

## Perception of Environmental Awareness by Administrators and Teachers in Secondary Schools in North Cyprus: The Case of Guzelyurt

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**ABSTRACT** 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 psycho-motor sub-dimensions. The data obtained from the scale coded and analysed using SPSS package program. Opinions on whether there is a significant difference between the  $\alpha = 0.05$  significance level was tested.

### INTRODUCTION

The environment is defined as all forms of biotic and non-biotic factors that effects a living organism or a community of living organisms. An environmental balance that has self-sufficiently maintained its function for centuries has now begun to deteriorate. Waste that nature is unable to accommodate within its own structure and the amount of the extent of this waste has reached serious dimensions and continues to increase. Parallel to this, the looting of nature by people and their thoughtless use of nature to satisfy their own interests forms the basis of many environmental problems. Attitude and awareness among people are the two most important factors for nature protection and caring for environment (Sahu et al. 2015). An awareness of the cause and results of these will play a motivating role in our efforts to protect the environment (Erten 2005).

Mankind today has reached a critical threshold with its relationship with its environment. The point that environmental problems have reached on a global scale poses a threat for the continuation of a large proportion of nature, the development of communities and their futures.

Dramatic increases of population, the destruction of the ozone layer, global warming, the extinction of species, the eradication of genetic diversity, acid rains, nuclear contamination, the

destruction of tropical rain forests, soil erosion, desertification, flooding, famine, the withdrawal and contamination of underground water, petrol spillage into the seas, over harvesting in fishing, poisonous waste and the over congestion of cities (Foster 1999) are just a few of the problems that threaten the environment.

The ability of nature to renew itself is restricted. That is why the prevention of the destruction of existing ecological balances is crucial for the survival of mankind (Haktanir and Çabuk 2000).

While the rapid development of information and technology increases the life standards of individuals, it maintains the destruction or alteration of many aspects of the environment that those individuals live in. If environmental problems that arise like this are not prevented by individuals, life can end. Both governments and individuals have a mutual responsibility both for the creation and prevention of environmental problems. Environmental education is essential to identifying and executing these responsibilities. An education system that will maintain this, along with the informing of its key features; teachers and students must be maintained. If this prerequisite is upheld you can observe positive developments in individuals' actions and environmental protection is achieved (Unal et al. 2001).

Environmental education is an indispensable vehicle to eradicate problems that can cause the end of the world. Through this education it is aimed to make aware individuals with environmental awareness. In this regard, environmental education differs from environmental science and other education with ecological content. Environmental education transfers ecological information whilst developing individuals' approaches to the environment and maintaining the transformation of these approaches into habits or actions (Erten 2006).

The prevention of environmental problems and the protection, development and improvement of the environment can only be maintained with the transformation of each individual's approach to the environment through the critical analysis of their approaches and values regarding the environment. With the extent of environmental problems reached today, the initial and perhaps the only way of overcoming them is to communicate these problems to the masses and to take relevant precautions by providing an independent environmental education that will sustain environmental awareness and sensitivity (Kavruk 2002).

As mentioned above, environmental education is a continual form of education that is life long, has various stages and can obtain very important results in the long term. Environmental education is a constant education process that involves the entire community. Saricam and Sahin (2015) see children as the protective shields in making important decisions about the environment or environment-related implementations. Thus an institution that aims to protect the environment and leave a healthy environment for future generations must take care to work in a coordinated manner with bodies and social groups and to facilitate an effective environmental awareness that leads to the change of actions and habits. It has been observed that everybody or group that takes responsibility during this process acquires its own line of conduct and each one contributes in a different area. As a result, the development of environmental protection and environmental awareness is an issue that is of interest to every section of society and expects their contribution. From the industrialist to the city planner, from the teacher to the student, from press to civil society organisations, from governmental bodies to the ordinary citizen; all fractions of society have a role to play

in this regard and require a transformation of consciousness (Landers 2002).

## METHODOLOGY

### The Model of the Research

This study is a scan type of research study. With the study it is aimed to identify the environmental awareness level of middle school teachers and administrators in the Guzelyurt region of the TRNC. It has been analysed with demographic features and percentages. In this regard the study is of a descriptive nature.

### Population and Sample

The population of the study consists of administrators and teachers that serve in middle schools in the Guzelyurt region of North Cyprus (The overall sum of administrators and teachers: 300). The sample consists of 180 randomly selected administrators and teachers who serve for middle schools in the Guzelyurt region of the North Cyprus.

### Collection of Data

To collect the data used in the study together with the aim of supporting the theoretic aspect of the study, a detailed analysis of similar national and international studies was carried out and some general statistical data was obtained. Questionnaire based field work and statistical analysis was conducted with the aim of supporting the practical/applied aspect of the study. Data was collected through a survey.

Once the necessary permissions were obtained through relevant legal processes, identified schools were visited where head teachers were provided information on the survey and a few changes were made to the 'Personal Information Form and Environmental Awareness Checklist' prepared by Erten (2003) before it was applied. Information was given to administrators and teachers by the researchers regarding the implementation and teachers were allocated the necessary time to answer questions. Following the implementation, measuring tools were individually revised and measuring tools that were left blank, lacking or answered incorrectly were left outside of the scope of the research.

### Data Collection Tools

The personal information form and environmental awareness checklist were used in the study to collect data.

### FINDINGS

The demographic features and correlation with answers given and their gender was carried out with the t-test and can be seen in the table below. For questions that had a t-test Sig (2 tailed) value below 0.05, there was a significant 5 percent difference between answers given by men and women.

The first result obtained from the study appeared in regard to participation of any environmental activity whereby interestingly men (1,3) had a higher rate of approval compared to women (1,5), thus a significant statistical difference was observed (1: Yes, 2: No).

The 2<sup>nd</sup> result was observed in the 'when I see used paper in other bins this very much upsets me' statement. According to this result women were more aware than men (4.57>4.30).

The 3<sup>rd</sup> result appears in the statement: 'the air I breathe is at the level of damaging my health.' Both male and female teacher approval responses to this question were very low. This was an anticipated result as the air pollution in our country is not very high. When we compare male and female approval to this question we observe that women, with a (3,7) average are more aware than men (3,2).

The 4<sup>th</sup> result was observed in the statement 'Politicians are responsible for the formation of so much waste'. Once again the approval response to this question both among male and female teachers was very low. In addition male teachers found politicians more responsible when compared to female teachers (3.68>3.27).

The 5<sup>th</sup> result was observed in the statement "there are already a satisfactory number of civil society organisations in Cyprus striving for the implementation of necessary precautions". Whilst the rate of men who believed there to be a sufficient number of organisations was very low, women did not agree at all (3.19>2.71).

The 6<sup>th</sup> result was observed in the statement 'I do not intend to do anything to keep the seas, lakes and rivers clean'. This statement shows that women (1,3) are more aware than men (1,8) and that they are more eager to take action.

The 7<sup>th</sup> result was obtained through the statement "When we are buying dish and clothes detergents we take care to check whether they are harmful to the environment". This statement shows that men (3,2) than women (2,8).

The 8<sup>th</sup> result appears in the statement: "at home we separate unused paper and contact the place paper is collected to inform them or take the paper to them." Both male and female participants did not agree with this statement. This response is proportional to the state of recycling in Turkey.

The 9<sup>th</sup> result is in the statement: "In order to prevent environmental pollution, I will give the press, politicians, or any other authorised person information." Both male and females gave a low approval response to this statement. However, once again male teachers (3,0) were observed to obtain a higher score than women (2,2).

The 10<sup>th</sup> result comes from the statement: "Carbon dioxide gas is the only gas responsible for the holes in the ozone layer". Women (2,5) were observed to disagree with this statement more so than men (3,0).

The 11<sup>th</sup> result is in the statement: "Recycling entails the recycling of some waste products". This statement showed that women demonstrated a higher awareness regarding their knowledge of concepts regarding the environment with a 4,3 average higher than that of the 4,08 average of men.

The 12<sup>th</sup> result is in the statement: "Waste should be collected separately as glass, plastic, paper, special waste and other waste." According to this women with a 4.68 average are more aware than men (4,3).

The 13<sup>th</sup> result is in the statement "It is a good choice to have furniture or dressing cupboards located in front of your heaters at school or at home". This statement shows that men agreed to this statement more so (3,0) than women (2,2).

### Comparison of Results Based on the Marital Status of Teachers

Only 5 of the respondents who took part in the survey were widows, 39 of them single and the remaining 136 were married. Following the completed ANOVA and within the Duncan 5 percent significance rate, only 8 questions revealed a significant difference between widowed teachers and single and married teachers. However,

due to the fact that only 5 (2.77%) respondents were widowed, it was not possible to make a generalisation regarding widowed teachers. Thus it is not appropriate to make a comparison of results based on marital status.

**Comparison of Results Based on the Legal Status of Teachers**

The legal position of teachers who participated in the study were divided into 3 legal groups, permanent, contractual and temporary staff. Thus a significant difference was established according to the ANOVA test and Duncan 5 percent importance rate. The teachers' results according to their legal status showed similarities to that of their marital status. Only 4 of the respondents were contractual, 17 temporary and the remaining 159 were permanent staff members. Again like that of marital status results, only 7 questions revealed significant changes whereby contractual teachers (2.22 percent) results differed in other teachers results. Thus it is not appropriate to make a comparison based on legal status.

**Comparison of Results Based on the Education Level of Teachers**

When the results of teachers are compared according to their level of education only one result shows a significant difference. Regarding all analysis due to the fact that only one teacher has a PhD this aspect was not considered. Similarly only 3 teachers had associate degrees. The question that showed a significant difference was on whether gas from exhaust fumes was able to harm trees but not humans.

Teachers with Associate Degree's showed a minimal number of approval to this question, whereas post graduate teachers respondent mainly to 'I completely disagree' (1,3). These results demonstrate that the level of awareness increases according to the level of education.

It was observed that teachers who had spent different numbers of years teaching responded differently to the statement: "There are already a satisfactory number of civil society organisations in our country striving for the implementation of necessary precautions for environmental protection" whereas some teachers responded 'I do not agree' (2), others responded 'I slightly agree' (3). Whilst teachers who had spent 0-5 and 6-10

years in teaching were closer to the response 'I do not agree', teachers who had spent over 11 years in the occupation were closer to the 'I slightly agree' option and thus a significant statistical difference occurred between these two groups (Table 1).

**Table 1: There are already a satisfactory number of civil society organisations in our country striving for the implementation of necessary precautions for environmental protection**

Length of service	N	Subset for alpha = .05	
		1	2
0-5 years	53	2.6	
6-10 years	27	2.6	
16+ years	67	3.0	3.0
11-15 years	32		3.2
Sig.		.1	.4

Duncan 5%, sig.: .032

The first result that is observed when we compare the answers of teachers who have ever participated in an environmental event was not surprising and it revealed that teachers who had never attended an environmental activity were also not members of any civil society organisation or institution.

The second result was that teachers who had participated in an event regarding the environment believed that the extinction of animal or plant species was a bigger threat to humanity.

The third result was that administrators and teachers who had participated in an environmental activity were more concerned that one day they would not find clean water to drink.

The fourth result revealed that teachers who had participated in an environmental event were more eager to learn information about how to keep seas, lakes and rivers clean.

When the researchers look at other results that support the results given above, other relevant results are that teachers and administrators who have participated in an environmental activity also believe that there are a sufficient number of civil society organisations in Turkey who deal with environmental issues, have a desire to voluntarily contribute to the cleaning of a polluted environment, take care whether a cleaning product is harmful to the environment before buying it, takes more care to separate used paper in their homes and have them collected, takes care to buy paper or notebooks that are made from recycled paper, attend more conferences on

the protection of the environment, are more eager to provide information to press members, politicians and authorised persons to prevent environmental pollution, and have a deeper knowledge on the endemic species of Turkey.

To conclude, the result obtained is that those who have attended an environmental event have a higher level of environmental knowledge and awareness.

The first result obtained when the researchers compare answers given by teachers who are members of an environmental organisation, is that all teachers who are members of an environmental organisation have also participated in an environmental event.

When the researchers look at other results that also support the first result, they observe that administrators and teachers who are members of an environmental organisation also believe that environmental organisations play an important role in the protection of the environment, are willing to spend a fraction of their free time taking care of animals and plants, have a desire to voluntarily contribute to the cleaning of a polluted environment, takes care to buy paper or notebooks that are made from recycled paper, attends more conferences on the protection of the environment, are more eager to provide information to press members, politicians and authorised persons to prevent environmental pollution, have a deeper knowledge on the endemic species of our country, are more aware that many rivers and seas are ill or destroyed due to the deficiency of nutrients and are more aware that there are alternatives to obtaining electrical energy, rather than the thermal and nuclear power plants that are harmful to the environment.

When the researchers look at whether teachers believe that charities or organisations play an important role in the protection of the environment and compare it with their responses the results are consistent. This is because the first result obtained from the study is that teachers who are members of environmental organisations also believe that they play an important role in the protection of the environment.

When the researchers look at the other results, they can similarly see that administrators and teachers who believe that organisations play an important role in environmental protection also feel sad when they see used paper being thrown into general waste bins, believe there are a sufficient number of organisations to maintain the necessary precautions for the protection of the environment, are eager to take action to prevent the further destruction of the environment, are more inclined to spend time taking care of animals and plants and are more willing to contribute voluntary time to cleaning a polluted area. In addition when the researchers consider the psychomotor expressions they can observe that teachers who believe that organisations play an important role in environmental protection are more eager and sensitive to the taking action regarding environmental protection.

#### Environmental Awareness Levels of Administrators and Teachers

In identifying the level of environmental awareness, the sums of points given according to Effective (E), Psychomotor (V) and Cognitive (W) factors were taken and first projected as general results and then divided into grouping based on gender, position etc. for comparison (Table 2).

This study has identified an average score of 206.89 for the entire scale. In another study in Sakarya where the same scale was used the score for the entire scale was identified as 217.16 (Bas 2011). The Psychomotor score obtained in our study (65.5), was higher than that of the study conducted by Bas (2011) in Sakarya where he identified a score of (63.9). Despite this, the scores were close to each other and do not show a significant difference. On the other hand, the cognitive and affective scores obtained in our study were significantly lower than that obtained by Bas (2011) in Sakarya, (In Sakarya Cognitive: 74.70, Affective: 78.56). This situation can be a result of our sample group being smaller in size.

**Table 2: The arithmetic average of the environmental awareness scale, the standard deviation, and the number of scale items (descriptive statistics) based on the lowest and highest values**

<i>Environmental scale</i>	<i>N</i>	<i>Lowest value</i>	<i>Highest value</i>	<i>Average</i>	<i>Standard deviation</i>	<i>Number of factors</i>
<i>Affective Factor</i>	177	44.00	100.00	72.64	7.12	20
<i>Psychomotor Factor</i>	170	35.00	100.00	65.51	8.68	20
<i>Cognitive Factor</i>	170	48.00	100.00	69.10	8.20	20
<i>Total Scale</i>	163	147.00	300.00	206.89	17.86	60

Table 3 shows the results of the independent t-test held with the aim of revealing whether the arithmetic average of administrators and teachers level of environmental awareness contrasted with gender reveals a significant difference (Table 3).

According to the results obtained, men's cognitive and psycho motor points are higher than women's. However, despite this, in affective scores women obtained higher scores than men. This result shows that women act in a more effective manner than men.

The results obtained only show a significant and meaningful difference in terms of statistics when we look at the psychomotor scale points. In this scale, statistically men score 5 percent higher than women's points.

Table 4 shows the results of the ANOVA test conducted to identify whether there is a signifi-

cant difference between the arithmetic average of administrator and teacher environmental awareness based on their legal position.

According to the results obtained, there was no significant difference between each group from a statistical perspective. As anticipated, the cognitive scores of teachers was very similar to teachers in other legal positions (permanent, contractual, temporary). This situation arises from the fact that information is a resource obtained from the number of years of education. Although the results of the affective and psychomotor scores were not as close as the cognitive scores, they did not show a significant difference in statistical terms.

Table 5 shows the results of the ANOVA test conducted to identify whether there is a significant difference between the arithmetic average

**Table 4: The distribution of the level of environmental awareness of administrators and teachers according to their legal status**

<i>Environmental scale</i>	<i>Position</i>	<i>N</i>	<i>Average</i>	<i>Standard deviation</i>	<i>F</i>	<i>Sig. (P&lt;.05)</i>
<i>Affective Factor</i>	Permanent	157	72.9	7.1	1.3	.2
	Contractual	4	73.0	4.3		
	Temporary	16	69.8	6.9		
	Total	177	72.6	7.1		
<i>Psychomotor Factor</i>	Permanent	151	65.6	8.9	.7	.4
	Contractual	3	69.6	12.5		
	Temporary	16	63.5	4.2		
	Total	170	65.5	8.6		
<i>Cognitive Factor</i>	Permanent	151	68.9	8.2	.4	.6
	Contractual	4	71.5	9.4		
	Temporary	15	70.4	8.2		
	Total	170	69.1	8.2		
<i>Entire Scale</i>	Permanent	146	206.9	18.5	.51	.6
	Contractual	3	216.3	18.4		
	Temporary	14	204.7	8.3		
	Total	163	206.8	17.8		

**Table 5: The distribution of the level of environmental awareness of administrators and teachers according to their marital status**

<i>Environmental scale</i>	<i>Position</i>	<i>N</i>	<i>Average</i>	<i>Standard deviation</i>	<i>F</i>	<i>Sig. (P&lt;.05)</i>
<i>Affective Factor</i>	Single	38	71.0	8.4	1.3	.2
	Married	134	73.1	6.6		
	Widowed	5	71.0	8.0		
	Total	177	72.6	7.1		
<i>Psychomotor Factor</i>	Single	35	64.0	7.7	.8	.4
	Married	130	65.9	8.9		
	Widowed	5	63.4	6.9		
	Total	170	65.5	8.6		
<i>Cognitive Factor</i>	Single	39	68.9	9.2	.0	.9
	Married	126	69.1	7.9		
	Widowed	5	68.4	7.7		
	Total	170	69.1	8.2		
<i>Entire Scale</i>	Single	35	203.5	16.4	.9	.3
	Married	123	208.0	18.4		
	Widowed	5	202.8	10.9		
	Total	163	206.8	17.8		

of administrator and teacher environmental awareness based on their marital status. According to these results there was no significant difference of results according to whether the respondent was single, married or widowed and the three environmental scales.

### DISCUSSION

According to the results of the study, the cognitive and psychomotor scores of the male administrators and teachers was higher than that of females, however as anticipated the affective scores of the female respondents was higher than that of the males. This result demonstrates that women have a higher level of “environmental protection” awareness than men. This situation is consistent with Bas’s (2011) study. In his study, Bas (2011) identified that when environmental awareness levels were analysed based on gender, all scales including cognitive, effective and psychomotor showed that women were of a higher level of environmental awareness than men.

When we look at the environmental awareness of administrators and teachers according to the legal position and scores on all scales including cognitive, affective and psychomotor, we observe a significant difference. Whilst Bas (2011) was unable to find a significant difference between legal position of administrators and teachers and their environmental awareness on scales including cognitive and psychomotor, he was able to find a significant difference on the affective scale. According to his study, those who worked in the lower pay range were of a higher environmental awareness than the permanent and contractual staff.

The level of environmental awareness of administrators and teachers compared to their marital status did not show a significant difference on either scale including cognitive, psychomotor and affective. On the other hand, although Bas (2011) was unable to find a significant difference of scores on the scales relating to affective and psychomotor, he found a significant difference in the scores relating to the cognitive subscale. On the cognitive scale, single teachers scored higher than married teachers.

One of the most interesting results of this survey was that the level of environmental awareness of administrators and teachers did not vary according to their educational status. The most

important factor behind this result was that of all the administrators and teachers who participated in this study only one person had a PhD and only three participants had associate degrees. Whilst Bas (2011) was unable to find a significant difference in the affective and cognitive scales of scores of the level of environmental awareness of administrators and teachers compared to their level of education, the psychomotor scales and therefore the entire scale scores showed significant differences. According to his study, post graduate degree holders obtained a higher score than degree holders. Buhan (2006) also obtained results that supported this finding.

The level of environmental awareness of administrators and teachers according to their time of service showed a significant difference on all scales including affective, psychomotor and affective scores. As for Bas (2011), in his study he observed that administrators and teachers environmental awareness according to their time of service varied on all scales and sub-scales in the following ways: Administrators and teachers who served for over 11 years carried a higher level of awareness than those who served between 6-10 years and that there was no difference observed among those who served between 0-5 years. Buhan (2006) emphasised that the age of respondents affected the environmental awareness of respondents but the number of years of service did not.

In a manner that supports this study, Bas’s (2011) study also demonstrated that the level of environmental awareness of administrators and teachers did not vary according to their working positions. When the expressions given in the sub-dimension psychomotor scales, it was observed that the level of environmental awareness of administrators and teachers was not reflected in their actions. This can be explained by the fact that the environmental activities in Turkey (such as recycling etc.) have only started to form very recently, that the efforts in this regard are still very new and that they are yet small in numbers. In the results of the study conducted by Erten (2003), when the cognitive, affective and psychomotor comparative analysis was conducted to measure the environmental awareness of teachers, it was observed that teachers did in fact possess a level of environmental awareness but that this awareness was not reflected in their actions. In a manner that supports our study,

when Bas (2011) compared the environmental awareness of administrators and teachers with their actions towards the environment, he too observed an inconsistency of results.

### CONCLUSION

1. This study has identified that the level of environmental awareness of administrators and teachers is given the average score of 206.89(68.9%) as the total of all scales. Although it is at a lower rate compared to those of similar studies conducted in various parts of the world, it is still at an acceptable level.
2. When the results of the responses given to the affective scale are evaluated it can be observed that administrators and teachers have an environmental awareness and that they care about the environment.
3. When the results of the psychomotor factor are analysed it is observed that the environmental awareness of administrators and teachers are not reflected in their actions. This result can be explained by the fact that environmental initiatives in our country (such as recycling etc.) are only newly developing and that initiatives in this regard are still very new and small in numbers.
4. When the results of the responses given to the cognitive scale are evaluated, it is observed that administrators and teachers possess a satisfactory amount of knowledge regarding the environment and environmental concepts.
5. According to the results of the study, the cognitive and psychomotor scores of male administrators and teachers is higher than that of female, yes the affective scores of women are higher than that of men. These results show that women have a higher 'environmental protection' awareness and sensitivity than men.
6. The environmental awareness of administrators and teachers according to their legal position when analysed on all three cognitive, affective and psychomotor scales show no significant differences of scores.
7. The environmental awareness of administrators and teachers according to their marital status when analysed on all three cognitive, affective and psychomotor scales show no significant differences of scores.
8. One of the most interesting results of this survey was that the level of environmental awareness of administrators and teachers did not vary according to their educational status. The most important factor behind this result was that of all the administrators and teachers who participated in this study only one person had a PhD and only three participants had associate degrees and this situation has shown an unanticipated result. That is that both our administrators and teachers do not show an interest in PhD programs that will contribute greatly to both their occupational and social development.
9. The environmental awareness of administrators and teachers according to their time of service when analysed on all three cognitive, affective and psychomotor scales show no significant differences of scores.
10. The environmental awareness of administrators and teachers according to their positions at school when analysed on all three cognitive, affective and psychomotor scales show no significant differences of scores. However when analysed the results of responses by administrators and teachers based on their positions, it can be seen that the environmental awareness and knowledge of administrators is higher than that of teachers.
11. The environmental awareness level of administrators and teachers according to their place of residence when analysed on all three cognitive, affective and psychomotor scales show no significant differences of scores.
12. When the environmental awareness level of administrators and teachers are evaluated according to whether 'they have ever participated in an environmental activity' responses given at the affective and psychomotor scale show that those who have participated in environmental activities score higher than those who have not participated in activities. This result shows that the participation of environmental activities leads to the development of affective and psychomotor qualities. As for cognitive factors, we observe that participation in activities has no significant impact.
13. The results of the survey show that administrators and teachers who are members of an environmental organisation score higher



- on all scales, cognitive, psychomotor and affective compared to administrators and teachers who are not members of any environmental organisations. This result indicates a double sided affect: That is, alongside the fact that being a member of an environmental organisation increases the level of awareness, also that those who have a high level of environmental awareness are members of environmental organisations. As a result, efforts must be made to increase the number of such organisations and their members.
14. When the environmental awareness level of administrators and teachers is evaluated according to whether 'they believe that environmental organisations play an important role in the protection of the environment', we see that administrators and teachers who believe that environmental organisations that play a role in environmental protection also score higher in affective scales.
  5. The environmental awareness of administrators and teachers must be developed through in service environmental trainings provided by professionals in the field of environmental awareness within specific periods.
  6. As seen in this study, the participation of environmental activities or the membership of any environmental organisation is particularly important in the development of environmental awareness. For this reason the membership of teachers or administrators to environmental organisations must be encouraged and opportunities must be provided to maintain their volunteer participation to environmental activities conducted by organisations.
  7. Guzelyurt, the chosen area of study, was important due to the fact that it hosts a few environmental problems faced in Cyprus. In the region where there is intense agricultural activity, there is both land and water pollution. As for underground water, it has become salted due to excessive use. In addition Gemikonagi, an area effected by mining waste is also within the region. In order for environmental awareness to occur it is important for the people of the area to be aware of and identify the environmental problems of the area. With this aim, projects must be planned and implemented with the participation of teachers and administrators as well as the general public.
  8. The effect of schools, administrators and teachers on the environmental approach and actions of individuals cannot be denied. When we look at it from this perspective, teachers who have not obtained environmental education during their undergraduate degrees and who are currently serving must be taken into in service training as soon as possible in order to increase their level of environmental awareness.
  9. The production of environmentally friendly products which has spread in many countries with the aim of environmental protection must be initiated and spread in our country and the use of the products must be supported.
  10. The protection of the environment and species must be conducted with the instructions and guidelines of the central government and sustained with the coordination

### RECOMMENDATIONS

1. Environmental education which is the most significant factor in increasing environmental awareness must become prevalent and be disseminated in a manner that will reach all segments of society. Environmental education must be given to every age and profession within specific programs.
2. From primary education to higher education, environmental education must be taught in obligatory and constant courses, or a larger scope must be given to books that explore environmental awareness and knowledge.
3. Environmental education must be integrated into formal education. Administrators and teachers must be informed on air, water, ecological balance and particularly land waste and all levels of teachers should be provided with scientific events on environmental awareness. Auto control must be established.
4. During their four year degree programs, teacher candidates must be exposed to effective environmental education programs to maintain a more positive approach to the environment and to obtain responsible environmental practices. It must be maintained that this knowledge is passed down to the public.

of all segments of the society including civil society organisations, local governments, universities, international institutions and most importantly must be maintained with the participation of the public at large. In this regard, various meetings and activities must take place.

11. Postgraduate and PhD programs involving environmental awareness and comprehensive programs bearing in mind the conditions of the world standards must be encouraged providing better conditions.

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