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PERCEPTION OF ENVIRONMENTAL AWARENESS BY ADMINISTRATORS AND TEACHERS IN SECONDARY SCHOOLS IN TOBRUK- LIBYA

MASTER THESIS

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This study by the Environmental Education and Management Department of the jury are considered as Master's Thesis.

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ABSTRACT

PERCEPTION OF ENVIRONMENTAL AWARENESS BY ADMINISTRATORS AND TEACHERS IN SECONDARY SCHOOLS IN TOBRUK- LIBYA

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The aim of this study was to determine the levels of environmental awareness among teachers and administrators in secondary schools and through this study will detect many variables that influence the environmental awareness and to make recommendations on these issues to our educational system in Tobruk - Libya.

The process of this research has been consisted of teachers and the school managers of the secondary schools in Libya, Topruk, meanwhile the sampling has been obtained from 400 people including the teachers and the school managers of 2015-2016 in the secondary education. Throughout the research; “Personal Information Form”, “Environmental Attitude and Behavior Scale”, and “Environmental Knowlege Test” have been used as measurements to gather findings.

The data obtained from the questionanire has been analysed by SPSS 20.0 on a computer setting. In order to find out whether the level of awareness towards the attitude and behavior for nature among secondary school teachers and school managers is related to gender difference unrelated t-test has been used. Anova, Manova, Wilks Lambda, Frekans andBenferroni test has been used in order to find out any differences in their education level, marital status, and working hours.

When the research data has been analysed, no meaningful difference has been found among the teachers and managers in Libya related to their knowledge about nature or their attitudes and thoughts about nature. When the Libyan participants’ avarage data

has been analysed, their knowledge level ($\bar{X}$=68,77) can be obviously seen as higher according to their attitude ($\bar{X}$=65,64) and behaviour ($\bar{X}$=55,58) level. No meaningful difference has been found in relation to their gender differences, their work status, their graduation level with their behaviour, knowledge and attitude level towards the environment.

According to the results obtained, the knowledge and the attitude of Libyan teachers and managers towards environement is highly lacking and there should be an educational training with regard to this issue.

Key Words: Environment, Environmental Problems, Environment Education, Attitude towards Environment, Behavior towards Environment.

ÖZET

LİBYA- TOBRUK'TA ORTAOKULLARDAKİ YÖNETİCİ VE ÖĞRETMENLERİN ÇEVRESEL BİLİNÇ ALGILARININ İNCELENMESİ

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Bu çalışmanın başlıca amacı orta eğitimdeki öğretmenlerin ve yönetim görevlilerinin çevre duyarlılık derecelerini tespit etmek ve bu değişken etkenlerin neler olduğunu denetleyerek Tobruk-Libya'daki eğitim sistemini ele alarak etkili öneriler sağlamaktır.

Araştırmanın evrenini, Libya Tobruk'taki orta öğretim okullarındaki öğretmenler ve okul yöneticileri, örneklemini ise, 2015-2016 yılında ortaokulda hem ders veren öğretmenler, hem de okul yöneticileri, toplamda 400 kişi oluşturmaktadır. Araştırmada veri toplama araçları olarak "Kişisel Bilgi Formu", "Çevresel Tutum ve Davranış Ölçeği", "Çevre Bilgi Testi" kullanılmıştır.

Anketlerden elde edilen veriler bilgisayar ortamında SPSS 20.0 programı kullanılarak çözümlenmiştir. Araştırmadaki orta öğretim okullarındaki öğretmenler ve okul yöneticilerin çevreye yönelik tutum ve davranışları konusunda bilinç düzeylerinin cinsiyetlerine göre farklılık gösterip göstermediğinin tespitinde ilişkisiz t-testi, eğitim düzeylerine, madeni durumlarına, çalışma saatlerine göre farklılık gösterip göstermediğinin tespitinde ise Anova, Manova, Wilks Lambda, Frekans ve Benferroni testi uygulanmıştır.

Araştırma bulguları incelendiği zaman, Libya'da görev alan yöneticilerin ve öğretmenlerin çevre bilinci, çevreye yönelik tutumları ve görüşleri arasında anlamlı bir farklılık bulunamamıştır. Libya'lı katılımcıların ortalama değerleri incelendiğinde bilgi düzeylerinin ($\overline{X}$=68,77), davranış ($\overline{X}$=65,64) ve tutumlarına ($\overline{X}$=55,58) oranla daha

yüksek olduğu görülmektedir. Katılımcıların çevre bilgisi, tutum ve davranış düzeyleri ile cinsiyetleri, kurumlarındaki çalışma türleri, mezun olma düzeyleri arasında da anlamlı fark bulunamamıştır.

Elde edilen sonuçlara göre, Libya'daki okul yöneticilerinin ve öğretmenlerin çevre bilinç düzeylerinin üst düzeyde yeterli olmadığı ve bu konuda eğitim çalışmaları yapılması gerektiği söylenebilir.

Anahtar Kelimeler: Çevre, Çevre Sorunları, Çevre Eğitimi, Çevreye Yönelik Tutum, Çevreye Yönelik Davranış.

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Juma E. SULAIMAN MOHAMED
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CONTENTS

CHAPTER I
INTRODUCTION

CHAPTER II
RELEVANT LITERATURE

CHAPTER III

METHOD

CHAPTER IV

RESULT AND COMMENTS

CHAPTER V
CONCLUTION AND RECOMENDATION

ABBREVIATIONS

UNESCO: United Nations Educational,Scientific and Cultural Organization

UNDP: United Nations Development Programmer

EPA: Environmental Protection Agency

PCB: Polychlorinated Biphenyl

SO2: Sulfur Dioxide

MEF: Ministry of Environment and Frosty

SPSS: Statistical Package for the Social Sciences

NEU: Near East University

EA: Environmental Awareness Test

GDP: Gross Domestic Product

TERMINOLOGY

Environment: Environment is the whole of the physical, chemical and biological factors which have effect on the lives of living beings in a definite habitat. Briefly, all the factors, affecting the lives of living beings, are their environment (Yücel, 2006).

Environmental Education: Environmental education is an interdisciplinary lifelong approach which aims at raising a world population who are aware of the environment and related issues and who has knowledge, skill, attitude, motive, individual and social duty and responsibility which would contribute to the solutions to the environmental problems and would prevent the new ones from happening (Moselley, 2000).

Environmental Knowledge: Knowledge is defined as "Intellectual Outcome" or "something learned" which is obtained by thinking, judging, reasoning, reading, observing and experimenting (Balay, 2004).

Environmental Attitude: Attitude is a way of behavior an individual presents in different ways in any situation he/she confronts (Gezer & Erol, 2006).

Environmental Behavior: Environmental behavior is the concrete indicator of an individual's environmental knowledge, attitude and skill, and his/her active participation in the activities which could contribute to solve environmental problems (Kışalıoğlu et al., 2010).

Environmental Problems: It is a broader concept when compared to the concept of environmental pollution. Thus environmental problems are discussed as deterioration, contamination, living behavior and ways of the life which constitute negative factors (Erten, 2006).

Environmental Pollution: All activities of the environmental changes that affect people in a negative way or incorrect use of our resources in the wrong place, In other words, modern people's ecosystem is defined as a force which cannot be considered ecologically (Erten, 2000).

TABLES

FIGURE

CHAPTER I

INTRODUCTION

Recently became the attention to environmental problems is on the rise, not only among the developed countries, but also in some developing countries. The reason is common that the consequences of environmental damage to some of the vital resources has become very clear and shocking and became the governments concerned show the media of great value to their titles because of major public concern (Karimi, 2003).

Among many global phenomenon, environmental pollution has become a key concern for human beings. Each and everybody of whatever occupation he or she may have, is affected by environmental issues like global warming, depletion of ozone layer, dwindling forest, energy resources, loss of global biodiversity, air, soil, water pollutions, water shortage, garbage problems etc. to keep our environment safe and livable it is important to raise environmental awareness. By the term environmental awareness we mean knowledge about environment and also attitude, values and necessary skills to solve environment related problems. Environmental awareness also refers to the ability of a person to carry on citizenship. to encourage meaningful public participation and environment, it is necessary to create awareness about environment pollution and related adverse effects. Any Government at its own level can't achieve the goal of environment conservation, until the public has a participatory role in it. Therefore, there is a great need to protect and preserve our environment by increasing the level of awareness among the public as well as the students, who are the future of a nation. The role of students would go a long way in achieving such desired goals. In order to faster their awareness towards environment, it is necessary to know what levels of awareness they possess in these areas. For raising public awareness and enhancing the protective attitudes towards the environmental issue, environmental education is one of the most effective strategy or role. If the peoples' perception, knowledge, awareness and attitude toward environmental issues are high, it means that the people's environmental literacy rate is also high. Increasing environmental literacy will lead to a change in behavior or action. Determining, what people know about the environment, how they feel about

it, and what actions they take that may help or harm the environment is required to establishing the sustainability of a community and to protect the environment. Environmental education rate will be high when people's conception, knowledge, consciousness and behavior toward environmental issues will be high (Thapa, 2001).

Environmental consciousness and environmental sincerity should be grown among young people. For the awareness of society it is essential to work at a gross root level. So the whole society can work to save the environment. If we want to generate the environmental values in our student, we have to know the responsibility towards environment and also we have to show our behavior as a like eco-friendly. Environmental awareness should be the integral part of any environmental curriculum encouraging student to take an active role in the protection to their environment in one way by which the critical balance between man and environment may be preserved. Through it young generations are full of curiosity to learn about their environment (Talay et al., 2004).

1.1. Problem Sentences

Do the Perception of Environmental have sufficient awareness, behaviour and attitude by administrators and teachers in secondary schools in Libya?

1.1.1. Sub- Problem

Based on the problem phrase, the sub-problems of the study are as follows:

- Is there any significant relationship between administrators and teachers in secondary schools in Libya about environmental aeareness, attitudes and behavior levels in their Gender?

- Is there any significant relationship between administrators and teachers in secondary schools in Libya about environmental awareness, attitudes and behavior levels in their Position?

- Is there any significant relationship between administrators and teachers in secondary schools in Libya about environmental awareness, attitudes and behavior levels in their Education?

- Is there any significant relationship between administrators and teachers in secondary schools in Libya about environmental awareness, attitudes and behavior levels in their length of work?

- Libya'lı katılımcıların tutum, davranış ve farkındalık düzeyleri nasıldır?

1.2. Aim of The Study

The aim of this study was to determine the levels of environmental awareness among teachers and administrators in secondary schools and through this study will detect many variables that influence the environmental awareness and to make recommendations on these issues to our educational system in Tobruk - Libya.

1.2. The Importance of Studying

Environmental education aims to develop the ability to find solutions to the problems in the environment as an environmentally conscious citizen in the individual. There are many factors that affect the achievement of environmental education goals such some of these factors are environmental knowledge, beliefs about the environmental issue, personal values, individual attitudes, knowledge and skill about environmental awareness, environmental actions, quality of environmental education program, qualifications of trainers (Çimen, 2002).

There are great responsibilities for educators in educating all the layers of society about environmental and environmental problems and training the individuals who will actively participate in solving problems at this point, the importance of educating teachers with qualifications that can provide this education is emerging (Altın 2001).

This research is important from the point of view of contributing to the increasing awareness of teachers and administrators about their surroundings and their surroundings and being an example of such studies.

This research is important to determine the attitudes and behaviors and awareness of teachers and administrators, to make a big impact on students, to determine how much environmental consciousness is considered by teachers and

administrators, and because there are few studies in this area, It is also important this research will be a source for future researchers.

Environmental problems in Tobruk - Libya are growing day by day. But the work done on this subject is very few. This study is important in terms of shedding light on a subject that is rarely studied in Tobruk - Libya.

This work is a product of an effort to reveal the importance of the environment and to try to understand and explain how serious the environmental problems are. It is also important to contribute to the development of individual and community environmental awareness.

1.4. Assumptions

This research has been moving from the following assumptions:

- Environment is the inevitable subject of schools, environmental consciousness is a phenomenon that requires long-term training.
- Answer survey questions that managers and teachers, sincere, showing the necessary sensitivity, it is assumed that they provide objective and careful answers.
- Working group in order to obtain data on the survey (sample) represents the universe.
- Data collection tool used in the study is carry the conditions in the collection of appropriate data for research purposes.

1.5. Limitations

This study was conducted in the border listed below:

- This research is limited to officials and teachers in secondary schools in Tobruk, Libya.
- This research is limited to 300 officials and teachers in secondary schools in Tobruk, Libya.

- Limited resources used in this research with those of the researcher can access them.

1.6. Definitions

Environment: Environment is the whole of the physical, chemical and biological factors which have effect on the lives of living beings in a definite habitat. Briefly, all the factors, affecting the lives of living beings, are their environment (Yücel, 2006).

Environmental Problems: The environmental problems are all the factors which cause hitches in the way of living and behaviors (Erten, 2004).

Environmental Knowledge: Environmental knowledge includes all the cognitive understandings of the environment and its associated problems (Harun, 2011).

Environmental Education: education about the environment should involve all parts of the community for awareness, and behavioral change about the environment. The main aim of the education about environment is to help individuals, who receive education, become citizens who have knowledge, ability and values which could provide and encourage to display responsible behavior towards the environment (Devlet Planlama Teşkilatı, 2001).

Environmental Awareness: The term environmental awareness has many areas of usages but it mostly takes place in politics at present. Environmental awareness implies, as most of the scientists emphasize, environmental knowledge, attitude towards the environment and behavior good for the environment. The person with environmental awareness is the one who has not egoist but environment friendly behaviors; who is not neutral and indifferent to destruction of the environment; and who thinks just about his own benefits and becomes ambitious about them (Erten, 2004).

CHAPTER II

RELEVANT LITERATURE

2.1.The Environment

The Environment is divided into two types Biotic environment and Abiotic environment. The biotic environment is all living creatures which share the same physical environment with living beings, and which effect the living beings directly or indirectly. And the a biotic environment is all the concrete environments, such as rocks, water etc., in or on which the living beings live, The reason why the concept of environment has gained importance and became the main topic of mankind is because of, not totally but mostly, the pollution. After the Industrial Revolution, the nature has been damaged and changed more rapidly by using it over its self-regeneration capability by human. The environmental pollution has become visible together with the wave of economic growth which started in 1950s. Because of the effluents resulted by technological development increasing by the desire of economic growth and, in consequence of it, industrialization gaining speed, the environment pollution has increased as well. Just for improving and maintaining their industries, especially developed countries polluted their environment from which they produce their products and supply their raw materials. Furthermore, just to supply raw materials, those countries polluted not only their own countries but also most of the countries of which they use the resources. So, the extent of the pollution becomes greater. Besides all this, with the desire of scientific and technological development and economic growth, the environment pollution influencing all over the world has become a kind of threat to lives of the living beings (Yücel, 2006).

2.2. The Environmental Problems

From the second half of 20th century, one of the most important points-or maybe, the most important one which has made the humans consider about the dazzling development of the industrialization is the environmental pollution. of course, the creation of different scenarios and the evaluation of the sustainable development in this respect are not bare coincidences. It is not right to consider the environmental problems as the result of only rapid industrialization and industrial revolution. Not only uncontrolled development of the industry, but also insufficient

progress cause ecological problems. For instance, the results such as drinking unhealthy water, unconscious destruction of forests, excessive usage of the soil without fallowing could be regarded as the indicators of underdevelopment. In this respect, it shouldn't be ignored that the environmental problems are not just a domestic matter but an international one. Hence, the pollution occurring in seas, oceans, lakes, rivers gets beyond the limits, and disturbs the neighboring countries. In so much that a river used as the source of drinking water by a country could be a conduit into which industrial waste is disposed by another country Naturally, the principle of problems could be a discussion matter in international platform by acquiring bilateral, and even, multi-lateral qualification (Seyidoglu, 2003).

Researches show that there is a strong relationship between the environmental pollution and the population growth. The world population has increased from billion to 2 billion in 130 years. Yet, today, there has been increase of l billion just in 10 years And, naturally, this situation has brought some problems with it. The more the population is, the more the nutritional production is required. The mount of the energy used increases; the rate of domestic waste disposed to the nature also increases and the sources of drinking water are consumed rapidly. Reduction of natural resources transforms the environmental problems into international politic problems. From time to time, rivers such as Nile, Firat and Asia caused a tension increase in Middle East because of excess demand occurring as a result of overpopulation. Just at this point mismanagement of existing resources should be taken in consideration as well as the population growth (Sönmezoğlu, 2000).

In this day and age, the phenomenon of sustainable development is the one which provides causal connection between the economic development and theenvironment. Very few states claim that there is no relationship between these two Some of them make such a claim just for avoiding the cost caused by the environmental pollution and the others make such a claim just because of ideological reasons (Sönmezoğlu et al.,2000). This connection established between the economy and the environment has provided the sustainable development widely approved in international platform. In essence, the basis to be the of the matter is constituted by this consensus because it is important to accept presence of a problem to solve it. In

order to provide the sustainable environment, an ecological planning becomes obligatory. Thus same precautions need to be taken (Karaaslan et al.,1999).

The natural environment should be protected and the defected parts should be revived.

- An economic and ecological ben system should be prepared.
- Domestic production and life style should be supported.
- Development of Ecologically conscious societies should be supported
- There should be established more active communication, transportation and production systems.
- Renewable sources should be developed.
- An active recycling mechanism should be established.
- A participative management mentality should be adopted.

Given these realities, it is seen that the possibility of living in a healthier environment for the next generations decreases day by day. However, the environment, which is the greatest part of sustainable development, can be made sustainable with the help of rational policies. At this point, it is required to take the radical steps mentioned. Because negative externalities show up as the unavoidable result of production and consumption activities. Instead of adopting to this situation, the externalities should be internalized, or in other words, ways to add them to the costs should be searched. In this day and age, solution offers have been discussed and sometimes, there is found application area In this regard, it is seen that market economy is not efficient for the prevention of the environmental pollution which is a negative externality, and the conviction that public power should interfere in the problem has been spreading (Bal 2012).

2.2.1. Environmental Pollution

Pollution whether it is originating from nature or resulting from human intervention in environment or ecosystems poses an immense threat to the environment and endangers human lives. Since human beings inhabited on this earth, they have been facing pollutants emitted from natural components of the environment itself such as natural disasters causing epidemics, famine, and etc.(Alqassas, 2000).With technological progress, the environment has become contaminated with pollutants caused by industrial effluents and noxious wastes. In addition the misuse of natural resources leading to ecological imbalance a threat to the environment (Mekhamer, 1984).

There are many opinions with regards to defining pollution. The Stockholm Conference defined pollution as:

Human activities which inevitability lead to compounded introduction of substances, and sources of energy to the environment in which these substances threaten and endangerhuman health and natural resources and habitats. In this case we are subject to pollution and since pollution is considered one of the oldest and most common dangers that face the environment and human beings, individuals, groups and states are obliged and are responsible for preventing and overcoming this problem. One of the most important instruments required to protect the environment is having a strong legal framework that deals with this issue and aims to improve the right of persons to live in clean environment free from pollution (Alabiedy, 2011).

Some of the environmental pollution are explained below:

Air Pollution: Ninety percent of the energy used in industrialized countries comes from the burning of fossil fuels (Flavin & Dunn, 1999). When fossil fuels such as oil or coal are burned they produce a variety of byproducts, including carbon dioxide, carbon monoxide, nitrogen, sulfur oxides and particulate matter. These air pollutants have been linked to respiratory problems and lung cancer in humans and are the cause of acid rain, ozone depletion and other environmental problems (Flavin& Dunn, 1999).

Although stricter emission laws have improved air quality in the U.S. and in many other countries, air pollution presents a serious health hazard worldwide. The World Health Organization estimates that disease resulting from ambient air pollution is responsible for 800,000 deaths worldwide each year (World Health Organization, 2002).

Water Pollution and Depletion: Pesticides, fertilizers, industrial chemicals and wastes, fossil fuel emissions, and residential runoff have polluted much of our fresh water supply. Thirty-three percent of the lake acreage and 15 percent of the total river miles within the U.S. are so contaminated with mercury, PCBs and other chemicals. The U.S.A Environmental Protection Agency (EPA) has issued fish advisories warning that some or all species are unsafe to eat (U.S. Environmental Protection Agency, 2003).

Since many waters have not yet been tested, the EPA recommends that pregnant women and young children limit their intake of fish caught from any U.S. freshwaters to six and two ounces per week respectively. Mercury contamination is a significant problem in the oceans as well. The EPA recommends that pregnant women and children avoid eating large ocean species such as shark and swordfish, and limit overall consumption to 12 ounces or less per week (U.S. Environmental Protection Agency, 2003).

Soil Pollution: The physical and chemical features of the soil could change in an undesirable way directly or indirectly. This is called “soil pollution”. Soil pollution emerges as dampness, being rocky, fertilization and industrial degenerations caused by erosion, desertification and drainage deformities. It emerges also when the pollution elements in air and water pollute the soil. Some industrial activities could cause soil pollution directly or indirectly (by polluting the air and the water). Polluted air or water causes reduction in quality and fertility of the soil by degenerating its physic-chemical and biological features. Moreover, some toxic substances created by various industrial activities accumulate in agricultural products and, later, transfer to other creatures by way of food chain. Various pollution factors in the atmosphere also cause soil pollution by precipitation (rain, snow etc.), being absorbed or predicating directly. SO_2 converts into sulfurous acid by dissolving in

precipitation water or soil solution, and causes soil to be acidic. The wash out of plant nutrition elements become easier by the acidification of the soil. Furthermore, acid rains cause great destruction in cultivated areas and forest lands (Keleşve Ertan, 2002).

Noise Pollution: All the undesirable sounds disturbing living beings are defined as “noise pollution”. Noise pollution is a kind of important pollution which affects humans' hearing and perceiving the environment negatively, and impairs individual and social life quality and it can be analyzed under two titles: indoor and outdoor noise pollution. Noise pollution causes people physical (hearing disorders), physiological (changes in body functions such as reparatory and cardiac acceleration, increase in blood pressure etc.), psychological (behavior disorders such as short temper, embarrassment etc.) problems, performance problems (concentration impairment, reduce in productivity etc.) and even, serious brain damages (Yücel, 2006).

2.2. Environmental Education

Environmental education is an interdisciplinary lifelong approach which aims to raise a world population who are aware of the environment and related issues and who has knowledge, skill, attitude, motive, individual and social duty responsibility which would contribute to the solutions for the environmental problems and would prevent the new ones to occur (Moseley, 2000).

The environment has a very multidimensional, extensive and complex nature. Thus, environmental education is also multidimensional, extensive and complex. Because of this reason, the notion of “Environmental Education” changes from person to person, from organization to organization. At this point, there are various definitions of environmental education. “Environmental education can be define a as developing environmental awareness in every segment of the society brings the individual's behavioral changes sensible to the environment, permanent and positive protecting natural, historical, cultural and socio-aesthetic values, and providing participation actively in solving the problems” (MEF, 2004).

There are two important movements having effect on the creation and development of environmental education. These movements are environment and education movements. In parallel with these movements, natural studies, non-formal education and education of protection, which have contributed to the development of the environmental education, have been also emerged. These educational movements have contributed greatly to the progress of the environmental education (Marcinkowski, 2006).

The importance given to environmental education has increased in the irate 20th century. The studies conducted, at first, in a local extend and in universal extend later. Thanks to the "Conference About The Environment of The Humans" held firstly by UN in Stockholm in 1972, because environmental education has gained a universal dimension. The 5th June, the beginning date of this conference, is celebrated as "World Environment Day" all over the world. While the target group in environmental education is all the individuals, the purpose is to develop sensible and positive attitudes and behaviors about protecting the environment (Tombul, 2006).

2.3. Environmental Knowledge

Knowledge is a precondition for environmental awareness to ignite in individuals. It is the students' ability to understand and evaluate the impact of a society on the ecosystem, Rational actions toward the environment are the translation of knowledge that individuals have. High level of knowledge on the environment will create positive attitude towards the environment referred to as a belief and feelings that individual have for the environment. Knowledge increase awareness which combination would motivate environmentally responsible actions. Student's attitude towards the environment is conceptualized as their verbal and actual commitment, motivation and effect concerning nature and environmental issues. Attitude is also a complex mental construct (perception) which emerges out of an integration of an individual's belief and values system. The dimension in environmental attitude can be divided into three major parts which are environmental worldview; environmental concern and environmental commitment (Rosta Harun, 2011).

2.3.1. Environmental Attitude

It provides the students to obtain standard of judgments, participation and motivation to protect and develop the environment.

Knowledge: Having knowledge about environmental issues helps to obtain basic concepts about the environment, to comprehend the interaction between the environment and the humans and how to solve environmental issues and problems.

Skills: It helps to obtain required skills for solving, searching and defining environmental issues and problems.

Participation: It provides the use the knowledge and skills, obtained about environmental issues and problems, in solving the problems (Environmental Protection Agency, 2003).

2.3.2. Environmental Behavior

Is the result of many factors and can be complex to understand, no single model or theory constitutes an all encompassing 'understand a scope.' An effective model can however help improve our insights into behavior and how to change it. Using flow diagrams, pictures or word descriptions, a model can help create a simpler mental image of the relationships between factors that influence behavior, even though the underlying causes may not be fully understood. Some models used to promote. Environmental behavior concentrate on individual behavior change and are similar to those used to get people to change an ingrained individual habit like smoking. Others have an interpersonal or community wide focus and try to take account of social influences or broader, structural influences such as how much of a resource is left, say water during a drought or the availability or cost of products such as solar panels (Ajzen,1985).

Environmental behavior is the concrete indicator of an individual's environmental knowledge, attitude and skill, and his/her active participation in the activities which could contribute to solve environmental problems (Kışalıoğlu et al., 2010).

As determined in the Tiflis Conference, raising individuals, who present responsible behaviors towards the environment, up is one of the main aims of environmental

education. The responsible environmental behaviors can be classified in 5 groups as follows (Hsu, 1997; McBeth & Volk, 1997 akt.; Erdoğan, 2009):

- ***Eco-Management:*** The behaviors the humans present directly towards solving

and preventing the environmental problems.

- ***Consumer/Economic Action:*** The behaviors the humans present towards

Solving and preventing the environmental problems by using financial support or financial pressure.

- ***Individual and Public Persuasion:*** The persuasion behaviors the humans present towards solving and preventing the environmental problems.

- ***Political Action:*** The political performance the humans present towards solving and preventing the environmental problems.

- ***Legal Action:*** The behaviors the humans present towards their support to existing laws or they offer new laws for solving and preventing environmental problems.

2.3.3. Environmental Awareness

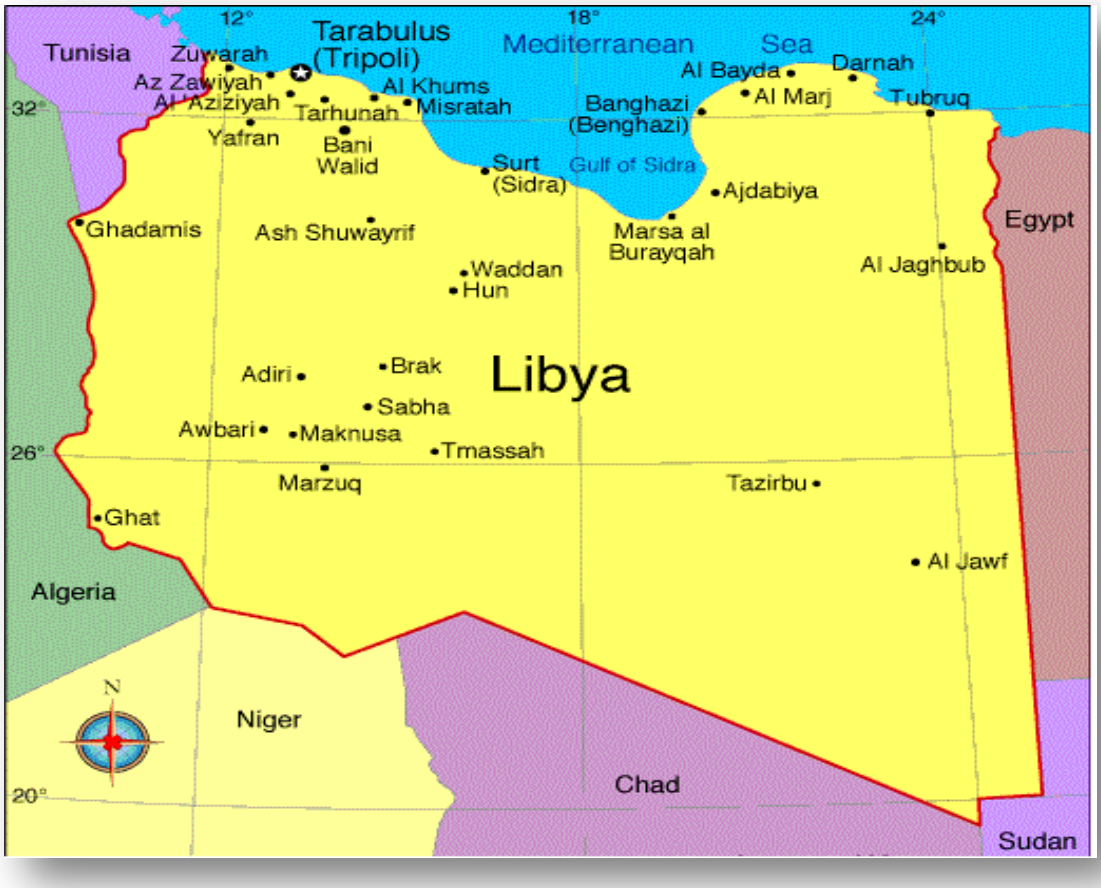
It is to help the individuals and groups obtain awareness and sensibility towards the environment and environmental problems. Environmental awareness has intellectual, emotional and behavioral dimensions. In other words, environmental awareness comprises of the thoughts including all the decisions, principles and interpretations about the environment, the behaviors which are the way to transfer all these thoughts and the emotions related to all these (Türküm, 2006).

2.4. General Information of Libya

Libya is located in North Africa, bordered by the Mediterranean Sea to the north, Egypt to the east, Sudan to the southeast, Chad and Niger to the south, and Algeria and Tunisia to the west. With an area of almost 1.8 million square kilometers. Libya is the 4th largest country in Africa and 17th largest country in the world. Libya is one of the most developed countries in Africa, with the second

highest Human Development Index score in Africa after the Seychelles, and the sixth highest GDP per capita. According to Annual Statistical Bulletin 2013, Libya has the 8th largest proven oil reserves in the world and the 15th highest crude oil production (UNDP, 2013).

Figure 1: General Information of Libya



Source:http://www.infoplease.com/atlas/country/libya.html

Location: Northern Africa, bordering the Mediterranean Sea, between Egypt and Tunisia, Land Area: 1,759,540 sq km, Capital: Tripoli, Languages: Arabic, Italian, English, all are widely understood in the major cities, around 6.4 million people live in Libya, 1.7 million of them are in the capital city of Tripoli, Note: includes 166,510 non-nationals (July 2004 est.), GDP: $35 billion (2003 est.), Major Industries: petroleum, food processing, textiles, handicrafts, cement, Major Trading Partners: Italy, Germany, Spain, Turkey, South Korea, UK, Tunisia, Japan, France

(2002),Literacy: 82.6%, Male: 92.4%, Female: 72% (2003 est.), Religions: Sunni Muslim 97%, Academic Year: September to June (UNDP,2013).

2.5. Environment in Libya

Libya is a North African country located along the southern coast of the Mediterranean Basin. Its total land area is about 1.76 million km2, most of which (95.2%) is desert, while the rest is either rangeland (4%), or agricultural land (0.4%), and less than 0.3% is a scattered forested area. The annual average rainfall is estimated at 300-400mm depending on climatic and topographic features. Libya's environmental challenges include limited water resources, droughts and land degradation, depletion of natural resources, fragmented mechanisms for environmental management and monitoring, inadequate solid and hazardous waste management, and oil spills (UNDP,2013).

Primary education is compulsory in Libya, and is provided by the sovereign state. Children between the ages of 6 and 15 attend primary school and then attend secondary school for three additional years (15 to 18years old).The de facto official language of Libya is Modern Standard Arabic. About 95% of the Libyan population use different Arabic dialects as native language, most prominently Libyan Arabic, but also Egyptian Arabic, Tunisian Arabic and other varieties. English is the most widely spoken foreign language especially by the younger generation and business community. Moreover, there are thousands of young Libyan professionals who were educated in universities in the United Kingdom and Ireland. Italian is still known to some degree by some of the elderly people, mainly in the form of Libyan Italian (Abdul-Aziz, 2008).

2.6. Education in Libya

Libya's population of approximately 5.5 million includes 1.7 million students, over 270,000 of whom study at the tertiary level. In academic year 1975/76 the number of university students was estimated to be 13,418. Today, this number has increased to more than 200,000, with an extra 70,000 enrolled in the higher technical and vocational sector. The rapid increase in the number of students in the higher education sector has been mirrored by an increase in the number of institutions of higher education. Since 1975 the number of universities has grown from two to nine

and after their introduction in 1980, the number of higher technical and vocational institutes currently stands at 84 (UNESCO, 2002).

Libya became independent in 1951 after 40 years of occupation by European powers. The country had been an Italian colony until the defeat of the Axis forces in North Africa in 1942. From 1942 until 1951 it was under temporary British military rule. Under the monarchy (1951-1969), all Libyans were guaranteed the right to education. Schools at all levels were established, and old Koranic schools were reactivated and new ones opened, lending a heavy religious cast to Libyan education. School enrollments rose rapidly, particularly at the primary level; vocational education was introduced; and in 1955 the first Libyan university was established in Benghazi. Total school enrollment rose from 34,000 on the eve of independence in 1951 to about 360,000 at the time of the 1969 revolution. During the 1970s, teacher training was pushed in an effort to replace Egyptian and other non-Libyan teachers who made up a majority of teaching personnel (UNESCO, 2002).

2.6.1. Basic Education

The first nine years of education are compulsory and are known as basic education. Basic education consists of the six years of primary school and the first three years of secondary school. Successful completion of nine years of basic education results in the award of theBasic Education Certificate. Compulsory education has an open path through the successive educational stages, with assessment at the end of fourth grade, sixth grade and ninth grade. Students progress to the subsequent grade if they score 50 percent or higher in each subject. The Libyan national report for the UNESCO Education For All program states that the rate of enrollment for grade one is approximately 98 percent (Libyan National Commission for Education, Culture and Science, 2001).

2.6.2. Primary Education

Duration of program: Six years. This stage of education is split into a four-year period and a two-year period. Grades I through III receive 20 hours of weekly instruction, and grades IV through VI receive 23 hours of weekly instruction (Libyan National Commission for Education, Culture and Science, 2001).

Curriculum: Arabic language, Koranic studies and Islamic morals, Jamahiriyi society, mathematics, sciences, history, geography, art, music, physical education (Secretariat of Education, 2000).

The curriculums in grades one through six have recently been upgraded to emphasize the study of mathematics and science and introduce technological education to the curriculum (Secretariat of Education, 2000).

2.6.3. Secondary Education

Secondary education covers six to seven years divided into a three-year cycle that concludes the compulsory, or basic, period of education and a three- to four-year "intermediate" cycle. Since the early 1980s, the application of the "New Educational Structure" for training and education at the basic level allows students who drop out before completing the full nine years of basic education the opportunity to enroll in vocational programs of one to three years in length. These programs train students in a practical skill or vocation in readiness for the job market and result in the award of the Lower Certificate. In academic year 1998/99 there were 398 basic vocational training centers training more than 130,000 male and female students (Libyan National Commission for Education, Culture and Science. 2001).

Lower Secondary School (Preparatory Education) Duration of Program: Three years (Grades VII through IX). Students receive 27 hours of weekly instruction (Secretariat of Education, 2000).

Curriculum: Arabic language, Koranic studies and Islamic morals, Jamahiriya society, English, mathematics, history, geography, biology, chemistry, physics, principles of technology, art, music, physical education (Secretariat of Education, 2000).

Leaving Certificate: Grade nine marks the completion of the basic and compulsory stage of education at the end of which students take examinations for the Basic Education Certificate (Secretariat of Education, 2000).

Upper Secondary School (Intermediate Education):Intermediate education extends from three to four years and is provided at general (science and arts) and

specialized secondary schools (economics, biology, arts and media, social sciences and engineering), and vocational training centers and institutes. Studies last four years in technical education, three years in general secondary schools and two to three years in vocational secondary schools (Secretariat of Education, 2000).

In light of the afore mentioned, "New Educational Structure" plans for restructuring intermediate education include the gradual phasing out of general secondary schools in favor of technical secondary schools that would specialize in six main fields: basic sciences, engineering and industrial sciences, medical sciences, agricultural sciences, social sciences, and fine arts and media. The idea behind the plan is to prepare students for a level of specialization at university, and to provide those students not destined for higher education with a practical vocational base in preparation for the labor market (Secretariat of Education, 2000).

It is worth noting that from the time of their introduction in the 1990s, enrollment at specialized technical schools has been weaker than hoped for by educational planners. Reasoning for this has been centered on traditional social and cultural values, commonly held in many Arab countries, placing a premium on theoretical and academic education. It is reported that these enrollment trends are gradually reversing (Secretariat of Education, 2000).

Duration of Program: Three to four years (Grades X through XII/XIII). Students receive 28-30 hours of weekly instruction (Secretariat of Education, 2000).

Curriculum: The first year of the intermediate cycle at general and specialized schools is common for all students and covers Islamic education, Arabic, English, politics, physics, chemistry, biology, mathematics, art, physical education and military education. Students at general secondary schools may then specialize in the literary or scientific branches. The literary branch covers history, geography, philosophy, sociology; the scientific branch covers physics, chemistry, biology and mathematics; the common subjects to both branches are religious education, Arabic, English, physical education and military education. At specialized technical schools students specialize in a particular field in the last two years (Secretariat of Education, 2000).

Leaving Certificate: On completion of the intermediate cycle students take final exams. Students who successfully pass the exams are awarded the Secondary Education Certificate (Secretariat of Education, 2000).

2.6.4. Vocational Secondary Education

Intermediate vocational training centers train students for various skills-based professions. Students who graduate from the two to three-year programs are awarded the Intermediate Training Diploma, which gives access to vocational training centers and institutes but not university studies. Vocational schools offer programs for 44 different vocations in seven major fields: electrical; mechanical; carpentry, building and architectural; inclusive female vocations; service industry; agricultural; marine fishing (Libyan National Commission for Education, Culture and Science, 2001).

Official statistics suggest that 50-60 percent of Libyan students graduating from the nine-year basic education cycle enroll in programs offered at intermediate vocation training centers (Secretariat of Education, 2000).

2.7. Environmental Education in Libya

Environmental education curricula are considered more educational elements influence on the construction of the individual behavior towards dealing with the environment, so many countries have taken an interest in the curriculum by focusing on the good selection of appropriate environmental concepts to students ages and mental levels, and the variety of environmental activities, make full use of school resources in environmental education and others as the environmental education care focused on the early stages of public education, especially at the elementary level, where the malleability of the child's behavior at this stage, the construction of the positive trends towards increasing his understanding and dealing with the environment that the introduction of environmental concepts in the curriculum does not happen impulsive or random, as accident my many traditional approaches, where they studying some of environmental concepts through the teaching of science subjects such as science, religion, sociology, etc., but they needed to build a scientific and environmental curriculum in the framework of an integrated strategy that does not depend only on what should be taught to students, also the desired

concentration on how to teach environmental education so, as enhance the optimal behavior in the hearts of emerging (Rabea, 2009).

2.8. International Studies on Environmental Education, Environmental Knowledge, Attitude and Behavior for Environmental Protection

Kalibourno et al. (2001), He conducted a research called ‘’Analyzing The Dominant Social Paradigm in The Environmental Attitudes of University Students in Regard To The Cultures’’. The research was conducled on 386 students from the universities of USA, UK and Denmark. The results of the research and the suggestions are: There is a meaningful relation between economical, political, technological dimensions of the dominant social paradigm and the students' environmental attitudes. The higher the dominant social paradigm points are, the lower the perception related to the environmental issues is. Environmental attitude points change from country to country. This is because every country has a different socio-cultural structure.

Şimşekli (2001), in his study named ‘’The Evaluation of The Activities Conducted in The Schools in Bursa Chosen for The Project Named “Applied Environmental Education in Terms of Contribution of The School Director and The Attendant Teachers”. He analyzed the activities conducted in Bursa, during 2000-2001 school year. By analyzing the reports prepared by the directors of 14 schools chosen for the project and the official reports prepared during the supervision, the effect of the activities on creating environmental awareness in children was researched. It was observed that it is one of the factors which makes the environmental education difficult that the teachers do not have efficient awareness of the environment.

Bradley, Waliczek & Zajicek (2001), in their studies on environmental attitudes and knowledge of high school students, they conducted a survey and test questions to the students before and after giving them a 10-day long environmental education course. After the course, there was detected important differences in both the level of the students' knowledge and their attitudes. There was detected increase in the rate of %22 in students' knowledge level about the matter.

Legault and Pelletier (2002), they analyzed the change in attitudes, motivations and behaviors of Canadian students towards ecology after performing an 8-month long environmental education program. They also analyzed the possible effects on developing the changes in attitudes, motivations and behaviors of their families towards ecological situations. At the end of the research, no any meaningful difference in ecological attitudes of the students was found, and the effects of the research on the students and their families were found quite weak.

Ko ve Lee (2003), studied on the perception of science teachers in elementary schools teaching environmental problems taking place in the curriculum of the science lesson. They utilized both survey and interview techniques to analyze the teachers' perception on the subject. The results of the study revealed that the teachers' attitude towards environmental education, their skills about teaching environmental education, their faith in that the science is suitable for teaching environmental education were related to their methods they use while teaching environmental education. The more the teachers have positive attitudes towards environmental education, and the more they believe that science is suitable for teaching environmental education, the more they are tend to teach environmental education.

Semerjian et al. (2004), emphasized the necessity and the benefits of interdisciplinary approach in environmental engineering and environmental science with their research. In the research carried out in Beirut American University, they prepared environmental science program inter-faculties, and analyzed the attitudes of the students in this new curriculum. As a result, it was stated that the environmental engineers and the scientists need help, in social and political subjects, about determining the environmental policy related to their own majors.

Öznacar (2005), in his study, researched the effect of teaching the subjects such as biological variety, environmental pollution and erosion to the 5th graders by using the method based on constructive learning theory on the academic success and permanence. While applying the constructive learning theory, it was tested whether there were meaningful differences between the academic success and permanence points of the experimental group who was applied the methods such as meaningful learning, project-based learning, cooperation-based learning and the control group

who was applied traditional method. The research was conducted on the 5th graders studying in a public school with sub-socio economic level, named Şehit İlbey Gülbey Primary School, in one of the counties of Adana during 2004-2005 school year. The students who participated in all the lessons within the research were accepted as the test subjects, and just the points of these students were analyzed.In this way, 34 students from the experimental group and 29 students from the traditional teaching group-in total 63 students were used as the test subjects. The experiment took 4 weeks during 25 lessons. As the evaluation instrument, the research developped a test named "Profiency Test about Biological Variety, Environmental Pollution and Erosion" of which aspects of reliability and availability were completed, and applied to both groups as pre-test, post-test and permanence test. The results of the research showed that there is a meningful difference, for the good of constructive learning theory ($p<0.0001$), between constructive learning theory and traditional teaching in terms of academic success and permanence.

Shobeiri (2007), The study was conducted on secondary school teachers to study their environmental awareness with respect to their residential background, subject specialization and teaching experience in India and Iran. One thousand and four teachers were selected through the stratified random sampling technique from 103 secondary schools of Mysore city (India) and Tehran city (Iran). Subjects consisted of 505 male and 499 female. They were assessed using the Environmental Awareness Test (EAT) (Shabina Jinaraja, 1999). Results revealed that there are significant differences between them in environmental awareness across and within two groups with regard to their subject specialization (science and arts). Also in overall lengths of teaching experience is not a factor, which can affect teacher's environmental awareness.

Aslanova & Gündüz (2012), in a similar study, tried to define the level of knowledge of students of Baku state University, Biology Fakulty on environmental education. The results showed that knowledge levels of Baku State University' students on environmental problems (58,25%) is higher than Azerbaijani students (52,88%) studying at Near East University. While verifying attitude levels on environmental awarness, a of Azerbaijani students studying at NEU were 3,34%

(69,2%), but attitudes of Baku State University students were 3.34% (66,8). Although there are significant difference among two groups from statistical point of view, this differernce is not higher than environmental knowlede. Siginificeant difference among two groups was observed in 38 questions from 63 questions on environmental knowledge from statistical point of view.

Zarrintajet al. (2013), Topic relationship between Awareness, Knowledge and Attitudes towards Environmental Education among Secondary School Students in Malaysia The importance of environmental education is well known globally among societies. Environmental education is gradually promoted as a sustainable tool in protection of the environment. Environmental education is found across school curriculums in Malaysia. The objectives of the curriculum are environmental attitude, knowledge and awareness investigated in the current study. The study was conducted to identify the relationship between environmental awareness, knowledge and attitude among secondary school students. The survey was conducted on 470 respondents who were in Form Four (16 years old) in Kajang city, Selangor, Malaysia. An instrument which included (48 questions) was employed to investigate the relationship between awareness, knowledge and attitude. The results of Person Correlation showed a significant but weak relationship between awareness and knowledge on environmental issues while there was high relationship observed between awareness and attitudes among respondents. Moreover, the statistical test showed a negligible relationship between knowledge and attitude among students about environment. The study concluded that a high level of awareness and knowledge plus positive attitude of students have been achieved from the families of respondents, teachers, media, private reading and school curriculums regarding the environment that increases the environmental view among students as well as in overall society. The study recommended that environmental education subject might necessarily be considered as an independent syllabus in Malaysian education system**.**

Al-Farra (2013), this study aimed to determine the degree of the school administration in turn to the development of awareness environmental education to secondary school students in the Gaza Strip, and disclosure of the impact of each of (type, qualification, years of service, the school district) in the estimates of the study

sample of science teachers in secondary schoolsin the Gaza Strip to the school administration degree turn in educating students environmental education, also aimed to identify ways of activating the role of school management in secondary schools in the Gaza Strip in educating students environmental education. The researcher used the descriptive analytical method, and study population consisted of all science teachers in secondary school directorates (Rafah, Khan Younis, east of Khan Yunis, Central, east of Gaza, west of Gaza, north Gaza) For the academic year 2012 AD / 2013 m and totaling (507) teachers, The study sample consisted of (507) teachers from schools Directorate (Rafah, Khan Yunis, east of Khan Younis, Central, east of Gaza, west of the Strip, North Strip.) for the academic year 2012 AD-2013 AD by all members of the community's original study. The researcher designed a tool (questionnaire), which included (50) items distributed on three domains: (cognitive domain, the affective domain, the domain behavioral). In addition to an open-ended question to prompt respondents to identify ways of activating the role of school management in secondary schools in the Gaza Governorates in educating students environmental education. The Study concluded the following results: 1 - that the degree of school administration for its role in the development of awareness of high school students environmental education in schools in the Governorates of Gaza from the point of view of science teachers were highly valued% 68.47.

- There is no statistically significant differences at the level ($\alpha \leq 0.05$) between the mean estimates of study sample to the point contribution of school administration in the development of awareness of high school students environmental education due to the variable type (Male, Female), and in all areas of the questionnaire.
- That there were statistically significant differences between the mean estimates sample study on the role of school management in the development of environmental education in the field of cognitive attributable to qualification for the campaign bachelor, but for the rest of the areas it has been shown that there are no statistically significant differences between the mean estimate study samplein these areas due to the qualifications.
- There is no statistically significant differences at the level ($\alpha \leq 0.05$) between the mean estimates of study sample to the point contribution of school

administration in the development of awareness of high school students environmental education due to the variable each of the years of service, and the school district and in all areas of the questionnaire.

Gunduz et al. (2015), Living organisms live in an environment in interaction with each other. As people are in a constant conflict with their environment, it leads to various problems in the environment. In order to solve these problems, it is essential to educate individuals. This can only be possible through effective environmental education. This study is to put forward the environmental education and sensitivity of the administrators and teachers that play a key role in education. Research's scale consisted of two parts, the first part of the scale is the personal information and in the second section there are 60 expressions about cognition, environmentally conscious, affective and psychomotor sub-dimensions. The data obtained from the scale coded and analyzed using SPSS package program. Opinions on whether there is a significant difference between the $\alpha = 0.05$ significance level was tested.

Almarous (2016), this research studies whether the environmental attitudes and behaviors ofLibyan and Turkish students studying in the universities of Turkish Republic of Northern Cyprus are efficient or not. The study aims to get information about the relationship between these attitudes and behaviors of the students and the classes and departments they study in, and to make a general evaluation about efficiency and effectiveness of the environmental education in our country. The participants are 300 Libyan and Turkish students studying in 2015-2016 academic years. This study, in which quantitative research method and relational screening model were used, was done by getting answers from the students to questions of the survey, which was used as a tool for collecting information, by giving the students enough time. While gathering the data, environmental knowledge test, survey of attitude and behavior were used. The data obtained from the results of the survey were evaluated by using SPSS 20 program. Frequencies and percentages were utilized while analyzing the efficiency of Libyan and Turkish students' environmental education.

Awida (2016), The aim of this research is to determine the environmental attitudes and behaviors of the university students with different cultures. This is a research prepared by asking students' opinions related to attitudes and behaviors towards the environment and the sustainable development. In other words, this research was prepared in accordance with survey model.The population of the research is comprised of 300 university students with different cultures studying at Near East University in 2015-2016 academic years. In this research, the sustainable development survey and the environmental attitude and behavior survey were used as the data collecting tools. The scales, applied to the students, were comprised of 60 questions. In the survey with 58 questions, the first 10 questions were to get personal information 24 questions were to determine their knowledge about the sustainable development 17 questions were to determine their environmental attitudes and 7 questions were to determine their environmental behaviors.The data obtained from the surveys was analyzed by using SPSS 20.0 program. While determining whether the participant students' knowledge about the sustainable development and the environmental attitude and behavior differs according to their genders, unrelated "t"-test was used; and while determining whether it differs according to the educational background of their parents, Anova,Scheffe, Manova, Wilks' Lambda Test was used. At the end of the research, it was seen that the attitudes and behaviors of the university students with different cultures towards the environment and the sustainable development are still not sufficient.

Alemari (2016), The aim of this study is to determine the level of environmental literacy of university students and to determine the effect of different variables on environmental literacy. The research was carried out with 400 university students studying in the North Cyprus during 2015-2016 academic year. "*Relational Screening Model*" is used in this study conducted on the environmental literacy knowledge levels of university students. In this study, "*Environmental Knowledge Test", "Attitudes Towards the Environment"* and *"Behavior Towards the Environment"* scales are used as a data collection tool. The literature (theses, articles, papers, books, etc.) on the subject to improve the data collection tool developed by researchers, creating the basic structure of the research, is examined in order to reach the designated research purposes and the main frame is formed with the conceptual structure of the data collection tool.Survey data

obtained were analyzed using SPSS 20.0 computer program. Unbound “T” test was used to determine the levels of students’ environmental literacy (awareness, attitude, behavior) participating in the research according to gender and ANOVA, Duncan's test was used to determine the varies according to their class and economic situation, parent education status and monthly family income. According to the study results, the environmental literacy level of university students was found as moderate. It is determined that university students have partially high level of environmental attitudes; while their environmental knowledge and environmental behavior levels are moderate.

CHAPTER III
METHOD

This section of the study explains the model, population and sample, data gathering tool, applying the data gathering tool and data analysis of the study which has been conducted to determine “Perception of Environmental Awareness By Administrators And Teachers In Secondary Schools In Libya ”.

3.1. Research Model

In the study conducted to determine the awareness, behavior and attitude of Perception of Environmental Awareness By Administrators And Teachers In Secondary Schools In Libya , “scan model” was used. Scan researches are conducted with the aim to gather the date about significant aspects of a group (Büyüköztürk et al., 2009). According to Karasar (1999), scan models are the research approaches aiming to describe a situation, in the past or still happening, as the way it is.

Manova Analysis: In case that two independent variables influence multi dependent variables, Two-Way MANOVA is used. It is used to research the common effect of multi independent variables on multi dependent variables (Wilks Lambda) (Büyüköztürk, 2002).

Anova analysis: It is used to analyze how ANOVA independent variables interact among themselves and the effects of such interaction on dependent variable. In case that the variable to be analyzed has more than 2 groups, the method to be used is Anova. In order to investigate whether there is any difference of any group based on Anova analysis; if data shows a normal distribution the subtests like Turkey, LSD or Sheffe are used. In this study Scheffe test was prefered (Büyüköztürk, 2002).

Frequency test: It presents the data as numbers and percentages in order to describe the characteristics of the distribution of the scores or values belonging to one or more variable(s).

3.2. Participantsand Sample

The population of this study comprised 400 Administrators And Teachers at secondary school Perception of Environmental Awareness on the academic year 2016. The samples were from the city of Tobruk - Libya, where was the questionnaire distributed on all of 8 secondary schools.

Table 1. The Status of The Participants

Participants	No. of The Administrators And Teachers
Male	161
Female	239
Total	**400**

3.3. Data Gathering Tools

In this research, the "Personal Information", “Environmental Attitudes – Behavior Scale Test" and “Environmental Awareness and Information Test” was used as the data collection tool.

3.4. Scoring Scale Classification of the Substance

The levels of knowledge of the secondary school Administrators And Teachers participating in this research about environmental education were revealed and interpreted in regards to the survey questions.

3.5. Analyses That Was Performed

The data obtained from the questionanire has been analysed by SPSS 20.0 on a computer setting. In order to find out whether the level of awareness towards the attitude and behavior for nature among secondary school teachers and school managers is related to gender difference unrelated t-test has been used. Anova, Manova, Frekans andBenferroni test has been used in order to find out any differences in their education level, marital status, and working hours.

3.6. Research Validity and Reliability

In this part, the researcher has focused on the validity and the reliability of the research method. The reliability of a scale is related to the coincidential errors of scales that are perpared by the researcher. The findings gathered with an unreliable

scale has no benefit for the research. Yet, when the same test will be applied on the same people in different times, it is not possible to comment on the results in this circumstance (Altunışık, Coşkun, Bayraktaroğlu ve Yıldırım, 2007).

Table 2. Reliability of Awareness Scale

Cronbach's Alpha	N of Items
,798	20

Awareness cronbach; when analysed with alpha modulus can be seen over ,70 limit that is an accepted value in social sciences.

Table 3. Reliability of Behavioural Scale

Cronbach's Alpha	N of Items
,782	20

Behavior cronbach; when analysed with alpha modulus can be seen over limit ,70 that is an accepted value in social sciences.

Table 4. Reliability of Attitude Scale

Cronbach's Alpha	N of Items
,754	20

Attitude cronbach; when analysed with alpha modulus can be seen over limit ,70 that is an accepted value in social sciences.

CHAPTER IV
FINDINGS AND COMMENTS

The statistical resolutions of data obtained in the research are explained in this section. The findings obtained are given in tables and explained. Some comments are made by taking into consideration whether the attitudes and behaviors of the participants towards environment differ majorly or not according to their demographic, education, socio-economic, etc. features.

4.1. Analyses of Demographic Information

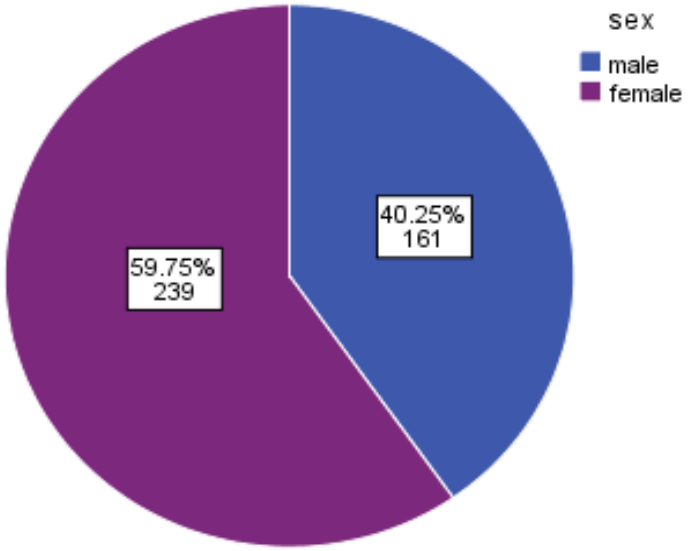
The findings and comments with regard to the questions about demographic features are given as follows:

Tablo 5. Distribution of Sampling According to Gender

Gender	Frequency	Percent
Male	161	40,3
Female	239	59,8
Total	**400**	**100,0**

As seen in Table 5, the exemplary of the research consists of 400 people. %59,8 of the participants are female students, while %40,3 of them are male students. We can see that the distribution of the exemplary according to sex, the number of females is greater than males.

Figure 2. Distribution of the Examplary According to Sex



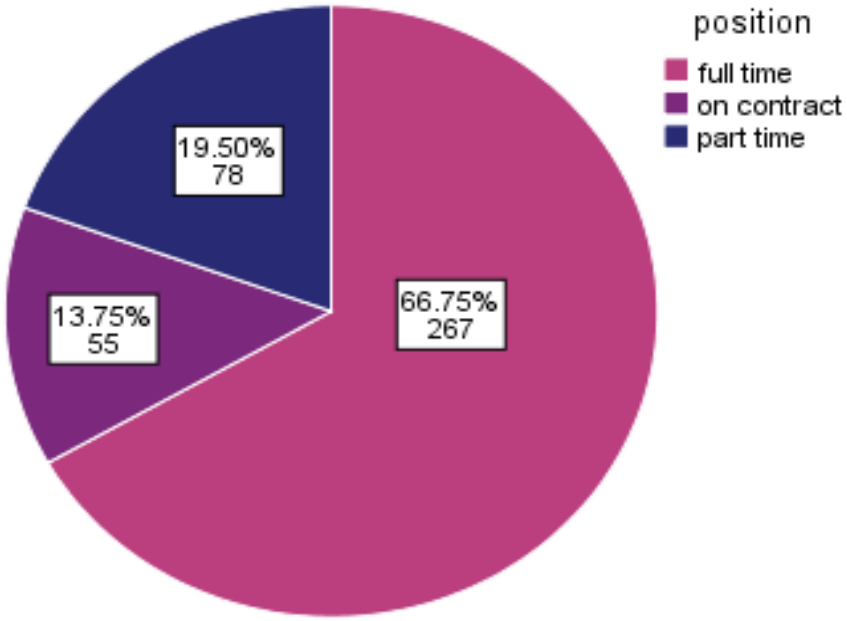
As it is seen in Figure 2, most of the participants are female.

Tablo 6. Distribution of Sampling According to Position

Position	Frequency	Percent
Full time	267	66,8
On contract	55	13,8
Part time	78	19,5
Total	**400**	**100,0**

Considering Table 6, we can see that among the participants forming the exemplary of the study, %66,8 work as full-time, %13,8 on contract and %19,5 part-time. We can see in the distribution of exemplary that there are more full-time workers when considering working conditions of the participants.

Figure 3. Distribution of Exemplary According to Working Conditions



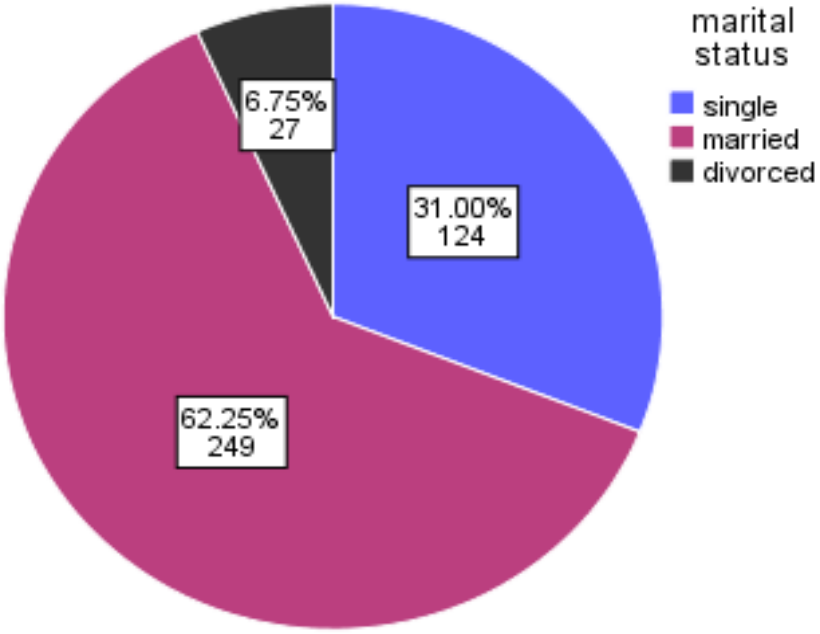
As it can be seen from Figure 3, we can see that there are more full-time workers when considering working conditions of the participants of the study.

Table 7. Distribution of Sampling According to Marital Status

Marital Status	Frequency	Percent
Single	124	31,0
Married	249	62,3
Divorced	27	6,8
Total	**400**	**100,0**

Considering Table 7, we can see that among the participants forming the exemplary, 31% are single, 62.3% are married, 6.8% are divorced. We can see in the distribution of exemplary that the participants are mostly married.

Figure 4. Distribution of Exemplary According to Marital Status



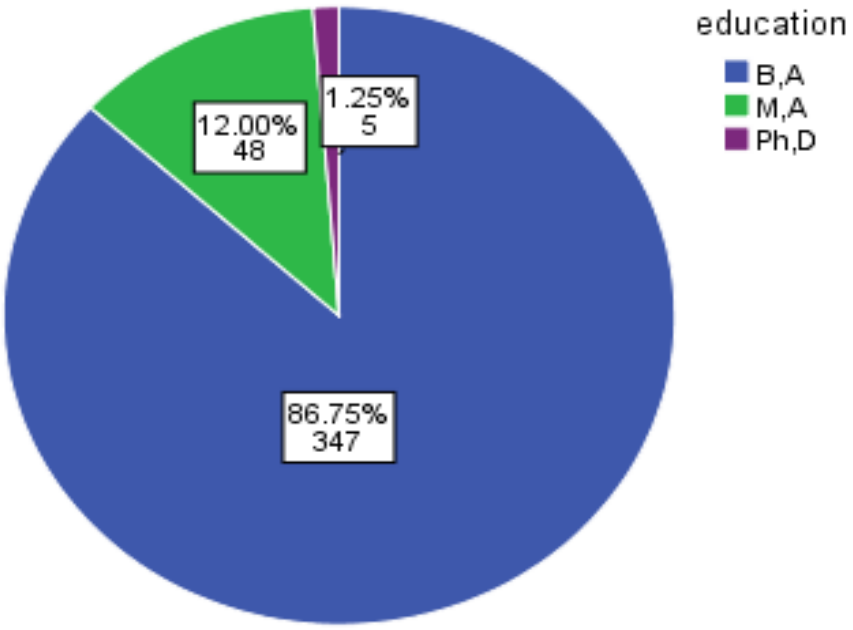
As it can be seen in Figure 4, it is clear that marital status of participants of the research is mostly married.

Tablo 8. Distribution of Sampling According Education

Education	Frequency	Percent
BA	349	87,3
MA	44	11,0
PhD	7	1,8
Total	**400**	**100,0**

Considering Table 8, it is obvious that among the participants forming the exemplary are taking education as follows; %87,3 BA, %11, MA and %1,8 PhD . We can see in the distribution of exemplary that the majority of participants has bachelor's degree.

Figure 5. Distribution of Exemplary According to Educational Background



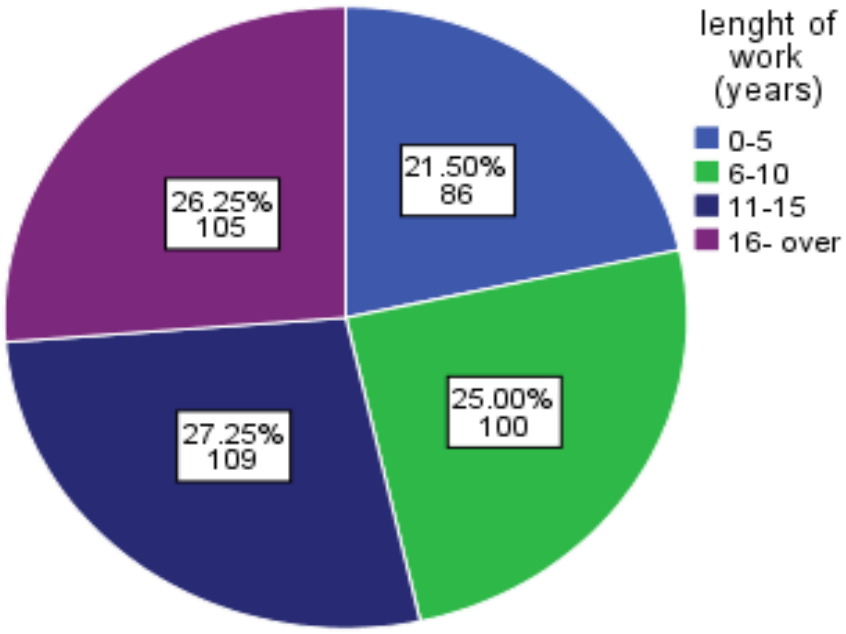
As it can be seen in Figure 5, we can see that the majority of participants of the research has bachelor's degree.

Tablo 9. Distribution of Sampling According to Lenght of Work

Lenght of Work	Frequency	Percent
0-5	86	21,5
6-10	100	25,0
11-15	109	27,3
16- Over	105	26,3
Total	**400**	**100,0**

Considering Table 9, it is seen that the work load of the participants are in the following rates; %21,50-5, %25 6-10, %27,3 11-15, and %26,3 16 and above. We can see in the distribution of exemplary that the work load of participants is between 6-10

Figure 6. Distribution of Exemplary According to Weekly Work Load



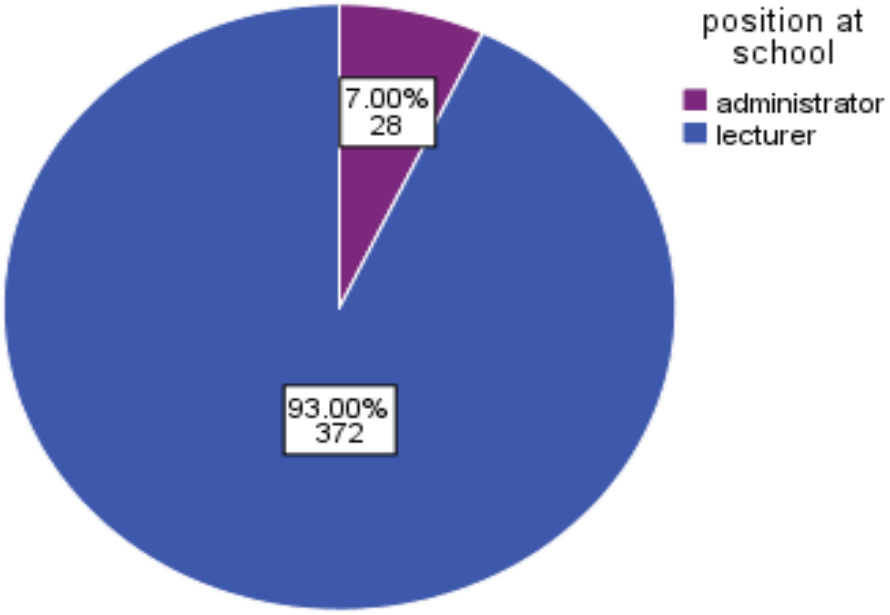
As it is shown in Figure 6, we can see that weekly work load of participants of the research is between 11-15.

Tablo 10. Distribution of Sampling According to Position At School

Position At School	Frequency	Percent
Administrator	28	7,0
Lecturer	372	93,0
Total	**400**	**100,0**

Considering Table 10, it is seen that the participants forming the exemplary have the following professions with their rates; %7 administrator and %93 lecturer. We can see in the distribution of exemplary that the majority of participants are lecturers.

Figure 7. Distribution of the Exemplary According to Tasks at School



As it can be seen in Figure 7, we can see that the majority of participants of the research are lecturers.

4.2. Findings Based on Sub-Problems

4.2.1. Findings Based on the First Sub-problem

Does the perception of environmental have sufficient awareness, behaviour and attitude by administrators and teachers in secondary schools in Libya? Based on the phrase of this problem, the sub-problems of the study are as follows:

Table 11. Environmental Awareness, Behaviour And Attitude by Administrators And Teachers

Environmental Awareness	**N**	$\overline{X}$	**SS**	**t**	**df**	**p**	**Explanation**
Administrator	27	67,44	8,64				p>.05
				,283	,396	,409	Difference is meaningless
Lecturer	371	68,88	8,50				
Environmental Behaviour	**N**	$\overline{X}$	**SS**	**t**	**df**	**p**	**Explanation**
Administrator	27	64,66	9,38				p>.05
				,245	,397	,580	Difference is meaningless
Lecturer	371	65,70	8,95				
Environmental Attitude	**N**	$\overline{X}$	**SS**	**t**	**df**	**p**	**Explanation**
Administrator	27	55,07	5,87				p>.05
				,326	,397	,644	Difference is meaningless
Lecturer	371	55,62	7,20				

As it can be seen in Table 11, there has been found no significant differences between environmental awareness, attitudes and opinions of the administrators and lecturers working in Libya towards environment. When the environments shown in Table 11 are investigated, it can be seen that knowledge level of the participants are higher than their behaviour and attitude levels.

4.2.2. Findings Related to the Second Sub-Problem

Is there any significant relationship between administrators and teachers in secondary schools in Libya about environmental awareness, attitudes and behavior levels in their Gender?

Tablo 12. Administrators and Teachers in Secondary Schools in Libya Environmental Awareness, Attitudes And Behavior Levels in Their Gender

Source	Variable	Sum of Squares	sd	Mean Square	F	p	Explanation
Gender	**Awareness**	67,024	1	67,024	,925	,337	p<.05
	Behaviour	452,012	1	452,012	5,934	**,015**	**p>.05**
	Attitude	,670	1	,670	,013	,909	p<.05
Position at school	**Awareness**	50,723	1	50,723	,700	,403	p>.05
	Behaviour	4,931	1	4,931	,065	,799	p>.05
	Attitude	12,082	1	12,082	,237	,626	p>.05
YxC	**Awareness**	23,199	1	23,199	,320	,572	p>.05
	Behaviour	2,374	1	2,374	,031	,860	p>.05
	Attitude	9,044	1	9,044	,178	,674	p>.05
Error	**Awareness**	28618,891	395	72,453			
	Behaviour	30086,324	395	76,168			
	Attitude	20114,294	395	50,922			
Total Correct	**Awareness**	28767,148	398				
	Behaviour	31583,910	398				
	Attitude	20175,569	398				

[wilkis lambda ∧= ,999 , F=1,130 , p=,943 (p>,05)]

As it can be seen in Table 12, the common effect between environmental awareness, attitudes and behavioral levels and genders of Libyan administrators and lecturers has not been found to be significant [wilkis lambda ∧= ,999 ,F=1,130 , p=,943 p>,05]. However, it was found that behaviours according to gender variable have a significant difference when investigated alone (p=,015 , p<,05). As a result of Benferroni test which was conducted to find out among which groups this difference took place, it was concluded that males ($\bar{X}$=63,06) had lower behaviours than females ($\bar{X}$=67,22).

4.2.3. Findings Based on the Third Sub-problem

Is there any significant relationship between administrators and teachers in secondary schools in Libya about environmental awareness, attitudes and behavior levels in their Position?

Tablo 13.Administrators And Teachers in Secondary Schools in Libya About Environmental Awareness, Attitudes And Behavior Levels in Their Position

Source	Variable	Sum of Squares	sd	Mean Square	F	p	Explanation
Position	**Awareness**	195,618	2	97,809	1,348	,261	p<.05
	Behaviour	485,932	2	242,966	3,116	**,045**	**p>.05**
	Attitude	102,525	2	51,263	1,018	,362	p<.05
Position at school	**Awareness**	73,266	1	73,266	1,010	,315	p>.05
	Behaviour	242,190	1	242,190	3,106	,079	p>.05
	Attitude	2,817	1	2,817	,056	,813	p>.05
YxC	**Awareness**	189,973	2	94,987	1,310	,271	p>.05
	Behaviour	267,733	2	133,867	1,717	,181	p>.05
	Attitude	54,467	2	27,233	,541	,583	p>.05
Error	**Awareness**	28505,009	393	72,532			
	Behaviour	30644,729	393	77,976			
	Attitude	19793,029	393	50,364			
Total Correct	**Awareness**	28767,148	398				
	Behaviour	31583,910	398				
	Attitude	20175,569	398				

[wilkis lambda ^= ,968 , F=2,140 , p=,057 (p>,05)]

As it can be seen in Table 13, the common effect between environmental awareness, attitudes and behavioral levels and work types of Libyan administrators and lecturers in their institutions has not been found to be significant [wilkis lambda ^= ,968 , F=2,140 , p=,057 , p>,05]. However when working types are investigated alone, it can be seen that there is significant difference (p=,047 , p>,05) between behaviours of participants. Based on these results, it was concluded that full-time workers ($\bar{X}$=66,10) have higher positive behaviours than on contract ($\bar{X}$=64,31) and part-time workers ($\bar{X}$=54,91).

4.2.4. Findings Based on the Fourth Sub-problem

Is there any significant relationship between administrators and teachers in secondary schools in Libya about environmental awareness, attitudes and behavior levels in their Education?

Tablo 14. Administrators And Teachers in Secondary Schools in Libya About Environmental Awareness, Attitudes And Behavior Levelsin Their Education?

Source	Variable	Sum of Squares	sd	Mean Square	F	p	Explanation
Education	**Awareness**	17,155	2	8,577	,118	,889	p<.05
	Behaviour	168,927	2	84,464	1,063	,346	p<.05
	Attitude	161,929	2	80,965	1,593	,205	p<.05
Position at school	**Awareness**	,023	1	,023	,000	,986	p>.05
	Behaviour	1,311	1	1,311	,016	,898	p>.05
	Attitude	,085	1	,085	,002	,967	p>.05
YxC	**Awareness**	118,754	2	59,377	,819	,442	p>.05
	Behaviour	47,375	2	23,688	,298	,742	p>.05
	Attitude	5,173	2	2,586	,051	,950	p>.05
Error	**Awareness**	28505,660	393	72,533			
	Behaviour	31232,674	393	79,472			
	Attitude	19971,871	393	50,819			
Total Correct	**Awareness**	28767,148	398				
	Behaviour	31583,910	398				
	Attitude	20175,569	398				

[wilkis lambda ∧= ,994 , F=,401 , p=,879 (p>,05)]

As it can be seen in Table 14, the common effect between environmental awareness, attitudes and behavioral levels and graduation levels of Libyan administrators and lecturers has not been found to be significant [wilkis lambda ∧= ,994 , F=,401 , p=,879 , p>,05]. Based on these results, when the overall points are investigated according to graduation levels of administrators and lecturers, it cannot be seen a significant difference in their attitudes, behaviours and opinions.

4.2.5. Findings Based on the Fifth Sub-problem

Is there any significant relationship between administrators and teachers in secondary schools in Libya about environmental awareness, attitudes and behavior levels in their length of work?

Tablo 15. Administrators And Teachers in Secondary Schools in Libya About Environmental Awareness, Attitudes And Behavior Levels İn Their Length of Work?

Source	Variable	Sum of Squares	sd	Mean Square	F	p	Explanation
Length of	**Awareness**	442,459	3	147,486	2,071	,104	p<.05
Work	**Behaviour**	606,779	3	202,260	2,568	,054	p>.05
	Attitude	35,882	3	11,961	,235	,872	p<.05
Position at	**Awareness**	26,252	1	26,252	,369	,544	p>.05
school	**Behaviour**	7,279	1	7,279	,092	,761	p>.05
	Attitude	2,700	1	2,700	,053	,818	p>.05
YxC	**Awareness**	648,923	2	324,462	4,556	**,011**	**p>.05**
	Behaviour	254,039	2	127,019	1,613	,201	p>.05
	Attitude	104,798	2	52,399	1,028	,359	p>.05
Error	**Awareness**	27915,167	392	71,212			
	Behaviour	30872,671	392	78,757			
	Attitude	19985,846	392	50,984			
Total Correct	**Awareness**	28767,148	398				
	Behaviour	31583,910	398				
	Attitude	20175,569	398				

[wilkis lambda ^= ,953 , F=3,160 , p=,005 (p>,05)]

As it can be seen in Table 15, the common effect between environmental awareness, attitudes and behavioral levels and graduation levels of Libyan administrators and lecturers has been found to be significant [wilkis lambda ^= ,953 , F=3,160 , p=,005 , p>,05]. It can be observed that this common effect comes to the fore in the awareness of administrators and lecturers. When this result is investigated in details, it can be seen that working periods of administrators between 6-10 years ($\bar{X}$=72,87) and teachers between 11-15 years have higher awareness than those having 16 years and above of work experience.

4.2.6. Findings Based on the Sixth Sub-problem

How are the attitude, behaviour and awareness levels of Libyan participants?

Table 16. Attitude, Behaviour and Awareness Levels of Libyan Participants

	N	Min	Max	Mean	S
Awareness	400	20,00	90,00	68,77	8,501
Behaviour	400	22,00	90,00	65,64	8,969
Attitude	400	20,00	81,00	55,58	7,114

As it can be seen in Table 16, when average values of Libyan participants are investigated, it can be seen that they are higher than their awareness ($\bar{X}$=68,77), behaviour ($\bar{X}$=65,64) and attitudes ($\bar{X}$=55,58).

CHAPTER V
CONCLUTION AND RECOMENDATION

In this part, results of the findings in this particular study have been focused on and discussed briefly.

5.1. Conclusıon

There has been no meaningful difference between the awareness, attitude and behavior to environment by Libyan managers and teachers. According to table 11, the awareness of participants shows a higher level when compared with their attitudes and behaviors of environemnt. This results shows similarity with the study results of Baş (2011) and Bükük (2012).

Environmental awareness, behavior and attitude of managers and teachers in Libya shows no meaningful common effect with their gender differences [wilkis lambda ∧= ,999 ,F=1,130 , p=,943 p>,05]. However, when gender difference is analysed seperately the attitudes shows a difference (p=,015 , p<,05).In order to find out which gender shows the difference, Benforrini test has been applied on both genders and according to results males ($\bar{X}$=63,06) shows a lower level in attitude when compared with females($\bar{X}$=67,22). In relation to the studies it has come up with a result that females show more positive attitude and behavior towards environment when compared with males and this supports the results of the research (Alp et al.,2006; Hacıeminolu et al., 2006; Uzun 2005; Ekici 2005; Özmen et al., 2005; Yılmaz et al., 2004; Şama 2003; Paraskevopoulos et al., 2003; Tikka et al., 2000).

According to the research results conducted by Gündüz, S., Kocadal, E., & Bükük, A. (2016) in TRNC with managers and teachers no difference has been found between the sensory and cognitive points just as this particular study, and in psychomotor measure it could be seen that males had higher results than females. No common meaningful effect has been found among Libyan managers' and teachers' awareness, attitude or behavior with their work load in the establishment. [wilkis lambda ∧= ,968 , F=2,140 , p=,057 , p>,05].

However, once the work loads are studied seperately, a meaningful difference (p=,047 , p>,05) in the participants' behaviors has been seen. According to this

result, full time workers ($\bar{X}$=66,10) have higher postive attitudes than the ones on contract ($\bar{X}$=64,31) and part time ($\bar{X}$=54,91). According to the study research of Gündüz, S., Kocadal, E., & Bükük, A. (2016) similar results have been mentioned with the managers and teachers and no effect has been found with the change of occupational seniority in the environmental awareness points. In a different study, Burhan (2016) has made a research on the environmental awareness of preschool teachers and found out that teachers with 6-10 years of experience shows a higher environmental knowledge level than the ones who have experience between 1-5 years. On the contrary, according to the statistical results of the study no meaningful difference has been found in the environmental awareness of teachers with the experience of 10-15, 16-20 ve 21-25 years. In addition to this data, it is not a surprise to find a difference in environmental awareness compared to the factor of 10 years occupational experience.

No common effect have been found in relation to the awareness, attitude and behavior level of environment in Libyan teachers and managers when compared with their gradutaion level [wilkis lambda ^= ,994 , F=,401 , p=,879 , p>,05]. According to this result when the points are calculated in total it can be said that no meaningdul difference has been found between the attitude, behavior and awareness levels and their graduation levels. In literature, according to the study of Yilmaz and others (2004) states that the attidude towards environment of the participants with higher academic success has been more postive. Research shows a relation between educational level and cognitive awareness towards environment.

There has been a meaningful difference between the graduation level of Lbyan managers and teachers and their environmental awareness, behavior and attitude. [wilkis lambda ^= ,953 , F=3,160 , p=,005 , p>,05]. This common effect has been found in the awareness of the managers and teachers. When this result has been anaysed more in depth, managers with 6-10 years ($\bar{X}$=72,87) work length and teachers with 11-15 years ($\bar{X}$=69,26) working experience show a higher awareness level when compared with the ones 0-5 years and 16 and over years of experience.

According to the study results of Baş (2011) meaningless results between sensorial and cognitive awareness of environment level and educational level has

been stated, and the points of psychomotor has shown a meaningful difference in the knowldge of masters level participants with a higher awareness compared with undergraduate level under three sub measurements. Akbaş (2007) and Keser (2008) on science teacher applicants and Ocal (2013) on social sciences teachers applicants have made a reseach and found out similar results stating that 4th grade students have more awareness towards environment than the ones in the 1st grade.

When Libyan participants' overall values are evaluated, their awareness level ($\bar{X}$=68,77) are higher than their attitude ($\bar{X}$=65,64) and behavior ($\bar{X}$=55,58). According to the obtained results, managers and teachers in Libya have high level of lacking environmental awareness and it is necessary to provide educational training in this particular matter. According to the findings, in order to positive attitudes change into postive actions time is needed, education on environment should begin in early ages and the continual education should be provided.

5.2. Recomendatıon

The results show certain highlighted suggestions in relation to the solutions of environmetal problems:

- Since schools are the second homes for development and growth after families, they show a vital importance just like families. That is why, teachers play a very important role in the attitude, behavior and knowldge development of youth when growing. At this point, managers and teachers have very important duties.

- It can be said that since there is lack in environmental awareness level of teachers and managers, educational training is necessary. Again with the results of this study, time is needed to change positive attitudes into actions therefore trainings towards environment awareness must begin in early ages and must be kept continual.

- Individuals must be encouraged to become members in various environment foundings or organizations and be actively involved in the conferences or meetings of these organizations.

- Education is present in every stage of life. Therefore, studies in order to start environmental knowledge trainings must be provided for all the individuals living in this society.

- Taking the roles of individuals in the society into account, in depth education about environment must be provided.

- In service courses or education seminars for parents about environmental awareness must be provided.

- In order to develop positive attitudes as well as knowledge about environment and create more sensitive individuals, enviornment education at schools must be made more attractive and effective and time spared for these particular topics must be increased.

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Appendix -1.

PERSONEL INFORMATION

1. Gender: ( ) Male ( ) Female

2. Position: ( ) Full-time ( ) On contract ( ) Part-time

3. Marital Status: ( ) Single ( ) Married ( ) Divorced

4. Education: ( ) B.A ( ) M.A ( ) PhD

5. Length of work (years): ( ) 0-5 ( ) 6-10 ( )11-15 ( ) 16-over

6. Position at school: ( ) Administrator ( ) Lecturer

7. Place of stay: ( ) Village ( ) Town ( ) City

8. Have you ever participated in an activity related to the environment?

   ( ) Yes ( ) No

9. Are you a member of any organisations dealing with the environment?

   ( ) Yes ( ) No

10. Do you believe that these organisations contribute to the protection of the environment?

    ( ) Yes ( ) No

Appendix - 2.

ENVIRONMENTAL CONSCIOUS AWARENESS TEST

No	Environmental Awareness Checklist Mark The Appropriate Box For Your Answer.	Strong y Disagree	Disagree	Partly Agree	Agree	Strongly Agree
E1	Animal and plant extinction is totally harmful to mankind .					
E2	Polluted rivers and seas do not harm life much.					
E3	It worries me to see waste paperin trash instead of recycle cans.					
E4	The air I breathe is quite unhealthy.					
E5	Living things will disappear in the future if deterioration of nature continues.					
E6	We may not have drinkable water in the future.					
E7	Many people may die or become sick in the future because of air pollution.					
E8	I'd like to know how to keep the sea, lakes and rivers clean.					
E9	It's the politicians to blame for so much garbage around.					
E10	There aren't sufficient number of organizations, or institutions to protect the environment and take necessary measures.					
E11	I have no intention to keep the sea, the rivers and lakes clean.					
E12	I'd like to contribute to keeping the sea, lakes and rivers clean					
E13	Fossil fuel resources will be totally used up if deterioration continues					
E14	I'm a volunteer to spare some of my free time to protect plants and animals.					
E15	I'd like to participate in cleaning a polluted area (a lake, a river, a forest and the sea)					
E16	To avoid polluting the environment, I wouldn't drive faster than (100 KMH).					
E17	I'm ready to buy school materials made of recycled waste.					
E18	I would use artificial fertilizer if I had a garden.					
E19	I prefer to spend time at recreational places rather than visiting a zoo.					
E20	I wouldn't buy a luxury car if I had a lot of money.					

Appendix 3.

ENVIRONMENT CONSCIOUS ATTITUDE TEST

No	Mark your agreement with the following in the appropriate box.	Never	Seldom	Sometimes	Often	Very Often
VI	We prefer buying drinks either in tins or bottles.					
V2	I'm careful about the harm of washing liquids to the environment.					
V3	All my friends prefer canned drinks.					
V4	We separate the waste paper and inform the collectors.					
V5	I prefer canned drinks.					
V6	I'm careful about the stationery that can be recycled.					
V7	I dispose of used batteries in garbage cans.					
V8	I dispose of used bottles in bottle cans.					
V9	I prefer to use plastic files at school.					
V10	At home we reuse the shopping bags.					
V11	At home, we donate all our used npossessionsand old books to collector centers.					
V12	I keep the doors and windows closed when the heater is on.					
V13	We are very careful about energy save at home or at work. E.g. we switch off the lights, radio, or tv when we don't need them and keep doors and windows open if the heater is on.					
V14	We talk about the pollution of the environment around us.					
V15	I follow the technology and innovations and replace my mobile phone or computer with new ones.					
V16	I carry with me a basket or a strong shopping bag when shopping.					
V17	I check the taps at home to prevent water leakage.					
V18	I'm very careful about switching off the lights, radio and tv when I don't need them.					
V19	I always participate in conferences or meetings to dowith the protection of the environment.					
V20	I inform the press or a politician or a responsible person to do with preventing environmental pollution.					

Appendix 4.

ENVIRONMENT CONSCIOUS BEHAVIOR TEST

No	Mark The One Which Suits You The Best	Strongly Disagree	Disagree	Agree	Strongly Agree
W1	"Endemic" refers to living things in particular areas in the world.				
W2	I know a lot about endemic species in my country.				
W3	Noise causes anger, not diseases.				
W4	A lot of rivers and seas are spoilt due to lack of foodstuff.				
W5	Having a shower ls less harmful to the environment than having a bath in the bath-tab.				
W6	Carbon dioxide is the only reason for the hole in the Ozone layer.				
W7	Exhaust gas harms only plants, but not people.				
W8	There are alternative sources for electric energy apart from power and termic stations which areharmful to the environment.				
W9	It is better to keep the windows fully open for short periods instead of keeping them open intervally tosave the fuel for the heater				
W10	"Recycling" means reusing the waste.				
W11	It's wiser to buy bottled drinks than single-use cans.				
W12	It's important to buy recycled paper to protect the environment.				
W13	"Compost" refers to fertrilisers produced from organic waste in the kitchen				
W14	Every product is labled as "environmental-friendly".				
W15	The possibility that the world may submerge under water is seen as the result of the hole in the Ozone layer.				
W16	Waste such as glass, plastic, paper, and others should becollected separately				
W17	Furniture or wardrobe should be away from the heaterto avoid the blockage of heat circulation at home and at school.				
W18	School gardens, pavements and parks should be concreteor asphalted.				
W19	The best time to irrigate gardens is when the heat is at the peak.				
W20	Benches and tables in school yards should be made of wood.				

Curruculum Vitae

My name is Juma . E .S. Mohamed , I was born in 22/04/1984 in Libya on the city of Tobruk. In 1999, I started high school and completed in 2001, and began to study at the Higher Institute of occupations overall Tobruk in 2008-2012 Construction Department of the Environment and Water Resources. I obtained a degree in Higher Diploma in 2012. I got my high rate during the study of all classes at the University of Libya. The state gave me the opportunity to study abroad for a master's degree. I had the opportunity to travel to the Republic of Northern Cyprus to get a good education in this country. My master began (2014-2015) in the field of management science and environmental education. In my first year in Cyprus I studied English for two semester in spring 2014 to improve my English. After that I started in the management of environmental education at Near East University.

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Yazar Juma Suleiman

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