

## Comparative Evaluation of the Environmental Consciousness Levels of High School Students in Northern Cyprus, Turkey and Azerbaijan

Serife Gündüz<sup>1</sup>, Gökmen Daglı<sup>1</sup> and Fidan Aslanova<sup>1</sup>

<sup>1</sup>*Faculty of Education, Environmental Education and Management,  
Near East University, Nicosia via Mersin 10 Turkey*

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**ABSTRACT** This study aimed to evaluate the difference between the environmental consciousness levels of high school students studying in North Cyprus, Turkey and Azerbaijan. Face-to-face interviews were carried out to the informational level of students under the heading “environmental sensitivity”. Sample data of the research is composed of high school students studying between the academic period 2012-2013 in Northern Cyprus, Turkey and Azerbaijan. The formal content analysis method was used for the analyzing of the data collected. The results of the study showed that environmentally conscious individuals always try to stop nature’s unfortunate destiny. One of the best ways to raise this consciousness is to direct the youths toward trustful educational institutions. Results showed that the studied countries failed at being sensitive to environmental issues. The study goes further to describe these environmental problems. Environmental education is essential in these three countries, therefore, a complete educational program starting from preschool and various campaigns should be introduced and implemented.

### INTRODUCTION

Nowadays, in the early years of the 21<sup>st</sup> century, the desire of the industrial societies to maintain their welfare levels, economic competition, population growth, and new consumption habits is increasing human beings’ pressure on the natural environment. In general, as the amount of people’s interference with nature is rising, physical consequences of these decisions are going beyond limits.

As international economic interaction grows, the huge consequences resulting from national decisions are growing as well. In many parts of the world, people are faced with the dangers of irrecoverable harms given by their environment. These harms threaten the development base of the humanity.

Almost all science aspects are related with the natural environment. Therefore, it is possible to observe different environmental perspectives from different science fields. Ada (2003) defined environment as “all elements that are formed by nature and humans” and according to ecologists, it is a concept that defines everything in the universe, which is related to any individual whether alive or not. According to Yel et al. (2004), the environment is the place where living and non-

living things affect each other and their surroundings and vice versa. According to Usak (2009), “it is impossible to think of our environment and human’s effect separately”. Because the environment is not only the world outside the bodies, it is a place that one has an effect on, and that affects one, and a place where one forms a part of, the environment is in a close contact with the inner world, at the same time, it is a place where one fulfills one’s needs and feels at ease.

Human life is established on various balances. The failures on some parts of the chain that creates the natural balance between human beings and their environment affects the whole chain, and causes it to unbalance, which creates environmental issues (Yildiz et al. 2000). According to Dinc et al. (2009), “the human being is the only living organism which do not adapt to his environment but it adapts the environment to him”. According to Aktepe (2005), “while all the other living things have to adapt to nature, human beings have tried to change their habitats in accordance with their desires and have nature adapt to themselves.” According to Yel (2004), while a clear definition of environmental issues has not been given, pollution, ineffectual use of natural sources, biodiversity, the condition of forests, the sea and coastal resources are considered as environmental issues. Also, according to Yel, pollution varies as air pollution, water pollution, soil pollution, radioactive pollution and

sound pollution. According to Cepel et al. (2003), the main environmental issues are ineffectual uses of natural sources and sustainability. A country's desire to have a livable world and to avoid poverty depends on its acceptance of the use of natural sources as the base of resources for development. Therefore, countries should do their best to save natural resources. According to Cox (2006), as environmental issues arise, it is necessary to attract public opinion to save resources in the environment, like water, soil air and other biological mediums.

When people have to compensate their benefits and they provide financial support (both physical and financial, and so on) to help reduce or remove environmental issues, it is called eco-friendly behaviors. However, so far, studies on environmental consciousness show that environmental knowledge has a weak impact on eco-friendly behaviors and attitudes towards the environment are not so much related with building environmental consciousness (Erten 2000).

Environmental education should include all forms of society to enlighten people about the environment, raise awareness and bring a permanent behavioral change. The main purpose of environmental education is to help people act responsibly about environmental issues by providing them with necessary information, skills and moral values. Schools play a major role in helping environmental education attain its aim. If environmental education is included in the schools' curriculums, it is possible for environmental education to attain its aim (Simsekli 2001). According to Stokes (2001), environmental education in Europe was mostly developed thanks to the effective practices of the European Union Environmental Policy in the last 20 years. Correspondingly, the concept of the environment has changed over time. Previous ideas were focused on changing the effects of various conditions of ecosystems and pollution. In the last 20 years however, the social, economic and cultural parts of the subject of environment have been noticed and the tendency towards sustainable development caused the subjects of environment and environmental education to extend.

Lately, the question, "how should environmental education be implemented?" has been answered in studies of international companies and conferences and in the results of various scientific studies. According to Kose (2009), environmental education should be applied on a

problematic base for students to develop a positive behavior about saving the environment, that is, how students would consider this subject as an issue and feel encouraged to get into action. The fact that environmental education is lifetime learning and it appeals to all parts of the community strengthens its importance. According to Geray (2001), volunteering companies and the mass media is very important when it comes to providing an education, which raises awareness about environmental issues and ensuring participation.

According to Eroglu (2009), it is more effective to provide environmental education in the natural environment and at early ages. Also, Eroglu (2009) indicated that the sustainability of environmental education is as important as the sustainability of lifetime learning. In addition to these, he pointed out that the parts of environmental education, which are related to other disciplines should be provided in a balanced way because of its interdisciplinary structure. The most important step, to ensuring the environmental sensitivity and environment awareness, is education (Darcin et al. 2015).

A natural environment is the environment where natural activities and natural forces are formed, there is a human effect or it is mostly unchangeable. People create the artificial environment by using natural sources, developing technology and engaging in economic activities and while they improve their living conditions in this artificial environment, they are in a continuous interaction with the nature. People should be helped in early ages to become aware of the development of artificial environment and be educated to show eco-friendly manners (Dincer et al. 2003). Environmental issues that are the issues that make it hard or impossible to satisfy the need of life are called environmental pollution. Environmental pollution is rising day by day because of the fast-growing world population, unplanned industrialization and urbanization, nuclear tests, regional wars, pesticides, synthetic manure and chemicals like detergent. As a result of this, polluted air, water and soil have become dangerous for living things.

According to Bulbul (2004), as the role of education for understanding and preventing environmental issues become acknowledged, people in Turkey and around the world are beginning to act more consciously towards environmental matters. Especially in recent years, the

main reason for “global warming” has been identified, for example, in the 5<sup>th</sup> report of IPCC as human beings (Sciama 2007). Environmental issues both threaten the human race and cause the earth to become inhabitable. Not only using technological developments but also pursuing studies about changing people’s attitudes is essential to avoid these issues. This is only possible with environmental education. Environmental education is a useful tool for raising the consciousness level of individuals, for them to act in an eco-friendly manner. Environmental issues can be reduced or avoided with the effort of people who are environmentally conscious. The environmental consciousness concept is used in many different areas and nowadays, it is highly mentioned in policies. The purpose of environmental consciousness is to provide information about the environment, positive manners towards it and eco-friendly behaviors.

In Northern Cyprus, as the awareness of environmental issues continues to rise, it has become obvious that the Ministry of Education is laying more emphasis on environmental education as course books are continuously being changed since 2004.

According to Goa et al. (2006), it is necessary for the environmental curriculum to be flexible. Because the conditions of environmental issues are constantly changing, the curriculum should be changed and adapted continuously. For this reason, environmental curriculum should include everyone, continue for a lifetime, be flexible and practical and play along with economic and social aims.

### Objectives

In this study, this main aim was to bring an environmental consciousness and behavioral changes to high school students in Northern Cyprus, Turkey and Azerbaijan, in hope that this study will contribute to avoiding environmental issues and developing environmental consciousness and also help increase the number of people conscious about the environment in future.

## METHODOLOGY

This study deals with various aspects of high school students’ evaluation of environmental consciousness in Northern Cyprus, Turkey and

Azerbaijan. In this study, qualitative data was collected and the pattern of the study was set out as “content analysis”. Qualitative research can be defined as a research wherein qualitative data collection methods like observation, interview and examination of documents are used and a qualitative process is followed in order to show perceptions and events in a realistic and totalitarian way (Yildirim et al. 2011).

Qualitative researches deal with people’s emotions, experiences and thoughts. The researcher analyzes using this information. One of the most important features of a qualitative case study is that one or several cases are deeply researched. In other words, factors related to a case (individuals, events, environment, processes and so on) are researched in a totalitarian manner and their effect on the specific case and how they become affected by it is highly focused on. Also, a case study is a study in which one or more situations are researched in their limits (Yildirim et al. 2011). To sum up, a semi-structured interview method was used as a data-collecting tool in this research. The benefits of the interview method is that it provides the possibility to see the research subject from the specific individual’s perspective, also, it sheds light on the social processes that make up a particular perspective (Yildirim et al. 2011).

### Study Group

The high school students of the term 2012-2013 in Northern Cyprus, Turkey and Azerbaijan comprised the study group of this research. From each of these regions, that is Northern Cyprus (Lefkosa), Turkey (Ankara) and Azerbaijan (Baku), 60 students were selected, and a total of 180 students participated in the research. Stratified purposeful sampling method was used to determine the study group. This method was chosen to show and determine the feature of the three different countries including subgroups and to provide comparisons between them. The subgroups are regular high schools, science high schools and colleges from the three countries (Buyukozturk 2009).

### Data Collection Tools

In-depth interviews, direct observation and document analysis methods were used as a qualitative research approach to collect data (Lagard

et al. 2003). The data of this study was obtained through an often preferred method, which is “face-to-face interview technique”, which cannot be directly observed alongside other data collection tools, which enables in-depth understanding of relevant aspects of the subject of the participants in the qualitative research approach. It has some advantages, such as in-depth or face-to-face interviews, a high response rate, flexibility in the order of questions and the possibility of control over the environment and an in-depth knowledge about the study subject (Yildirim et al. 2011). This method is a source of revealing the feelings and reasons underlying the response of participants, including many aspects such as thoughts and beliefs (Legard et al. 2003).

In the process of the creation of a semi-structured interview form, related areas were examined first and the draft interview forms were prepared to fully reveal the environmental awareness of high school students. Expert opinions were taken to ensure the internal validity of the interview forms and the forms were restated in accordance with this opinion forum. After that, a study group that is equivalent to the other study group was selected and a pilot meeting was held. So whether the question is clear and understandable and if the answers were related to the questions were determined.

### Data Analysis

In the study, a questionnaire was applied to high school students studying in Turkey and Azerbaijan and Northern Cyprus. The data obtained from the interviews in the form of answers to the questions was analyzed using content analysis. Content analysis of the data was analyzed in four stages (Yildirim et al. 2011).

**1. Coding Data:** After the breakdown of the interviews, the data obtained from the participants was analyzed and separated into meaningful parts and these parts, which make up a significant portion of their meaningful wholes, were named and coded. After this data was coded, a code list was formed and it was used as a key list for examining and editing this data. Then, the coding key and interview transcripts were read separately by individual researchers, and “consensus” and “difference of opinion” issues were discussed and necessary arrangements were made.

For reliability calculations of the research, Miles and Huberman’s (1994) proposed formula of reliability was used and calculated as ninety-four percent in average. Results over seventy percent were considered reliable (Miles and Huberman). The results obtained herein were considered reliable for the research.

**2. Discovery of the Themes:** At this stage, the codes set in the step of encoding were collected under certain categories and themes were established. In the study, a total of ten dimensions about determining the aims of students in Northern Cyprus, Turkey and Azerbaijan and their role on education were created.

**3. Organizing and Defining the Data by the Codes and Themes:** At this stage, the opinions of the participants were explained in a language understood by the reader and opinions were presented to the reader firsthand. Footnotes were used to determine which interview notes are owned by which participant and interview notes were given in quotation marks. Then, the owners of the interviews were indicated in parentheses.

*Example-1:* “.....”(G:L(18)) L: Lefkosa

*Example-2:* “.....”(G:A(6)) A: Ankara

*Example-3:* “.....”(G:B(28)) B: Baku

**4. Interpretation of Results:** At this stage, the findings described and presented in detail were interpreted and submitted by the researcher. Collected data was interpreted through the stages required by qualitative research and a number of results were issued.

### Data Collection Process

Research data was obtained through interviews held between the dates, 15<sup>th</sup> April and 30<sup>th</sup> May 2013 during the hours when students were available at school. The interview form, which was applied in the collection of the data, was prepared by taking into consideration the existing problems and the surrounding environment.

The interview form was given to five experts to ensure internal validity. The form was examined and similar interview questions were eliminated and combined. Also, the intelligibility of some questions was improved and it was finalized. So whether the question is clear and understandable and if the answers were related to the questions were determined. To this end, the negotiations cast form created on the computer from the recorded sound was converted into a written form during the interview. Later, two other ex-

perts were asked to check whether the questions are clear and concise or include the topics discussed by examining the cast and whether the questions had the possibility of providing the necessary information. There was a ninety percent consensus among the three experts.

## RESULTS

In this section, the findings and interpretations of the results of analysis of the data obtained from the participants were given to reviewers.

### *1. Dimension: Future Disasters that May Occur Due to the Global Warming of the Earth and the Thinning of the Ozone Layer*

Thoughts of 180 participants were determined during interviews. Regarding the question in the first extent, the thoughts of the students were determined according to the rates and themes in Table 1.

High school students studying in secondary education programs were asked about their environmental considerations about disasters that may occur in the future due to the increase in warming of the earth and the thinning of the ozone layer. Within this context, fifty-nine percent of the respondents in Northern Cyprus stated that this will lead to very bad results and will create disasters, eight percent stated that the globe will warm up gradually, and thirty-three

percent were certain that precautions should be taken. Also, sixty-seven percent of the respondents in Azerbaijan stated that this will lead to very bad results and will create disasters, six percent opined that the globe will warm up gradually, and twenty-eight percent opined that precautions should be taken. Then, seventy-eight percent of the respondents in Turkey stated that this will lead to very bad consequences and will create disasters, three percent opined that the globe will warm up gradually, and nineteen percent were certain that precautions should be taken. One of the students in Northern Cyprus stated, “*The gradual warming of the earth and the thinning ozone layer will lead to many problems in the future, they will cause changes in seasons, appearance of ultraviolet rays on the earth, and many diseases in humans, especially, related with skin and cancer*” (G: L(5)). Regarding the question in the context of the first research, the answers of high school students studying in Azerbaijan were as follows. One of the students in the group stated, “*The main reason of warming of the Earth is toxic gases thrown into the air from the ground, especially CO<sub>2</sub>. These toxic gases cause the thinning of the ozone layer, approaching ultraviolet rays, some diseases on all living things and even deaths*” (G: B(18)). Regarding the question in the context of the first research, the answer of one high school student studying in Turkey was, “*The gradual warming of the earth and the thinning ozone layer will cause droughts and melting of*

**Table 1: Future disasters that may occur due to the gradual warming of the Earth and the thinning of the ozone layer**

Themes	Participant status								
	Northern Cyprus (Nicosia)		Turkey (Ankara)		Azerbaijan (Baku)				
	Num of stud	%	Num of stud	%	Num of stud	%			
Raising awareness about									
Renewable Energy Production	60	18	30.0	60	11	18.3	60	4	6.6
Earth will warm up gradually.	60	5	8.3	60	2	3.3	60	3	5.0
Gradual warming of the Earth will create a huge catastrophe in the future.	60	35	58.3	60	47	78.3	60	40	66.6
Later, some precautions will be taken in order to prevent global warming and ozone layer depletion.	60	20	33.3	60	11	18.3	60	17	28.3
Total and %	180		100.0	180		100.0	180		100.0

*the polar ice in future. So, I think this will affect both human life and the lives of many creatures. Vegetation will be unable to be fed due to drought, our environment will deteriorate and our life conditions will negatively change. To prevent this disaster, we should all be sensitive about our environment”* (G:A(3)). When the thoughts about possible future disasters due to the gradual warming of the earth and the thinning ozone layer were examined, the most common theme among the three countries is that the gradual warming of the earth will cause huge disasters. In this regard, the attitudes of students in Turkey, Azerbaijan and Northern Cyprus were seventy-eight percent, sixty-seven percent and fifty-nine percent, respectively.

The percentage of individuals who believe that some precautions would be taken about the thinning ozone layer was twenty-eight percent, thirty-three percent and nineteen percent, respectively in Azerbaijan, North Cyprus and Turkey. According to the results, students in Turkey were aware of the tragedy, but they did not believe that something would be done.

## **2. Dimension: Reduction of Exhaust Gases in Traffic, Increasing the Use of Bicycles**

In the context, the 180 participants were asked about their thoughts on “reduction of exhaust gases in traffic and increasing the use of bicycles” and the thoughts of the students were rated and divided into themes in Table 2.

About decreasing the exhaust gas and increasing the use of bicycles, twelve percent of the high school students in Northern Cyprus stated that the use of bicycles will not help reduce exhaust gas, sixty-three percent stated that it will help both, reduction of gas and avoiding air pollution, and twenty-five percent stated that for the reduction of exhaust gas, more different applications (single or double plate numbered vehicles) need to be added in addition to the use of bicycles.

Then, seven percent of the high school students in Azerbaijan stated that the use of bicycles will not help to reduce exhaust gas, fifteen percent stated that for the reduction of exhaust gas, more different applications (Single or double plate numbered vehicles) need to be added besides the use of bicycles and seventy-eight percent stated that it will help both reduction of gas and avoiding air pollution. Then, thirty-three percent of high school students in Turkey stated that the use of bicycles will help both reduction of gas and avoiding air pollution, forty-nine percent stated that it will help both reduction of gas and avoiding air pollution and eighteen percent stated that different applications (single or double plate numbered vehicles) need to be used besides the use of bicycles.

Thoughts on the subject of the respondents in all the three countries were determined and are presented in the following manner. One of the students in Northern Cyprus stated, *“If people use bicycles to reduce exhaust gas, this will be so much better for avoiding pollution in both our country and our world. Nowadays, there*

**Table 2: Reduction of exhaust gases in traffic, increasing the use of bicycles**

Themes	Participant status								
	Northern Cyprus (Nicosia)			Turkey (Ankara)			Azerbaijan (Baku)		
	Num of stud	%		Num of stud	%		Num of stud	%	
Bicycle usage will not decrease the exhaust gases.	60	7	11.6	60	29	48.3	60	4	6.6
If more emphasis is placed on the use of bicycles, exhaust gases will be reduced and air pollution will be avoided.	60	38	63.3	60	20	33.3	60	47	78.3
For the reduction of exhaust gas, 60 the more different applications (Single or double plate numbered vehicles) need to be added in addition to the use of bicycles.	60	15	25.0	60	11	18.3	60	9	15.0
Total and %	180		100.0	180		100.0	180		100.0

are multiple cars in every household and exhaust gas harms our environment. Therefore, the use of bicycle should be common” (G:L(17)). According to this explanation and opinion, it can be said that the student believes that people are not aware and educated enough about the environment.

One of the respondents from Azerbaijan stated, “I think reduction of exhaust gases in traffic and increasing the use of bicycles is beneficial for our future. Because exhaust gas negatively affects the air and causes air pollution and thinning of the ozone layer, the use of bicycle or travelling on foot would minimize these issues” (G:B(18)). One of the students from Turkey stated, “If the bicycle is used more often than cars, this will prevent pollution. However, we cannot arrive at places on time because bicycles are not as fast as cars. I think it is necessary to find a solution to prevent the exhaust gas” (G:A(6)).

### 3. Dimension: The Necessary Warning to Those Who Pollute the Environment

On the third dimension of the research, ideas on what to do about the necessary warning against the polluters were determined. The thoughts of the students were determined according to the rates and themes in Table 3.

The opinions of respondents about polluters were taken in an interview. Seventy-two

percent of the students studying in Northern Cyprus stated that legal sanctions should be developed against the polluters, eighteen percent stated that awareness of the people should be raised via a press release, and ten percent stated that non-governmental organizations should regularly provide warning signs against the polluters or organize events.

Then, eighty-three percent of the students studying in Azerbaijan stated that legal sanctions should be developed against the polluters, sixteen percent stated that awareness of the people should be raised via press release, and five percent stated that non-governmental organizations should regularly provide warning signs against the polluters or organize events.

One high school student from Northern Cyprus stated his/her thoughts about warning the polluters as, “Yes, I give necessary warnings to polluters and I care about our environment because I must consider my future and I don’t want to live in a polluted environment. We can partially prevent pollution by warning polluters. But in our country, people don’t care much about the environment. For example, the environment will be polluted since there are no trash bins around. I think legal sanctions should be developed against polluters to prevent those problems” (G:L(31)). According to this explanation and point of view, it can be interpreted that the students care most about the awareness of the

**Table 3: The necessary warning to those who pollute the environment**

Themes	Participant status								
	Northern Cyprus (Nicosia)			Turkey (Ankara)			Azerbaijan (Baku)		
	Num of stud		%	Num of stud		%	Num of stud		%
Increase the awareness of people by providing the necessary warning to those who pollute the environment via press release.	60	11	18.3	60	19	31.6	60	7	11.6
The development of legal sanctions against the polluters.	60	43	71.6	60	35	58.3	60	50	83.3
Non-governmental organizations to constantly arrange the environment and to put warning signs against polluting activities.	60	6	10.0	60	6	10.0	60	3	5.0
Total and %	180		100.0	180		100.0	180		100.0

people. One high school student from Northern Cyprus stated, “Yes, I warn people. For example, if I see someone throwing garbage on the streets, I warn him/her. I think people should use trash bins because this environment belongs to all of us. The consequence of pollution would be end of the life. If everyone tries to keep our environment clean, our world would be protected” (G:B(33)). One high school student from Turkey stated his/her thoughts about warning the polluters as, “Yes, I warn polluters and everyone should do this. Because there will be no problem if everyone takes responsibility. If everyone avoids polluting, there will be no pollution. At least, trying to keep the environment clean instead of cleaning will help” (G:A(19)). According to this explanation and point of view, it can be interpreted that the students care most about the awareness of the people.

#### 4. Dimension: Buying Recyclable Products

In this context, the thoughts of participants were rated and classified into themes. The thoughts of the students according to rates and themes are shown in Table 4.

About a product’s recyclability, eighty-five percent of the students in Northern Cyprus stated that education about buying recyclable products should be provided, twelve percent stated that information about recyclability of products should be provided on its package, and three percent stated that municipal workers should decompose the wastes according to their recyclability (organic, inorganic, metal, and so on).

About a product’s recyclability, seventy-two percent of the students in Azerbaijan stated that education about buying recyclable products should be provided. Then, eighty-two percent of the students in Turkey stated that education about buying recyclable products should be provided, and thirteen percent stated that information about recyclability of product should be provided on its package while five percent stated that municipal workers should decompose wastes according to their recyclability (organic, inorganic, metal, and so on).

In the research, the opinions of the high school students in each high school were indicated as follows. One of the high school students in Northern Cyprus stated, “Of course, it would be nice to check if a product is recyclable before buying. The other way of saving the environment is to recycle products. It is our duty to save the environment. However, our society including myself, doesn’t care about this feature while we are shopping. Recycling is essential for the sake of both, our environment and us. But I think that we don’t have enough awareness. It is very important that there is enough information about recyclability of the product on its package” (G: L(9)).

One of the high school students in Turkey stated, “The recyclability of a product is really important because if we buy those kind of products, we will positively affect the environment. It is very selfish to think that recycling is only for us. All the products we purchase should be beneficial for our environment. Therefore, education about buying recyclable products should be provided at schools” (G:A(31)).

**Table 4: Buying recyclable products**

Themes	Participant status								
	Northern Cyprus (Nicosia)			Turkey (Ankara)			Azerbaijan (Baku)		
	Num of stud		%	Num of stud		%	Num of stud		%
Education about buying recyclable products.	60	51	85.0	60	49	81.6	60	43	71.6
Information about recyclability of the product on its package.	60	7	11.6	60	3	5.0	60	12	20.0
Municipal workers decomposing the waste according to its recyclability (organic, inorganic, metal, etc.).	60	2	3.3	60	8	13.3	60	5	8.3
Total and %	180		100.0	180		100.0	180		100.0



**5. Dimension: Keeping Up With Broadcast Programs Related to the Environment on Press TV, Radio and Other Media for Creating a Livable Environment**

In this context, opinions of the participants on keeping up with broadcasting programs related to the environment on Press TV, radio and other media for creating a livable environment and the thoughts of the students were specified according to the rates and themes in Table 5. In the research, thirty-three percent of the high school students in Northern Cyprus stated that the amount of broadcast programs related to the environment on Press TV, radio and other media for creating a livable environment is very limited, forty-nine percent stated that these programs are inadequate in terms of raising people's awareness and eighteen percent stated that there are not any developments to encourage people to watch these programs.

As related to the same topic, ten percent of the respondents in Azerbaijan stated that necessary developments should be made to make people watch the broadcast programs related to the environment on Press TV, radio and other media for creating a livable environment, fifty-nine per-

cent stated that the quality of these programs are inadequate in terms of raising people's awareness, and forty-seven percent stated that the amount of programs related to the environment is very limited.

Under the same theme, respondents in Turkey stated that the amount of the programs related to the environment on Press TV, radio and other media for creating a livable environment are very limited, *and* therefore, they are inadequate in terms of raising people's awareness.

One high school student in Northern Cyprus stated, "*Yes, I do my best to watch programs related to the environment, but I don't think that they are adequate. I believe that more encouraging activities should be done to raise awareness*" (G: L(31)).

According to that explanation, *the* student cares more about the awareness of the people. One high school student in Azerbaijan stated, "*Now and then, these programs are broadcasted on TV and I watch them as much as I can. But they soon discontinue broadcasting since they are not interesting enough. And it is very hard to find such TV channels. I believe that necessary developments should be made to make people watch these broadcast programs related to*

**Table 5: Keeping up with broadcast programs related to the environment on Press TV, radio and other media for creating a livable environment**

Themes	Participant status								
	Northern Cyprus (Nicosia)			Turkey (Ankara)			Azerbaijan (Baku)		
	Num of stud		%	Num of stud		%	Num of stud		%
The amount of broadcast programs related to the environment on Press TV, radio and other media for creating a liveable environment is very small.	60	20	33.3	60	15	25.0	60	19	31.6
Broadcast programs related to the environment on Press TV, radio and other media for creating a liveable environment are inadequate in terms of raising people's awareness.	60	29	48.3	60	40	66.6	60	35	58.3
Necessary developments should be done to make people watch these broadcast programs related to the environment on Press TV, radio and other media for creating a liveable environment.	60	11	18.3	60	5	8.3	60	6	10.0
Total and %	180		100.0	180		100.0	180		100.0

the environment on Press TV, radio and other media for creating a livable environment” (G:B(54)).

One of the students in Turkey indicated, “Yes, I keep up with all the environment-related programs on TV, radio and other media. However, I don’t think they are enough. If so, people wouldn’t be polluting the environment” (G:A(25)).

### 5. Dimension: Planting Seeds Against Gradual Deforestation

In this context, respondents were asked about their opinions on planting seeds against gradual deforestation. The thoughts of the students were determined according to the rates and themes shown in Table 6.

As a result of the study, twenty-two percent of the students in Northern Cyprus stated that there are no activities or studies related to the planting of seeds in schools, fifty-three percent opined that the *seeds* are not well taken care of, and therefore, they do not survive, fifteen percent stated that people’s awareness about planting are not as much as expected and ten percent stated that deforestation causes anxiety about the future among students.

Then, ten percent of the students in Azerbaijan stated that there are no activities or studies related to the planting of seeds in schools, seventy-eight percent stated that the *seeds* are not well taken care of, and therefore, they do not survive, eight percent stated that people’s awareness about planting is not as much as expected

and four percent stated that deforestation causes anxiety about the future among students.

Then, thirty-three percent of the students in Turkey stated that there are no activities or studies related to the planting of *seeds* in schools and forty-eight percent stated that the *seeds* are not well taken care of, therefore, they do not survive.

One student in Northern Cyprus indicated, “I was in primary school the last time I attended a planting activity. I could not attend any in secondary or high school since there were no such activities. I believe that in our country, these activities are not enough and I think that they should be held once a week” (G:L(10)). One high school student in Azerbaijan stated, “We have these kinds of activities in our country and I always join them. These activities are mostly held over weekends but I think they are not enough and should be held during week days as well” (G:B(33)). One of the respondents from Turkey stated, “Yes, there are such activities in our school and I always join them. However, I think that they are not enough and should increase because inadequate planting could cause deforestation, which would lead to worse consequences” (G:A(44)).

### 6. Dimension: Renewable Energy Production

In this context, respondents were asked about their opinions on renewable energy production. The thoughts of the students were determined according to the rates and themes as shown in Table 7.

**Table 6: Planting seeding against the gradual deforestation**

Themes	Participant status								
	Northern Cyprus (Nicosia)			Turkey (Ankara)			Azerbaijan (Baku)		
	Num of stud		%	Num of stud		%	Num of stud		%
There isn’t any activity or study related to the planting seeding in schools.	60	13	21.6	60	22	36.6	60	6	10.0
The seeding are not taken care of and therefore they do not survive.	60	28	46.6	60	25	41.6	60	43	71.6
People’s awareness about planting is not as expected.	60	9	15.0	60	8	13.3	60	5	8.3
Deforestation causes anxiety about future among students.	60	10	16.6	60	5	8.3	60	6	10
Total and %	180		100.0	180		100.0	180		100.0

**Table 7: Renewable energy production**

Themes	Participant status								
	Northern Cyprus (Nicosia)			Turkey (Ankara)			Azerbaijan (Baku)		
	Num of stud	%		Num of stud	%		Num of stud	%	
Raising awareness about Renewable Energy Production	60	18	30.0	60	11	18.3	60	4	6.6
The production of Renewable Energy should be raised gradually since it is harmless	60	41	68.8	60	44	73.3	60	53	88.3
Changing the country policy to provide renewable energy.	60	1	1.6	60	5	8.3	60	3	5.0
Total and %	180	100.0	180	100.0	180		100.0		

In this research, sixty-eight percent of the respondents stated that the production of renewable energy should be raised since it is harmless, thirty percent stated that people should be enlightened more about renewable energy production and two percent opined that the country policy should be changed to adapt renewable energy. Then, eighty-eight percent of the students in Azerbaijan stated that the production of renewable energy should be raised since it is harmless, and seven percent opined that people should be enlightened more about renewable energy production. Seventy-three percent of the respondents in Turkey stated that the production of renewable energy should be raised since it is harmless, and nineteen percent stated that people should be enlightened more about renewable energy production. *One high school student in Northern Cyprus stated, "Renewable energy is a very important alternative for our environment. Renewable energy sources are eco-friendly and harmless, therefore, I support the use of renewable energy" (G:L(25)). According to this explanation, the student cares most about the awareness of people. One of the students in Azerbaijan stated, "Nowadays, renewable energy production is a really important alternative. However, powerhouses are used instead of renewable sources in our country. Renewable energy sources are very beneficial for the environment" (G:B(36)). One high school student in Turkey stated, "Renewable energy production is very essential and harmless for our environment. If our country uses renewable sources instead of nuclear energy, it will both, prevent pollution and be beneficial in terms of the economy" (G:A(47)).*

## CONCLUSION

In this part of the study, the results of the findings are mentioned.

### 1. Dimension: Future Disasters That May Occur Due to the Gradual Warming of the Earth and the Thinning of the Ozone Layer

When the opinions on future disasters that may occur due to the gradual warming of the earth and the thinning of the ozone layer were examined, the most common theme among the three countries is that there will be a huge disaster caused by gradual warming of the earth. On this subject, the opinions of the students in Turkey, Azerbaijan and Northern Cyprus were seventy-eight percent, sixty-seven percent and fifty-nine percent, respectively. In the context of taking precautions against the thinning of the ozone layer, the rates were twenty-eight percent, thirty-three percent and nine percent, respectively. According to these conclusions, it can be interpreted that students in Turkey were mostly aware of the possible disasters, however, they do not believe that something is going to be done about the gradual warming of the earth. Global warming has started threatening living quality, economics and the environment. Human beings should start fighting global warming by modifying the houses, uses of energy and water sources and the designs of vehicles. Therefore, engaging public service advertisements and education programs should be prepared to achieve desired results. The creation of a unit in the Ministry related to global warming and mobilization

across the country should be to done to strengthen environmental sensitivity.

### **2. Dimension: Reduction of Exhaust Gases in Traffic, Increasing the Use of Bicycles**

On the subject of reduction of exhaust gases in traffic and increasing the use of bicycles, the response rates of the students in Northern Cyprus, Turkey and Azerbaijan were twelve percent, forty-nine percent and seven percent, respectively. In this context, the percentages of the participants in Northern Cyprus and Azerbaijan seem to be close, and about half the participants in Turkey stated that the use of bicycles will not reduce the exhaust gas.

According to the theme, "the use of bicycles will help in the reduction of exhaust gas and air pollution", the respond rates of the students in Northern Cyprus, Turkey and Azerbaijan were sixty-three percent, thirty-three percent and seventy-eight percent, respectively. In this context, the percentage of the participants in Northern Cyprus and Azerbaijan seems to be close. This is because the participants from Turkey do not agree with increasing the use of bicycle since the traffic is very heavy in Turkey and it would be hard to build bicycle roads because of the unguided urbanization.

According to the participants in Northern Cyprus, Turkey and Azerbaijan, it can be interpreted that more different applications (single or double plate numbered vehicles) need to be added besides the use of bicycles for the reduction of exhaust gas. In this context, the percentage of the participants in the three countries seems to be close and different applications should be added in order to avoid air pollution.

### **3. Dimension: The Necessary Warnings to those who Pollute the Environment**

On the subject of the necessary warnings to those who pollute the environment, the most common suggestion in Northern Cyprus, Turkey and Azerbaijan was developing legal sanctions against the polluters. But there are some differences between the rates of each country. While the percentages of Azerbaijan and Northern Cyprus were eighty-three percent and seventy-two percent respectively, the percentage for Turkey is fifty-eight percent. According to these percentages, it can be interpreted that the stu-

dents in Turkey do not think that legal sanctions will be enough. In this context, the second popular theme was increasing the awareness of people by providing the necessary warning to those who pollute the environment via press releases with a percentage of thirty-three percent and the least popular was the involvement of non-governmental organizations to constantly arrange the environment and to put up warning signs against polluting activities with ten percent. These two subjects have low percentages in Northern Cyprus and Azerbaijan.

### **4. Dimension: Buying Recyclable Products**

On the subject of buying recyclable products, the most popular theme among high school students was education about buying recyclable products. The percentages on this theme are eighty-five percent in Northern Cyprus, eighty-two percent in Turkey and seventy-two percent in Azerbaijan.

The second highest rate in Northern Cyprus and Azerbaijan was information about recyclability of the product on its package. The theme of municipal workers decomposing the waste according to its recyclability (organic, inorganic, metal, and so on) had similar rates in Northern Cyprus and Azerbaijan. But Turkey was the second highest on the theme of municipal workers decomposing the waste according to its recyclability (organic, inorganic, metal, and so on) compared to the other two countries. This is probably because in recent years, there have been statements by media about environmental awareness and most of the products include information about recyclability on their packages.

### **5. Dimension: Keeping Up with Broadcast Programs Related to the Environment on Press TV, Radio and other Media for Creating a Livable Environment**

In this context, the percentages were similar among the three countries. The most common theme was that the amount of broadcast programs related to the environment on Press TV, radio and other media for creating a livable environment is very limited. About this subject, the rates were sixty-three percent in Turkey, fifty-nine percent in Azerbaijan and forty-nine percent in Northern Cyprus. It can be interpreted that such programs in Northern Cyprus are more

common than the other two countries because of the activities of environmental organizations.

The second highest rate among the three countries is that the amount of these environmental programs is limited. The least popular theme among the three countries is that necessary developments should be done to make people watch broadcast programs related to the environment on Press TV, radio and other media for creating a livable environment. This is because these programs are inadequate in terms of increasing people's awareness. According to this data, it can be interpreted that the students want to keep up with these programs but they cannot find properly prepared programs.

#### **6. Dimension: Planting Seeds Against Gradual Deforestation**

When the thoughts on planting seeds against gradual deforestation were examined, it was revealed that students in the three countries do not join planting activities. But the rates are eighty-two percent in Azerbaijan, sixty-three percent in Northern Cyprus and fifty-three percent in Turkey. Then, thirty-three percent of the students in Turkey stated that the seeds are not well taken care of, therefore, they do not survive and only thirteen percent indicated that people's awareness about planting are not as much as expected.

According to this data, it can be interpreted that the most aware group was the students in Turkey. Students in Northern Cyprus want to join planting activities but they stated that there are no activities or studies related to the planting of seeds in schools.

#### **7. Dimension: Production of Renewable Energy**

When the opinions on the subject of production of renewable energy were examined, it was revealed that the results are similar across the three countries. It can be interpreted that high school students believe that awareness of people on renewable energy production and the production of renewable energy should be raised. Nowadays, the most common energy sources are non-renewable sources like oil, gas and coal. The uses of these sources threaten the environment. Therefore, renewable energy policies should be changed and education and media

programs should be prepared to raise awareness. In this study, when the environmental sensitivity of the three countries was compared, there was no significant difference. However, none of the countries succeeded.

As a result, the failure of these three countries showed that sensitivity to environmental issues underlines the environmental problems. Environmental education is essential in these three countries. Therefore, a complete educational program starting from preschool and various campaigns should be prepared.

### **RECOMMENDATIONS**

No doubt, the most efficient and appropriate method for raising environmental awareness is environmental education and this education should start in early ages and even preschool. The interest of people should be increased via more environmental news in the press, together with the environmental education programs of media, and the environmental knowledge of society should be increased regarding environmental education. NGOs should inform and organize citizens on environmental issues. Public transport and use of bicycles should be encouraged through environmental education, so that carbon dioxide and carbon monoxide emissions would be diminished. As a result, the factors that cause global warming would be minimized in a short time. Panels, symposiums, courses, seminars and similar activities on environmental education should be organized and thus, environmental knowledge and awareness of society would be increased. Environmental clubs should be established in all educational organizations and students should have active roles and environmental awareness of students should be increased via nature trips, posters and essay contests. The municipalities should hand out educational brochures and improve the awareness amongst societies on recycling. Municipalities should collect waste materials such as plastic, cardboard and batteries separately so that the awareness of societies on recycling becomes easier to implement. Since the lessons in elementary, secondary and high schools are not sufficient, the teachers should receive in-service training for the development of environmental awareness. In order to improve the knowledge and awareness of future generations on environment, environmental education in high schools should

be increased and every university department should have compulsory environmental lessons.

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