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Primary School Students' Attitudes Toward Environment¹

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Abstract

This study aims to determine secondary school students' attitudes toward environment. Within the research, secondary school students' attitudes were investigated in terms of the educational status of their parents, genders, incomes of their families and grade point averages. In the study, instant survey method was adopted to determine the situation. The research was carried out in 2016-2017 educational year fall semester in Altınordu county of Ordu. The sample consists of 167 fifth grade students from two different public schools. Data, which consists of the level of the students' attitudes toward environment, was gained from an environmental attitude scale. The collecting data was analyzed with descriptive analysis method and Independent Samples T Test and One-Way ANOVA tests were used by SPSS 22 packaged software. At the end of the research, it was found out that there were meaningful differences among the points of the students' attitudes toward environment with respect to the all variables.

Key words: Environmental education, attitude, fifth grade.

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Introduction

Environment pointing out its strength with natural disasters in various times shows up that actually we should recognize it better. From the beginning, human being has always tried to get to know the environment and realize what is going on. In a very broad sense, environment might be defined as an ambient where people and the other organisms live together and interact with each other. It has always been a difficult task for people to overcome the problems which environment is faced with. First of all, an individual trying to protect environment should be aware of his surrounding and its characteristics. Thus, any effort into increasing the awareness of environment should be appreciated. One of the efforts is called environmental education described as a process that focuses on creating a more livable future (NAAEE-1). Environmental education is the beliefs and cultural values that people bring from the past (Uitto, Juuti, Lavonen and Meisalo, 2004). Besides taking precautions for environment, it has been understood that informing people has a great effect on protecting it. With this purpose, lots of establishments adopt the concept of environmental education and advise governments to put it in to practice all over the countries. Environmental education should aim to protect and improve environment intended for raising the feelings of responsibility and solidarity among countries (UNESCO, 1977). By now, 150 countries have joined the Institute for European Environmental Policy (IEEP) which consists of participants more than 250000 students, 12000 teachers, 1700 schools and 130 pilot schools. Over 60 countries have put environmental education into the national curriculums, International Environmental Education Programme.

Education at early ages helps children form the feeling of sensitivity about environment and consolidate that feeling through the following years. In pre-schools, environmental education should be placed in curriculum. Researches on that field show that education in early childhood is successful for making children aware of environment. Students' awareness of environment begins at early ages and keeps going increasingly (Goncharova, 2012). In the following periods, it should be sustained in detail. With prior to secondary schools, it should be integrated in to various lessons in all educational levels (Shobeiri, Omidvar ve Prahallada, 2007).

Although the studies on that field show that environmental education is a crucial requirement, the curriculums do not contain enough environmental education subjects in Turkey. There is not any independent course program in the first, second and high school levels, yet learning outcomes about environment are distributed in to the lessons of life science, science, geography and biology. Still, that outcomes constitute about 10% of total subjects. If looking closely, we can see that only 30 of 330 outcomes are directly related to environmental issues (Artun and Ozsevgec, 2016). Moreover, instead of making projects or outdoor activities, giving lectures only in theory reduces the quality of environmental education. To Markaki (2014), tendency for outdoor education and combination of subjects step up day by day. By its nature, environmental education is only possible with social participation and it requires inter disciplinary works (Treagust, Amarant, Chandrasegaran and Won, 2016). In addition, one of the significant challenges for environmental education is that teachers do not have enough information about it.

Method

In this study, instant survey method was adopted to determine the situation. While trying to describe an existing situation about the sample, the survey method is proper (Fraenkel and Wallen, 2009).

Sample

The sample consists of 167 students from fifth grade level in two different public schools from Altinordu provincy of Ordu. The students were chosen randomly and objectively.

Data obtaining tools

An environmental attitude scale designed by Gokce, Kaya, Aktay and Ozden (2007) was used to determine the students' attitudes toward environment. The Cronbach Alpha reliability coefficient of this scale is 0,87 which means reliability is very high. We investigate the attitudes of the students toward environment by taking into consideration genders, education levels of parents, academic achievements ve yearly income.

Data analysis

A quantitative data analysis was made with using the points gained from the scale with the help of SPSS 22 packaged software. The collecting data was analyzed with descriptive analysis method and Independent Samples T Test and One-Way ANOVA tests were applied.

Findings

In the study, quantitative data was examined and tabulated.

	Sum of Squares	Sd	Mean Squares	F	P
Between Groups	441.992	3	147.331	13.249	.000
Within Groups	1812.643	163	11.121		
Total		166			

Table 1. Comparing the students' father's education level.

Table 1 shows that there is a meaningful difference between the students' father's educational levels and obtained points from the scale.

Training level (I)	Training level (J)	N	X	Mean Difference (I-J)	Std. Error	P
1	2	46	42.63	-1.339	.761	.296
	3			-3.714*	.651	.000
	4			-3.629*	.808	.000
2	1	33	43.97	1.339	.761	.296
	3			-2.375*	.721	.007
	4			-2.290*	.865	.044
3	1	61	46.34	3.714*	.651	.000
	3			2.375*	.721	.007
	4			0.085	.771	1.000
4	1	27	46.26	3.629*	.808	.000
	2			2.290*	.865	.044
	3			-0.85	.771	1.000

Table 2. Results of Independent Sample T Test One-Way ANOVA for the students' father's educational levels.

Between the level 1-3 and 1-4, we can see significant differences.

	Sum of Squares	Sd	Mean Squares	F	P
Between Groups	292.417	3	97.472	8.097	.000
Within Groups	1962.218	163	12.038		
Toplam		166			

Table 3. Comparing the students' mother's education level.

Table 3 shows that there is a meaningful difference between the students' mother's educational levels and obtained points from the scale.

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Training level (I)	Training level (J)	N	X	Mean Difference (I-J)	Std. Error	P
1	2	60	43.28	-1.392	.725	.224
	3			-3.132*	.654	.000
	4			-2.481*	.953	.049
2	1	37	44.68	1.392	.725	.224
	2			-1.739	.743	.093
	3			-1.089	1.017	.708
3	1	53	46.42	3.132*	.654	.000
	2			1.739	.743	.903
	4			0.650	.967	.907
4	1	17	45.76	2.481*	.953	.049
	2			1.089	1.017	.708
	3			-0.650	.967	.907

Table 4. Results of Independent Sample T Test One-Way ANOVA for the students' mother's educational levels.

Between the level 1-3 and 1-4, we can see significant differences.

	Sum of Squares	Sd	Mean Squares	F	P
Between Groups	142.354	3	47.451	3.662	.014
Within Groups	2112.280	163	12.959		
Total		166			

Table 5. Comparing the students' yearly incomes.

Table 5 shows that there is a meaningful difference between the students' yearly incomes and obtained points from the scale.

Level Of income (I)	Level of income (J)	N	X	Mean Difference (I-J)	Std. Error	P
1	2	33	43.12	-2.096*	.762	.033
	3			-1.836	.818	.115
	4			-3.101*	1.055	.019
2	1	69	45.22	2.096*	.762	.033
	2			.260	.681	.981
	3			-1.005	.953	.717
3	1	47	44.96	1.836	.818	.115
	2			-.260	.681	.981
	4			-1.265	.998	.585
4	1	18	46.22	3.101*	1.055	.019
	2			1.005	.953	.717
	3			1.265	.998	.585

Table 6. Results of Independent Sample T Test One-Way ANOVA for the yearly incomes.

Between the level 1-2, we can see significant differences.

	Sum of Squares	Sd	Mean Squares	F	P
Between Groups	191.916	3	63.972	5.055	.002
Within Groups	2062.719	163	12.655		
Total		166			

Table 7. Comparing the students' academic points.

Table 7 shows that there is a meaningful difference between the students' academic points and obtained points from the scale.

Academic Achievement (I)	Academic Achievement (J)	N	X	Mean Difference (I-J)	Std. Error	P
1	2	3	41.67	-2.143	2.196	.763
	3			-2.377	2.099	.670
	4			-4.307	2.095	.172
2	1	21	43.81	2.143	2.196	.763
	3			-.235	.888	.994
	4			-2.164	.878	.070
3	1	68	44.04	2.377	2.099	.670
	2			.235	.888	.994
	4			-1.929*	.596	.008
4	1	75	45.97	4.307	2.095	.172
	2			2.164	.878	.070
	3			1.929*	.596	.008

Table 8. Results of Independent Sample T Test One-Way ANOVA for the academic points.

Between the level 3-4, we can see significant differences.

Gender	N	X	S	Sd	T	P
Female	80	45.46	3.478	165	2.121	0.035
Male	87	44.26	3.796			

Table 9. Comparing the students' genders.

Table 9 shows that there is a meaningful difference among the students' genders for the benefit of girls.

Result and Discussion

At the end of the research, when comparing the students' father's educational level with the points obtained from the scale, we can notice that there are significant differences between the group 1-3 and 1-4. Group 1 represents the lowest and group 4 represents the highest educational level. So, this clearly shows that as people get higher education, they are getting more sensible of environment and it directly affects their children positively. Likewise, there occurs meaningful differences between the students' mother's educational level and the scale points in group 1-3 and 1-4. The mothers who have higher education are more successful in raising their children concern about environment. Even the parents have not had enough education for environmental issues in the schools, they have become more conscious than the others as years pass.

If we look at the families' yearly incomes, it can easily be seen that richer students are more aware of environment than the others. The most important reason for this is that people who have better economic conditions are more prosperous and that makes them very comfortable. People having a hard time making ends meet do not care too much about environmental issues, because they primarily pay their attentions to their own lives. In opposite, comfortable people have more time to concern about environment and care for their children.

The sample of the study contains fifth grade students and they were asked to write down their fourth grade academic points. The greater part of the students have very high points in the previous grade which is the last year of primary school. It demonstrates us that the primary school teachers have not evaluated the students' achievements objectively. The students having higher averages realize environment more. It proves that well educated students are aware of the importance of protecting environment. However, it conflicts with the studies held by Erhabor and Don (2016) and Tesfai, Nagothu, Simek and Fucik (2016). In both studies, researchers have

found that the students' academic points do not have any effects on their perception of environment.

The fact that girls are more aware of environment than boys corresponds with the results of many studies such as Treagust et al. (2016), Yucel, Ozkan, Gungor and Ozer (2016), Tesfai et al. (2016) and Uitto et al. (2004). On the other hand, Shobeiri et al. (2007) have found that gender is not determinant on people's sensation about environment.

As a result, in general, it was reached that fifth grade students' level of sensibility of environment is very high. With this study, we tried to clarify the possible reasons about this result. Since educational level influences directly perception of environment, educating people of any ages is crucial. At the same time, as countries develop economically, people will have better life conditions and become more aware of environment. In Turkey, the need for environmental education in pre-schools is obvious. The number of subjects related to environment should be increased, in fact there should be a separated curriculum for environmental education.

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