

A RESEARCH ON DETERMINATION THE ENVIRONMENTAL SENSITIVITY OF UNIVERSITY STUDENTS: THE CASE STUDY OF KILIS*

Assoc. Prof. Dr.Sadettin PAKSOY
Kilis 7 Aralık University
spaksoy@kilis.edu.tr

Prof. Dr. H. Mustafa PAKSOY
Kilis 7 Aralık University
hmpaksoy@yahoo.com

ABSTRACT

Human being and all other species continue their lives by interacting each other in physical, biological, economic, social and cultural habitat which is named “environment”. Moreover, environment does not reflect only the earth we are living in but also the atmosphere surrounding it. In relation to environment, it is an important question to ask whether we do care about the environment enough or not, either within our country or in the world.

Even if we all know there is no life in the absence of environment, we still keep damaging the areas we are living and destroy the environment in the most horrible way. Native Americans have a saying that “*we do not inherit the earth from our ancestors; we borrow it from our children*”, so how many of us do actually see the earth in this way? Furthermore, how much do we care about to educate people concern with environmental issues such as pollution prevention and environmental awareness. To avoid from any harm to the environment and keep it sustainable level, it is needed to be improved environmental awareness. That is why; it should be on the agenda at all the time, amongst society, especially among university students.

Thus, even it is still important in primary and secondary schools, the main target of this study will be “the environmental awareness” of university students. It will be examine by conducting a survey on colleague, undergraduate and postgraduate students to see if they are educated about environmental issues, and if so, is that sufficient? The survey has conducted on 456 students at Kilis 7 Aralık University by face-to-face survey method to comprehend their ideas, perception and behaviours about “environmental awareness”. According to the results of survey, there has been some analysis and suggestions.

Key words: Environment, Environment Awareness, Kilis 7 Aralık University.

ÖZET

İnsanların ve diğer canlıların yaşamları boyunca ilişkilerini sürdürdükleri ve karşılıklı olarak etkileşim içinde buldukları her türlü fiziki, biyolojik, ekonomik, sosyal ve kültürel ortama

*This paper is represented in *International Environmental Sciences Symposium of Van (IESSV)* on 04-07 June 2014 and placed in summary book of the symposium. Full paper is firstly publishing in this journal.

çevre denilmektedir. Çevre, sadece yaşadığımız dünyayı değil, dünyayı çevreleyen atmosferi de kapsamaktadır. Kapsam alanı bu kadar geniş olan bir konuda acaba "çevre bilincine" gerek ülkemizde ve gerekse dünyada ne kadar önem verilmektedir?

Çevre olmadan yaşam da olmaz. Ancak, bu yaşam alanlarını kirleten yine bu çevrede yaşamak zorunda olan insandır. "Dünya bize atalarımızdan miras kalmadı, çocuklarımızdan ödünç aldık" söylemine ne kadar duyarlıyız? Öte yandan, çevrenin korunması, çevre bilincinin oluşması, çevre kirliliğinin önlenmesi vb. gibi konularda eğitime ne kadar önem verilmektedir? İlköğretim, ortaöğretim ve lise öğretimini bir yana bırakırsak, acaba üniversitelerimizde bu konuda eğitim verilmekte midir? Veriliyorsa yeterli düzeyde midir?

Çevreye zarar verilmemesi ve onun sürdürülebilir bir düzeyde tutulması için çevre bilincinin geliştirilmesi gerekmektedir. Bu nedenle, çevresel sorunları önleme ve/veya azaltma konusu sürekli olarak gündemde tutulmalı, toplumda ve özellikle öğrencilerde çevre duyarlılığı oluşturulmalıdır.

Bu çalışmada, Kilis 7 Aralık Üniversitesi ön lisans, lisan ve lisansüstü programlarında eğitim gören 456 öğrenci ile yüz yüze görüşme metodu ile anket yapılmış ve bu öğrencilerin "çevre duyarlılığı" konusundaki düşünce, görüş ve davranışları veriler doğrultusunda ortaya konulmuştur. Ortaya çıkan sonuçlara göre öneriler getirilmiştir.

Anahtar kelimeler: Çevre, Çevre duyarlılığı, Kilis 7 Aralık Üniversitesi.

بحث عن تحديد الوعي البيئي لطلاب الجامعة دراسة مثال كيليس

Prof. Dr. H. Mustafa

جامعة 7 Aralık Kilis
hmpaksoy@yahoo.com

Assoc. Prof. Dr.Sadettin PAKSOY
PAKSOY

جامعة 7 Aralık Kilis
spaksoy@kilis.edu.tr

ملخص

ان كل ما يحيط بالانسان والأحياء الأخرى من علاقات طوال حياتهم وهم في تفاعل وتقابل واستمرار معها من الأمور الفيزيائية والبيولوجية والاقتصادية والاجتماعية والثقافية تسمى بـ البيئة. البيئة ليست فقط الدنيا التي نعيش بها بل تشمل الغلاف الجوي المحيط بالأرض. أتساءل في موضوع وقضية كبيرة بهذا الحد والاطار ماهي الأهمية التي ينبغي اعطاؤها لـ " الوعي البيئي " ان كان في بلدنا أو في العالم؟

لن يكون هناك حياة بلا بيئة. لكن الناس الذي يضطرون للعيش في هذه البيئة مع تلويثهم لمناطق الحياة. ماهي مدى حساسيتنا لقول " هذا العالم لم يبق لنا كورثة من أجدادنا بل هو ما اقترضناه من أطفالنا؟" ومن جانب آخر ماهي الأهمية التي تعطى للتعليم في مواضيع حماية البيئة وخلق الوعي البيئي ومنع

التلوث البيئي الخ؟ لو تركنا التعليم الابتدائي و التعليم الاعدادي و التعليم الثانوي جانبا، لكن هل هناك اعطاء تعليم في هذه المواضيع في جامعاتنا؟ لو كان يتم الاعطاء هل هي في المستوى الكافي؟

لتجنب الأضرار بالبيئة ومن أجل الاستمرار والحفاظ في المستوى الذي هو عليه ينبغي توسيع الوعي البيئي. لهذا السبب ينبغي أن يكون وبشكل مستمر في جدول الاعمال مواضيع الوقاية من مشاكل البيئة و/أو التقليل، ينبغي تشكيل الوعي البيئي في المجتمع وخاصة في الطلاب.

في هذه الدراسة تم اجراء احصائية بطريقة المقابلة وجها لوجه مع 456 طالب وفقا لتعليمهم في برامج المعاهد و الشهادة الجامعية و الدراسات العليا في جامعة 7 Aralık في كيليس، وتم استخلاص النتائج باتجاه معلومات التفكير و الرؤية و السلوك المعطاة من الطلبة في موضوع " الوعي البيئي ". وتم تقديم المقترحات وفقا للنتائج الظاهرة.

الكلمات المفتاحية: البيئة، الوعي البيئي، جامعة 7 Aralık في كيليس

1. INTRODUCTION

There are several definitions of environment from different perspectives but in this paper it will be referred the most common ones when talking about environment. Human being and all other species continue their lives by interacting each other in physical, biological, economic, social and cultural habitat which is named "environment". According to another definition, it is nature in which livings and organisations sustain their existence and activities within the biosphere (Karacan, 2007). For all that, the main concern in environmental issues has always been human-being is also under the rules of nature very closely like all other livings. There is, however, no other species in the earth could possibly have so much effects on it as human have (Kocataş, 2002).

With an ambition to use livings and physical materials and with the capability of changing the environment that we all living in, most of the time, human-being act very careless to the environment and nature –even sometimes without considering they actually could destroy it all as a result of those actions. Need for use of natural resources was just at the survival level until 19th century, but it logarithmically accelerated with the industrial revolution. Almost all states follow development policies which are based on a system that targets the most profit in return to the least time and spending. Thus, this approach brings unlimited and reckless consuming habit with it that result in irreversible damages to the environment and nature (Yücel and et.al, 2008).

Industrial revolution brought people wealth and wellbeing as well as it had been devastating to the earth by changing nature of environment with polluting it. Therefore, pollutions and damages lead emergence of environmental movements at mid of twentieth century. Later, the United Nations organise a conference to put environmental issues on the table in international level to discuss policies about it on the United Nations Conference on Human environment in 1972 (Yücel and et.al, 2003).

Today, major environmental issues such as population, poverty, shelter, deforestation, global warming, nuclear energy and hazardous contaminants can be considered as reasons of ecological crisis. With environmental issues become a huge threat to the natural life and humanity, the issues become crucial to cope with. From remnants to water contamination, a lot of environment-related problems make it essential to work on the issues for producing solutions. It also has been subject to academic discussion in recent decades. Since it has been crucial for the entire world, every state try to take measures to protect the environment and nature and to prevent it from all sort of danger because it is national issue as much as it is international. To give an example of nation-level environmental conservation, the article 56 of Republic of Turkey Constitution states that “everyone has the right to live in a healthy, balanced environment” and “it is the duty of the state and citizens to improve the natural environment and to prevent environmental pollution”. Besides, it can be implied from the article 56 that problems concerned about environment is not only governmental or official issues but also every single citizen is equally responsible for the maintain the health of environment. In the work-field, in Turkey, there have been so many hardships to protect nature especially recent years. Even responses is not enough to stop to misuse of natural resources and to prevent to damages, they still could not be underestimated.

In time, to improve environmental awareness both in individual and political dimensions, it has to be promoted that “avoid damaging the environment and understanding the importance of its use at the sustainable level”. This awareness will help to prevent and decrease environmental problems as far as these *environmental attitudes* could be kept constantly on the agenda. Also, *environmental awareness* could be defined as how all influences on the environment and nature are perceived and reacted by public. That is very important to see people's responses and perceptions over the issues to measure environmental awareness since it is the main indicator. Environmental attitudes and awareness can differ according to individual socio-economic backgrounds. In other words, as a quantitative term, there are different levels of environmental awareness and attitudes that changes according to the individual feature (Yücel and et.al, 2003).

It is going to be very useful that to determine the level of environmental awareness of individuals and various socio-economic-cultural groups consists of individuals while using the results for taking measures according to the findings in a specific area. Among other, those benefits can be juxtaposed like that (Yücel and et.al, 2008):

- The sensitivity level of individuals is very important to affect decision making process to convince to take environment into account while politicians making policies. If the sensitivity concern to the issue is risen up, there will be permanent solutions come to the actions.
- Consumers who are very well aware of how to protect environment will be persistent about recycling. Although it is not enough by itself but still will be quite helpful to make limited resources long-lasting and it will be useful in

economic terms as well; it will reduce the dependency on exported raw-materials.

- Increase in the sensitivity of environment lead the people takes action and do not keep quite when something happens harmful to the nature. As a result of that, there will be self-control mechanism for each individual to use of environment with more respectfully and carefully.
- With respect to the level of environment, the need for education and/or regulations in next years will be defined accurately. Accordingly, studies will be carried out to raise a level at least effective-enough to make changes in current policies.
- With the increase in awareness of environment, the optimal use of fundamental resources for sustainable development will be reduced to the community level.

The main purpose of the study is measurement environmental awareness of Kilis 7 Aralık University's students by conducting a survey which is prepared in the light of that information.

2. MATERIALS AND METHOD

2.1. Materials

The research is conducted among faculty, college, and second-year postgraduate students who are studying at Kilis 7 Aralık University. The primary data of the research are resulting from survey carried out on the students. Secondary resources for the study are books, articles and written documents related to the topic.

2.2. Method

Method of the research consists of three main steps which are choice of students, collection of data, and analysis of it. With the theoretical background in the first chapter, research finding are supported.

2.2.1. Choice of Students (To Sample)

While choosing students, convenient sampling method was used. To the best representation of population, it had reached students from all walks of academic units.

Population who compose the heart of research is limited by Kilis 7 Aralık University students. The number of sample is calculated with this formula (Weiers, 2007:300):

$$n = \frac{q * p * \left(\frac{Z_{\alpha}}{d}\right)^2}{1 + \frac{1}{N} * \left[q * p * \left(\frac{Z_{\alpha}}{d}\right)^2 - 1 \right]} + p$$

p: Observed rate of X in the universe

q: (1-p) non-observe rate of X

N: Size of the universe

n: size of the sample

Z_{α} : for $\alpha=0.05$, 0.02 , 0.01 it is valued 1.96 , 2.33 , 2.58 respectively.

d: acceptable error margin

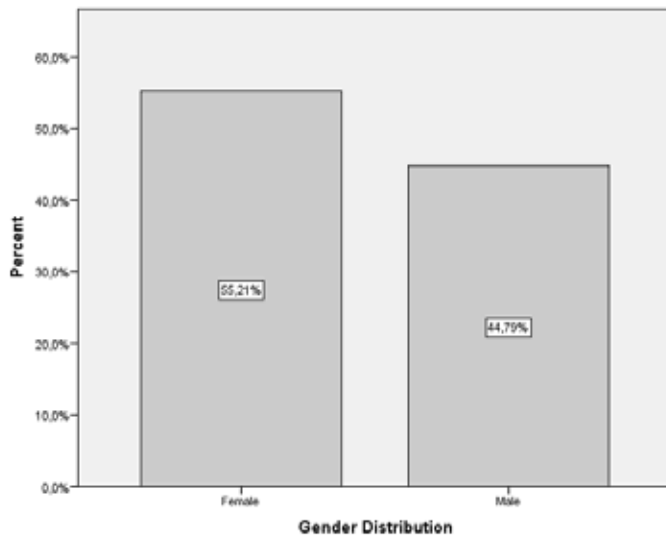
In the formula, p and q are not known well. That is why, to reach the most possible number in observation rate, p and q is fixed at 0,5. The N sized universe is accepted 8000 and the acceptable error margin is determined as 0.05. By using the formula, the number of sample is defined as 367. The higher number of sample is used, the more reliable results are taken, and for that reason, survey is conducted on 456 students to get better results.

2.2.2. Collecting Data (Conducting the Survey) and the Assessment

Survey handed in person to the students and collected in the same way. For the analyse part, data transferred into the related office programme excel. Having regulated and put in order in excel, they were transferred to the SPSS to evaluate.

3. RESEARCH FINDINGS

As it can be seen from the figure below, 55,21 per cent of participants are female whilst



men are 44,79 per cent.

Figure 1: Distribution of Sex

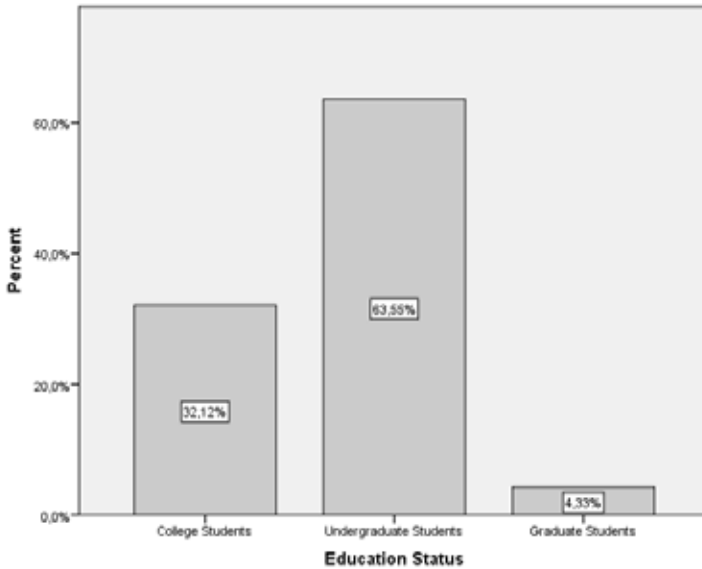
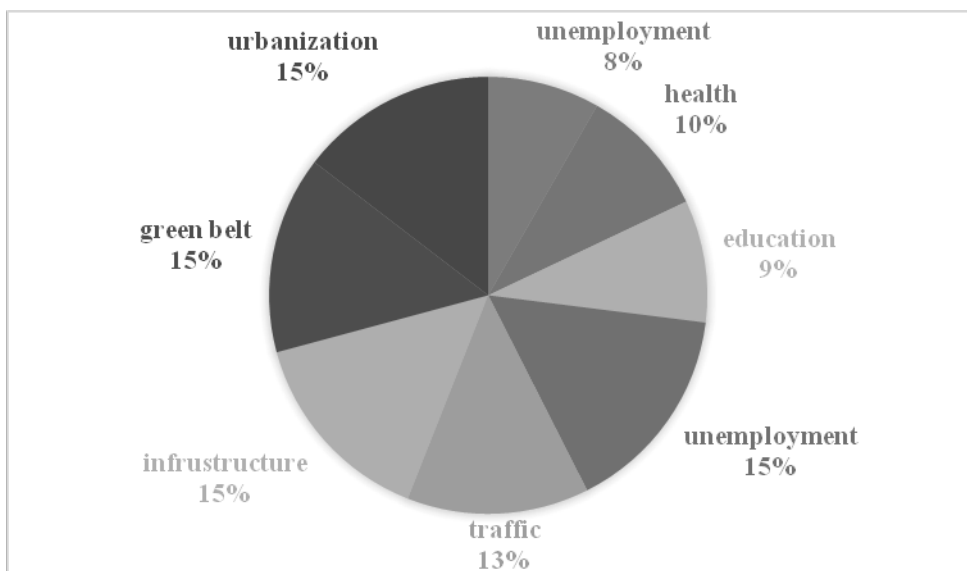


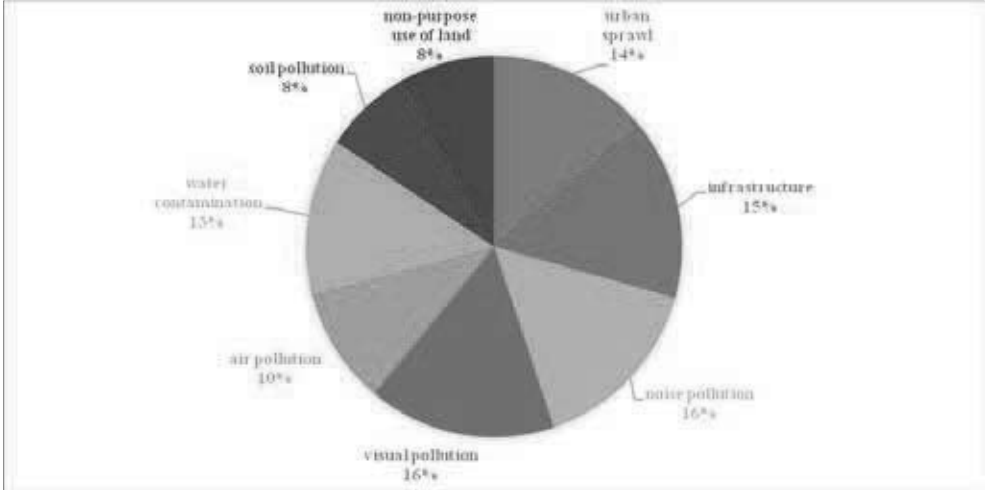
Figure 1: Educational Levels of Participants

The educational level of participant is seen the figure above. 32,12 per cent of participants are college students and 63,55 per cent are undergraduate while 4,33 per cent are post graduate students. (The survey is conducted among students of Kilis 7 Aralık University, which is newly established, thus there are lesser number of post graduate students. That is why, post graduates seems quite a few.)



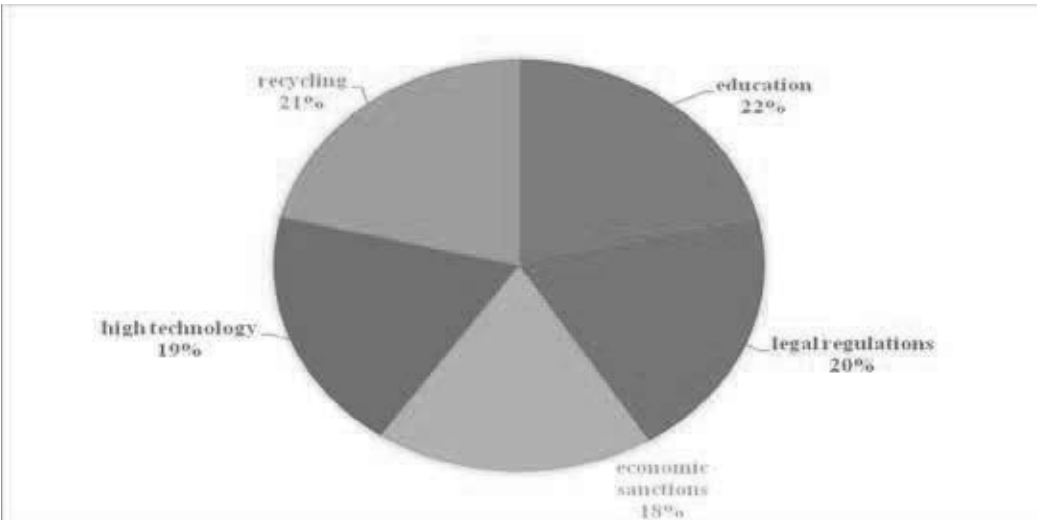
Pie Chart 1:The most significant problem of Kilis

In general, urbanization, green belt, infrastructure, and environment are perceived as the most significant problems of Kilis with the same percentage which is 15%. Traffic is the second with 13 per cent followed by health with 10 per cent, education 9 per cent and unemployment 8 per cent (Graph 1).



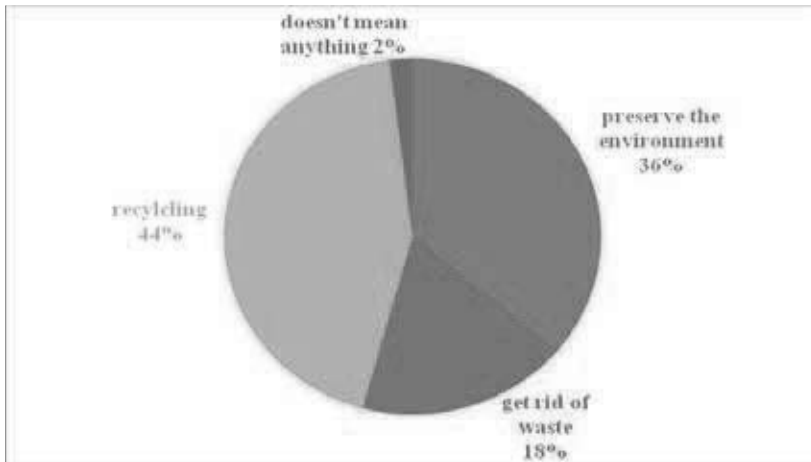
Pie Chart 2:The most important environmental issue in Kilis

The most important environmental issues of Kilis are ranged from the first to least importance like that: with 16 per cent visual pollution and noise pollution come first and followed by infrastructure by 15 per cent. Urban sprawl (14%), water contamination (13%), and air pollution (10%) are the other important once while less problematic issues according to survey taker are soil pollution and non-purpose use of lands by 8 per cent (Pie Chart 2).

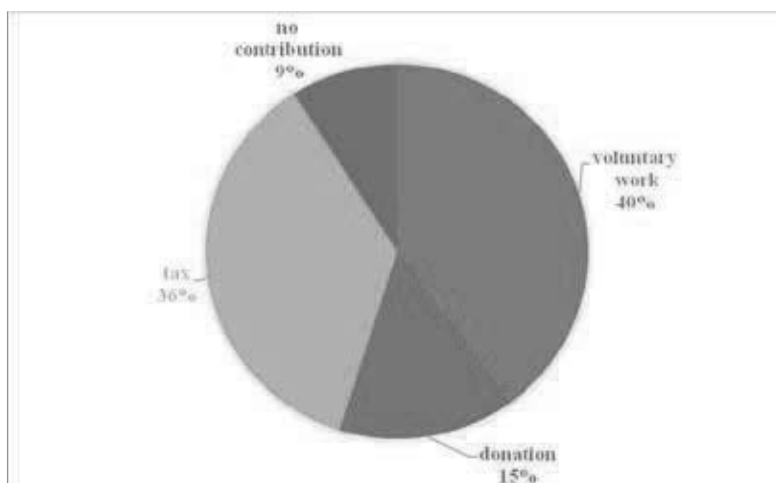


Pie Chart 3: Notions to solve environmental problems

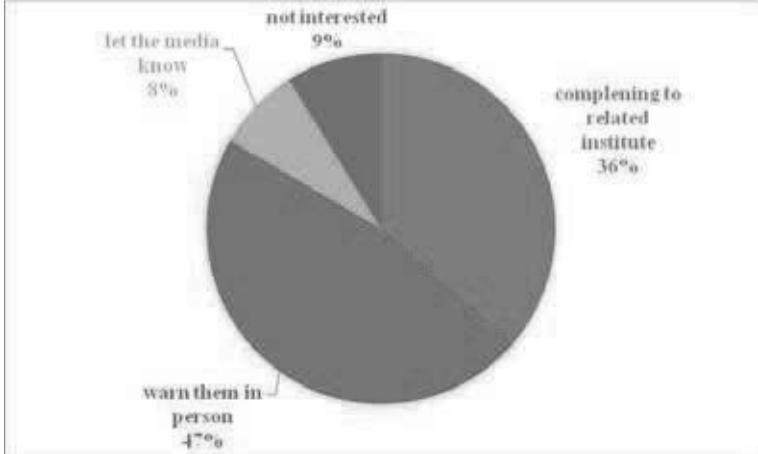
People suggest the solutions of environmental problems choose education in the first place by 22 per cent followed by recycling with 21 per cent while legal regulations by 20 per cent. High technology is not very less important than first three by 19 per cent as well as economic sanctions by 18 per cent (Pie Chart 3).

**Pie Chart 4:** What does paper and glass collecting boxes mean to you?

It is asked what paper and glass collecting boxes mean to the survey takers. Recycling is the most popular answer (%44) while the following is preserving the environment (%36). However, there are 18 per cent who still think that it means to get rid of wastes. Moreover, it even worse to see that there are 2 per cent who think it does mean nothing (Pie Chart 4).

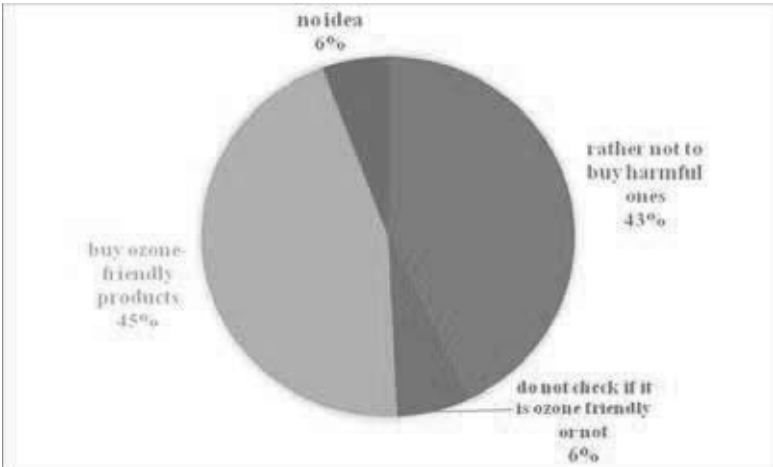
**Pie Chart 5:** Individual contribution into the conservation of environment

Also, one of the questions in the survey is about people's individual contributions to the conservation of the environment. Answers are: Doing some volunteer work is the most popular answer by 40 percent, the second is paying tax by 36 percent- very close to the first one, third is donations to the environmental organisations by 15 per cent and 9 per cent express they have no single contribution at all (Pie Chart 5).



Pie Chart 6: The reaction to the people or companies contaminating the environment

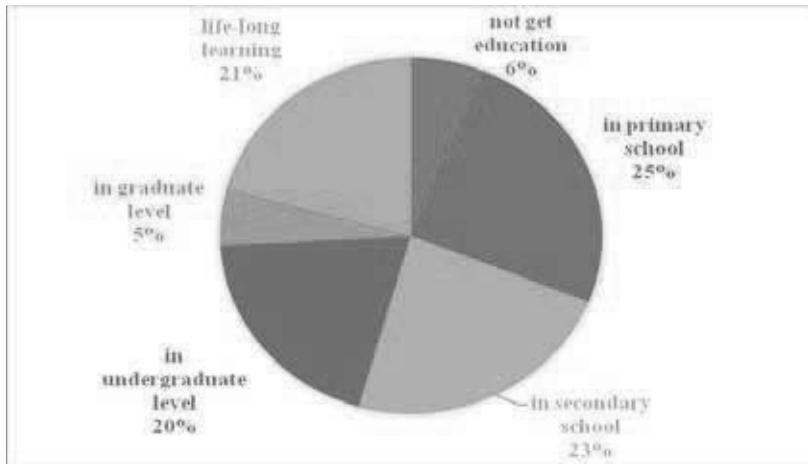
The reactions brought to polluters are: warn them in person is 47 per cent, complaining to the responsible institution is 35 percent, people does not care 9 per cent while people take issue to the press is 8 per cent (Pie Chart 6).



Pie Chart 7: The attitude against the products which are not ozone-friendly

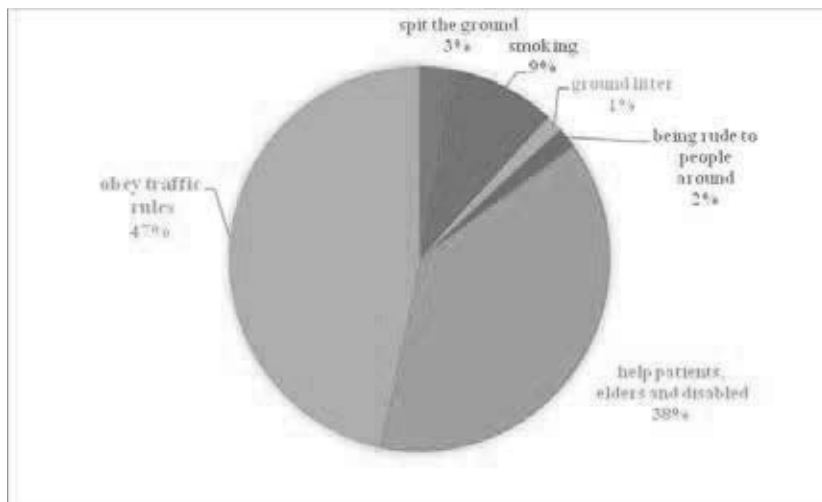
The majority took the survey states they choose to buy ozone-friendly products by 45 per cent while others note that they are choose not to buy ozone depleting products by 43 per cent. Also there is a group who do not pay attention if it is ozone-friendly or not

at all by 6 per cent whilst there are people who have no idea about ozone layer with 6 percent (Pie Chart 7).



Pie Chart 8: The level of education about protection of environment and nature

People state they had been educated to protect environment and nature in different level of educations. As it shows on the graph, rates are: in primary school 35 per cent, in secondary education is 23 per cent, during life-long education is %21, and at undergraduate level is 20 percent and graduate level is 5 percent. For all that, there is still 6 percent state they never get educated about environment (Pie Chart 8).



Pie Chart 9: Performing the specified actions

People surveyed were asked whether they practice a range of behaviours or not and the answers are like that: to follow the traffic rules (47%), to help patients, elders and disabled (38%), smoking (9%), to spit the place (3%), being rude to people around you (2%) and ground litter (1%)(Pie Chart 9).

Table 1: Recognition of the voluntary environmental organizations

	<i>TEMA</i>		<i>Greenpeace</i>		<i>Environment Foundation of Turkey</i>		<i>World Wildlife Fund</i>	
	Valid	Percent	Valid	Percent	Valid	Percent	Valid	Percent
Definitely I know	239	52,4	155	34,0	166	36,4	159	34,9
I know	141	30,9	95	20,8	137	30,0	123	27,0
Not sure	17	3,7	49	10,7	47	10,3	43	9,4
I do not know	21	4,6	70	15,4	33	7,2	34	7,5
Definitely I do not know	3	0,7	21	4,6	6	1,3	9	2,0
No answer	35	7,7	66	14,5	67	14,7	88	19,3
Total	456	100	456	100	456	100	456	100

The Table 1 shows the most known environmental organisation is TEMA by 239 people. Furthermore, all organisations has been placed in the survey are also known by people surveyed while almost no one choose the option stating not know any of them at all.

4. CONCLUSION

According to the findings, importance of environment is not perceived in sufficient level even by the university students. From the recognition rate of the most known non-governmental environment-related organisations to the inadequate knowledge about environmental issues such as 6 per cent students do not have opinion about ozone layer which is very well-known issue around the world as well as in Turkey.

From the graph three, with respect to the students' opinions, all components, namely education, recycling, legal regulations, high technology and economic sanctions are almost equally important to solution of environmental problems (range 22 percent to 18 percent). It may necessary to regard this finding as necessity to improve awareness of students by giving them some training first of all. And secondly, because recycling is not very common in Turkey, both governmental and non-governmental organisations should make people aware of its importance. Thirdly, legal regulations should be promoted, and when someone does not obey the rules, they should be paid the cost they have caused in the frame of law. While importing high technology, both public and governmental sectors should choose environment-friendly product instead. And as last but not the least importantly, economic sanctions should be dissuasive. When someone violates the environment, they should now they also have to pay a fine.

Environment is too important to leave decisions about to human being conscience. Human being has already been the most destructive existence the world ever seen, but

why do not we could reverse it. With patient and accurate measurements, I personally believe that we can save the earth and recover it from all bad things we have done hitherto.

BIBLIOGRAPHY

Karacan, A. R. (2007). Çevre Ekonomisi ve Politikası. İzmir: E.Ü. Yayınları

Kocataş, A.(2002). Ekoloji ve Çevre Biyolojisi. İzmir: Dora Yayınları

Yücel, M, C., Uslu, F., Altunkasa, N., and P. Say. (2003). Çukurova Üniversitesi Personel ve Öğrencilerinin Çevre Duyarlılıklarının Belirlenmesi. Çukurova Üniversitesi Ziraat Fakültesi Araştırma Projesi, Proje No: BAP – PM 2002-01. Adana.

Yücel, M., Uslu, C., Altunkasa, F., Güçray, S., and P. Say. (2008). Adana'da Halkın Çevre Duyarlılığının Saptanması ve Bu Duyarlılığı Arttıracak Önlemlerin Geliştirilmesi, Adana Kent Sorunları Sempozyumu, TMMOB Yayınları, Ankara.

Weiers, R. (2008). Introduction to Business Statistics. South Western Cenage Learning.