi eğitim alan lise öğrencilerinin okul öncesi eğitimi almayan öğrenciler arasında anlamlı farklılık olması ve okul öncesi eğitimi alan lise öğrencilerinin lehine olması, çevreye yönelik tutumun ve etiğin oluşmasında okul öncesi eğitimin önemli olduğu sonucunu doğrular.

Anahtar Kelimeler: Çevre etiği, Çevresel eğitim, Lise eğitimi, Etik tutum, Okul öncesi eğitimi