The Attitudes of Governmental Official in Terms of Sustainable Environment

Arefe YURTTAŞ

Kastamonu University Institute of Social Sciences, Kastamonu/Turkey
Atila ÇAĞLAR*

Kastamonu University Faculty of Education, Kastamonu/Turkey

Abstract

The inhabitable environment for all living beings is the first condition of the continuity of life in the world. The environment is an indispensable setting for all individuals and the damage to the environment is of utmost importance to every sector. The increase in population and the environmental problems it brings are forcing countries to take measures and to raise more environmentalist individuals. In particular, environmental degradation done involuntarily and wastes resulting from excessive consumption pose a big problem. Although the environment is a setting where all creatures live together, the greatest impact is made by human beings.

Studies on environmental issues often focus on educational environments including educators and students. However, all positive or negative environmental activities are followed carefully by the whole society. It is known that individuals' attitudes towards the environment are generally either human-centred (Anthropocentric) or environment-centred (Ecocentric), or totally anti-environmental. This study was applied to 300 personnel working in different branches of the public sector in order to determine which of these three attitudes they are more inclined to, and what demographic characteristics affect them. The applied questionnaire is a 7-scale Likert type with 27 articles consisting of 12 articles that measure environmental-centred attitudes, 8 articles that measure human-centred attitudes, and 7 articles that measure antipathetic attitudes towards the environment. In addition, more detailed information about the individuals was obtained by applying another questionnaire with demographic features. It has been determined that ecocentric attitudes in governmental officials' behaviours towards the environment is higher. In antipathetic attitudes towards the environment, on the other hand, the situation is in favour of males. There was no significant difference observed in the environment-related ecocentric and anthropocentric attitudes in the place of residence variable.

Keywords: Environmental behaviour, anthropocentric and ecocentric attitudes, sustainable environment.

Introduction

Environment is defined as the physical, biological, social, economic and cultural setting in which people and all living/non-living beings interact continuously (Environmental Law, 1983). As a concept, the interaction that humans experience with each other and with all living things, directly or indirectly, is defined as the continuous relationship with all the non-living things that are necessary for the survival of living things and the results arising from this relationship (Keleş, Hamamcı & Çoban, 2009).

Many environmental problems arise with the increase in the world population, the creation of living spaces easier with developing technologies and the increase in urbanization as a result. Human beings who constitute the source of these problems are also developing different methods for solving them. One of the most important problems of the dense population in cities is the pollution caused by environmental degradation. In these areas, where there is more waste generation, the scarcity of green areas



required to spend free time, one of the natural needs of human beings, causes many physical and mental disorders. When looked at the effects of the destruction of existing natural areas by humans, even at the local level, air pollution is seen to cause serious problems on human health (Gangadharan & Valenzula, 2000). It is reported that while environmental degradation causes deterioration of the quality of health, it also affects economic activities of countries (Bovenberg & Smulders, 1996). Therefore, environmental factors are in interaction with health quality and economic growth (Katrakilidis & Patsika, 2016). Therefore, the positive correlation between environment, health and economic activities indicates that the development levels of the countries are also good (Drabo, 2010). In terms of Turkey, in a conducted study, it is emphasized that more active steps should be taken towards environmental pollution in order to improve health quality, that environmental pollution reduction measures should be taken before it's too late and that environmentally sensitive growth-development model should be implemented without losing time (Ecevit & Çetin, 2016).

In the world where resources are limited and the reserve life for many resources is calculated, unconscious consumption and environmental degradation endanger the living conditions and quality of life of future generations. In addition to the fact that depletion of resources is inevitable, all countries of the world must start adequate work to discover and improve the quality of new resources. It is mandatory to reduce the use of petroleum as fuel before it is completely depleted and to use it more in the production in the field of petro-chemistry. Through such studies, a sustainable way should be pursued to ensure a better quality of life and to do the necessary work to solve environmental problems. Therefore, the lack of resources resulting from environmental problems and excessive use of resources has led to the emergence of the concept of sustainability. Although the importance of sustainability increases day by day, it includes all actions taken to ensure the continuity of human and environment without interruption, without weakening and without compromising its quality (Graham, Graham & Wilkcox, 2004). It is the responsibility of all mankind to protect the environment and to develop social awareness to combat environmental problems and therefore it is important to know and adopt the concept of "sustainability" (Karademir, Uludağ & Cingi, 2017). Individuals with sustainable environmental consciousness can see the environmental disasters that may occur in advance and by taking precautions before disasters, they aim to use resources in the most efficient way and to increase human well-being. For this reason, it is important for the future of mankind to raise individuals with sustainable environmental consciousness and turn them into the majority of society.

It is known that there are many factors that are effective in the formation of sustainable environmental awareness and attitudes of individuals. Among these factors are ecocentric (environment-centred), anthropocentric (human-centred) and antipathetic attitudes towards the environment, and many studies on this subject are included in the literature (Atlı, Uzun, Saraç, Sağlam, Sağlam, 2015; Casey & Scott, 2006). In order to create a sustainable environment, individuals need to have behaviours and attitudes that love the environment and conform to the environmental ethics. Environmental ethics is a multidisciplinary theory that examines the relationships of human beings with nature and examines all stages of the decisions that humans have to make about their environment (Karaca, 2008). By approaching ecocentric and anthropocentric attitudes under environmental ethics, the environmental activities of human beings are examined.

Anthropocentric approach is defined as attitudes based on utilitarian philosophy that accept humans at the centre of the world, defend that all other beings are for service to humanity, accept nature because of the benefits it provides to man, that nature and environment are unimportant by themselves alone, and that they gain importance as a result of the benefits it provides to man (Karahan, 2009; Dreger & Chandler, 1993; MacKinnon & Fiala, 2014; Erten & Aydoğdu, 2011). The ecocentric approach, on the

other hand, is defined as all of the attitudes that claim that man is a part of the ecosystem, that man is not an entity on top of nature, and that nature has a value on its own (Karakoç, 2004; Kortenkamp & Moore, 2001). Burning stubble in the field, according to individuals with anthropocentric approach, is the decomposition of soil components, reduction of fertile soils and the smoke arising of the burning is a wrong method, because it damages human beings. The situation here is entirely human-centred and for the benefit of humans. People who adopt the ecocentric approach, on the other hand, argue that the stubble burning method is wrong because various living things in the soil are burned to death. In this approach, human interest has been pushed back, and the importance nature and the living things in nature has taken the first place.

In anthropocentric understanding of environmental morality, cutting ofrainforests is wrong because it brings depletion of the source of drugs used to treat people with. In the ecocentric sense of environmental morality, it is wrong to cut rainforests down because many species of plants and animals will be destroyed (Kortenkamp & Moore, 2001). When these two approaches are compared, the anthropocentric approach is thought to be inadequate to eliminate the environmental chaos that emerged with the exploitation of nature, leading the world and lives of living creatures to disaster (Erten, 2004).

Today, the catastrophic scenarios for environmental problems that have become a global problem and the intense efforts to solve environmental problems are explained to the public by unconscious and wrong methods, causing the formation of antipathetic attitudes towards the environment in society. In order to find the value judgments underlying the attitudes of individuals towards the environment, Thompson and Barton added the size of the antipathetic attitudes towards the environment to the environmental questionnaire they used in 1994. Whether a person has an understanding of anthropocentric or ecocentric environmental ethics, the environmental activity they ultimately show can be in the desired direction in terms of protecting and sustaining the environment (Erten, 2011). The individuals who are in antipathetic attitude towards the environment are not expected to have protective consciousness and attitude to the environment.

Protecting the environment and making it liveable is an important process in which the whole society is affected. Attribution to a certain segment such as the individuals in the field of education (teachers, students, academics etc.) and generalization of the scientific studies carried out through them lacks from the scientific point of view. The place and importance of governmental official, which constitute a large part of the working population in our country, are very great in society. Considering the importance of the environment for life, it is important to know the environmental motifs that are formed in the awareness of governmental official who shed state policies for the environment into action. In this study, the general view of the personnel working in the public sector has been determined, the relationship between their environmental attitudes and personal characteristics is examined, and in line with the data obtained, it was tried to determine what is necessary for them to become a good environmentalist citizen.

Methodology

Working Group

The universe of the research is composed of governmental official working in various branches in Kastamonu province. Considering the adequacy of the representation power for the sample of the study, 300 governmental official working in Kastamonu province were included voluntarily in the study. Sampling of the study consists of 110 females and 190 males governmental official.

Data Collection Tool

The questionnaire developed by Thompson and Barton (1994) and translated into Turkish by Erten (2007) was employed. The questionnaire is 7-scale Likert type with 27 articles, 12 articles that measure environmental-centred attitudes, 8 articles that measure human-centred attitudes, and 7 articles that measure antipathetic attitudes towards the environment. The scales were created with values from 1 to 7 in the form of 'I do not agree at all', 'I do not agree', 'I disagree a little, 'I am not certain', 'I agree a little', 'I agree' and 'I fully agree'.

Analyzing Data

The analysis of the data was performed by SPSS packet programme. The scale has been previously applied to 200 governmental official in order to ensure the appropriateness of the scale to the governmental official sampling and as a result of the reliability analysis, Cronbach α (alpha) (reliability coefficient) was found to be ,80. The normality test was performed for the eccentric, anthropocentric and antipathetic attitudes towards the environment, the skewness and kurtosis values of the distribution charts were taken into consideration, and it has been determined that the scores obtained do not meet the normality assumption (p< ,05). In the analysis of collected data, Mann-Whitney U and Kruskal Wallis H test were employed for nonparametric tests.

Findings

The attitudes of governmental official toward the sustainable development were evaluated in terms of ecocentric, anthropocentric and antipathetic perspectives. And they are correlated with the variables of gender, age, years spent in profession, education status, graduated university, place of residence, place of childhood, house where the student lives, university enrolment in environment related activities, status of participation to environmental activities and the level of interest towards the environment and its problems.

Table 1.

Means and Standard Deviations of Ecocentric, Anthropocentric and Antipathetic Attitude
Scores of governmental official Towards Environment

Attitudes	Number of Questions	n	Х	ss
Ecocentric	12	300	69,41	10,75
Anthropocentric	8	300	42,45	8,25
Antipathetic	7	300	18,12	17,26

According to the means obtained from the responses of governmental official to questions that measure their ecocentric, anthropocentric and antipathetic attitudes towards the environment, it was determined that the participants' ecocentric attitudes were higher and the antipathetic attitudes were lower. The scores of governmental official in ecocentric, anthropocentric and antipathetic attitudes were given in Table 2. and examined whether there were significant differences.

Table 2.

Mann-Whitney Test Analysis Results of Ecocentric, Anthropocentric and Antipathetic Attitudes of governmental official by Gender

			_			
Attitudes	Gender	n	X	Σ	U	p
Ecocentric	Female	110	168,00	18479,5	8525,5	,008
	Male	190	140,37	26670,5		
Anthropocentric	Female	110	161,50	17764,5	9240,5	,094
	Male	190	144,13	27385,5		
Antipathetic	Female	110	135,00	14916,5	8811,5	,023
	Male	190	159,12	30233,5		

According to Table 2. ecocentric and antipathetic attitudes of governmental official involved in the study show a significant correlation with the gender variable (p<.05). It is observed that the ecocentric and antipathetic attitudes of female governmental official are higher than those of male governmental official. There was no significant difference determined between anthropocentric attitude scores (p<.05).

The scores of ecocentric, anthropocentric and antipathetic attitudes of governmental official in the study according to the years spent in profession variable were given in Table 3. and examined whether there was a significant difference.

Table 3.

Kruskal-Wallis Test Analysis Results of the Anthropocentric Attitudes of Governmental Official Towards Environment Compared to The Years Spent in The Profession

ears Spent In		_				Signif	
ne Profession	n	X	σ	X ²	p	Differ	ence ——
5	50	144,41	6	14,14	,028	4-7,	4-2,
10	44	157,16				4-5,	4-3, 4-6,
1-15	55	140,60				7-5,	7-1, 7-6,
6-20	46	185,03				2-5,	2-3, 2-6,
1-25	33	130,91				5-6	3-6,
6-30	39	127,19					
1	33	166,35					
1	10 -15 -20 -25 -30	n 5 50 10 44 -15 55 -20 46 -25 33 39	n X 5 50 144,41 10 44 157,16 -15 55 140,60 6-20 46 185,03 -25 33 130,91 6-30 39 127,19	n X σ 5 50 144,41 6 10 44 157,16 -15 55 140,60 5-20 46 185,03 -25 33 130,91 5-30 39 127,19	n X σ x ² 5 50 144,41 6 14,14 10 44 157,16 -15 55 140,60 5-20 46 185,03 -25 33 130,91 5-30 39 127,19	n X σ x² p 50 144,41 6 14,14 ,028 10 44 157,16 -15 55 140,60 5-20 46 185,03 -25 33 130,91 5-30 39 127,19	n X σ x² p 5 50 144,41 6 14,14 ,028 4-7, 4-1, 4-1, 4-5, 7-2, 7-5, 7-2, 7-5, 2-1, 3-5, 3-5, 5-6 6-20 46 185,03 2-5, 3-5, 5-6 6-30 39 127,19

A significant difference was observed in the anthropocentric attitudes of governmental official towards the environment (p<.05) in Table 3. According to the mean rank scores of the participants, the difference was found to be in favour of those in the profession between 16-20 years. Between those who spent 26-30 years in the profession, on the other hand, the mean ranks in the anthropocentric attitudes of governmental official was the lowest. There was no significant difference observed in the ecocentric and antipathetic attitudes of governmental official compared to the years spent in the profession.

Table 4.

Kruskal-Wallis Test Analysis Results of Governmental Official's Antipathetic Attitudes
Towards Environment According to the Educational Background

Antipathetic Attitudes	Educational Background	n	- x	σ	x²	р	Significant Difference
1	High School	80	172,51	3	12,12	,007	1-2, 1-3, 1-4, 2-3,
2	Associate Degree	62	152,22				2-4, 3-4
3	Undergraduate	135	144,36				
4	Graduate	23	105,37	_			

In the antipathetic attitudes of governmental official according to the educational background variables, significant difference was determined in favour of those at high

school level (p<.05). There was no significant difference in the ecocentric and anthropocentric attitudes of governmental official towards the environment.

Table 5.

Kruskal-Wallis Test Analysis Results of the Antipathetic Attitudes of Governmental Official Towards the Environment According to the Place of Residence Variable

Antipathetic Attitudes	Living Place	n	_ X	σ	x²	р	Significant Difference
1	Rural	9	144,33	2	10,05	,007	2-3, 2-1, 3-1
2	Town	8	245,38				3-1
3	City	283	147,48				

It was found that the antipathetic behaviour of governmental official participating in the questionnaire was found significantly different according to the place of residence variable (p<.05). Significant difference was in favour of those who live in the town. There was no significant difference in ecocentric and anthropocentric attitudes compared to the place of residence variables.

Table 6.

Kruskal-Wallis Test Analysis Results of the Ecocentric Attitudes of Governmental Official Towards the Environment According to The Level of Interest of the Environment

Ecocentric Attitudes	Level of Interest		_	Significant Difference			
	moroot	n	X	σ	X ²	р	Billereriee
1	No interest	4	48,75	3	13,24	,004	4-3, 4-2, 4-1, 3-2,
2	Low	17	107,32				3-1, 2-1
3	Medium	147	146,23				
4	High	132	163,90				

According to Table 6. it was found that there was a significant difference in the ecocentric attitudes of the participants towards environment (p<.05). Significant difference was in favour of those who have a high level of interest towards environment.

Table 7.

Kruskal-Wallis Test Analysis Results of the Antipathetic Attitudes of Governmental Official Towards the Environment According to The Level of Interest Variable of the Environment

Antipathetic Attitudes	Level of Interest	n	_ X	σ	X ²	р	Significant Difference
1	No Interest	4	252,63	3	23,32	,000	1-3, 1-2, 1- 4, 3-2, 3-4,
2	Low	17	168,50				4, 3-2, 3-4, 2-4
3	Medium	147	169,78				
4	High	132	123,61				

It was observed that there was a significant difference in the antipathetic attitudes of governmental official according to the level of interest variable towards environment (p<.05). Significant difference is in favour of those who have no interest towards environment. No significant difference was observed in their anthropocentric attitudes.

Table 8.

Mann-Whitney Test Analysis Results of the Ecocentric Attitudes of Governmental Official Towards the Environment According to The Environment Related Course Taking Variable

Ecocentric	Lesson		_			
Attitudes	Status	n	X	Σ	U	р
1	enroll	75	125,57	9417,50	6567,50	,004
2	Not enroll	225	158,81	35732,50		

According to Table 8, it was observed that there was a significant difference in the ecocentric attitudes of governmental official according to the course taking related to environment in the university variable (p<.05). Significant difference was in favour of those who answered "I did not take". No significant difference was observed in the anthropocentric and antipathetic attitudes according to the environment related course taking in the university variable.

Table 9.

Mann-Whitney Test Analysis Results of the Ecocentric and Antipathetic Attitudes of Governmental Official According to Participation to Environment Related Activity Variable

Attitudes	Environmental		_			
	Activity	n	X	Σ	U	p
	participate					
Ecocentric		73	171,42	12514,00	6758,00	,018
	not participate	227	143,77	32636,00		
	participate					
Antipathetic		73	127,67	9320,00	6619,00	,010
	not participate	227	157,84	35830,00		

According to Table 9, it was observed that there was a significant difference in the ecocentric and antipathetic attitudes of governmental official according to participation to environment related activity variable (p<.05). The significant difference is in favour of those who participated in the activity in ecocentric attitudes and in favour of those who did not participate the event in antipathetic attitudes. No significant difference was observed in anthropocentric attitudes.

Results and Discusioon

The level of attitudes of governmental official towards the environment were examined in the criteria of ecocentric, anthropocentric and antipathetic attitudes with attitude scale towards the environment. And it was determined that the ecocentric attitude was higher. It was also observed in the mean scores of governmental official that they showed anthropocentric attitudes. According to the questionnaire applied by Ersoy Quadır (2015), to the governmental official, the gender variable resulting in favour of the females in the ecocentric attitudes towards environment; it can be said that females who work in the public are more interested in nature, they push human interests more in the background than the males and see the creatures and their lives superior. It is found that there was a significant difference in the favour of female individuals in participants' sensitivity to 'waste reduction' in recycling. In one of the study, it was determined that there is significant difference in the direction of males in gender variable in antipathetic attitudes of governmental official towards the environment. In similar studies, it was seen that the significant difference was in favour of males in gender variable in antipathetic attitudes towards environment. (Erten, 2011; Alpak Tunç, 2015; Akgül, Birinci, Göral and Karaküçük, 2017).

Erten (2011) determined that the environment centred attitudes of Turkish teacher candidates towards environment to be more advanced among the attitudes of Azerbaijani and Turkish teacher candidates. At the same time, it was observed that Turkish teacher candidates and Azerbaijani teacher candidates have a high human-centred attitude towards the environment. Again, in an environmental study, it was determined that there was a positive correlation between ecocentric attitudes and academic achievement of middle school students and a negative relationship between

their anthropocentric and antipathetic attitudes and academic achievement (Atlı, Uzun, Saraç, Sağlam and Sağlam, 2015). Moreover, Akgül, Birinci, Göral and Karaküçük (2017), in their study on the attitudes of athletes towards environment, determined that the ecocentric attitudes of athletes towards the environment were higher than the anthropocentric and antipathetic attitudes. Karahan (2009) found that the students of Nursing Department have ecocentric and anthropocentric attitudes towards the environment. Özata Yücel, Özkan (2014) argued in their study that many of the science teacher candidates perceived the environment as human-centred. In the study conducted on Turkish teacher candidates, it was found that gender change in environmental ecocentric attitudes constituted a significant difference in favour of females (Erten, 2011). Derman and Senemoğlu (2015), in their study, found that there is significant difference in the favour of females at sustainable environmental awareness levels in 9th and 12the grade students. Again, in the study of Alpak Tunç (2015), it is observed that there is a significant difference in favour of female students in the ecocentric attitudes of science teacher candidates towards environment.

In a similar study on teacher candidates, it was determined that the environmental attitudes of teacher candidates, environmental knowledge levels and environmental behaviour constitute significant difference according to gender variables (Diken, Sert Çıbık, 2009; Zayimoğlu, Bayat, Sarı, 2015; Hoşgör, Gündüz Hoşgör, Tosun, 2015; Arık Yılmaz, 2017; Kayalı, 2018). In another study, on the contrary, the environmental awareness levels of teacher candidates do not change according to gender variables (Demircioğlu, Demircioğlu, Yadigaroğlu, 2015; Akçay, Pekel, 2017).

In this study, in years spent in profession variable of governmental official, it was seen that there was a significant difference in anthropocentric attitudes of those with a working history between 6-20 years. At the same time, it can be said that governmental official with a working background of 26-30 years have the lowest anthropocentric attitude scores, and in parallel with the work experience of individuals, they have drifted apart from the human-centred approach and adopted a more environmental-centred approach.

According to the education status variable of governmental official participated in the study, it was found that there was a significant difference in their antipathetic attitudes towards environment and the significant difference is in favour of those with high school education status. According to this result, it can be concluded that individuals with low education levels have a more antipathetic attitude towards the environment, and individuals perceive the importance of the environment better as the education level increases, and they drift away from the antipathetic attitude. In this study conducted on governmental official, there was no significant difference determined on ecocentric and anthropocentric attitudes according to the educational status. Again Akgül, Birinci, Göral and Karaküçük (2017), in their research, found that there was significant difference in antipathetic attitudes of athletes towards the environment in favour of those with high school and lower levels of education.

Here, according to the places of residence of governmental official, it was observed that there was a significant difference in antipathetic attitudes in the favour of those who live in the town. However, the fact that the number of people living in the town is significantly low when compared to the number of people living in the city, the data obtained with statistical result was stated as thought-provoking by the researchers. In the places of

residence variable, there was no significant difference observed in the environment-centred ecocentric and anthropocentric attitudes. In the similar study of Alpak Tunç (2015), in the place of residence for a long-time variable, there was no significant difference observed in the ecocentric, anthropocentric and antipathetic attitudes of the students related to environment. However, Özdemir, Yapici (2010), according to the findings obtained from their studies, argued that those who live in the nature have higher ecocentric and altruistic attitudes towards environment. In another study conducted on the students, it was found that the students in developed cities have a human-centred view of the environment and the students in rural areas have a nature-centred view of the environment (Hosgör, Gündüz Hosgör, Tosun, 2015).

Significant difference was observed in governmental official' ecocentric attitudes in the level of interest variable towards environment. The significant difference is in favour of those who have a high level of interest towards environment. According to this finding, it can be concluded that the love and interest shown towards nature has a positive effect on the environment-centred attitudes of individuals. On the other hand, the antipathetic attitude towards the environment has been observed in those who do not have any interest to the environment. From here, it can be concluded that those who are not interested in the environment may have a negative perception of the environment.

We determined that there is a significant difference in the ecocentric attitudes of governmental official in taking courses related to environment variable in favour of those who do not take courses. The research result is a finding contrary to what is expected. It can be concluded from this result that individuals can develop positive behaviours in their ecocentric attitudes towards the environment through the experiences they gained out of the school. In parallel with this judgment, teacher candidates view TV and radio as an important tool in the awareness of society on environment (Zayimoğlu, Bayat, Sarı 2015; Derman, Senemoğlu 2015). As a result of a similar study, there was no significant difference observed in environmental attitudes and knowledge levels of teacher candidates according to taking environmental course variable (Sadık, 2013). In contrast to these findings, Gözek (2016) found in his study that the environmental knowledge levels and attitudes of teacher candidates who took environmental courses were more advanced than those who did not take environmental courses.

According to the variable of governmental official to participate in any environmental activity, there was a significant difference observed in the favour of those involved in ecocentric attitudes. From here, it can be concluded that the activities carried out by individuals in relation to environment increase the degree of their sensitivity to the environment. In contrast to this study, in Karahan (2009)'s research, it was observed that the variables of nursing department students' membership to an environment related organization did not make a significant difference in ecocentric, anthropocentric and antipathetic attitudes towards the environment. In Sadık (2013)'s study, it was also found that the status of becoming a member of an environmentalist organization did not make any difference in the environmental attitude and knowledge levels of teacher candidates. Again, in this study, a significant difference was foundin antipathetic attitudes of governmental officialin favour of those who do not participate in the activities related to environment. In this study, there was no significant difference related to environment determined in age, graduated university, the place of childhood variables of governmental official in their ecocentric, anthropocentric and antipathetic attitudes.

In line with the findings obtained and evaluated as a result of this study, the following suggestions may be included; Although many of the governmental official are sensitive to the environment, seminars should be given by the institution periodically to improve their attitudes and behaviour on the environment. In particular, the participation of male personnel in practical and encouraging environmental activities, the preference of the graduates of vocational schools and faculty as governmental official, and the enticing of the continuation of high school university education as an open or formal form should be ensured by the state. The fact that the personnel from the countryside is more environmentalist, leads to the conclusion that urban life has drifting people away from environmental sensitivity. As in all developed countries, horizontal settlement should be initiated in our country. Rather than multi-storey houses, detached houses with spacious green areas should be encouraged to live in by the state. In addition to the environment-related courses, applied environmental activities should be organized in schools. Various environmental activities should be carried out for the personnel and supported by the institution.

. . .

References

- Akçay, S. & Pekel, O. (2017). Öğretmen Adaylarının Çevre Bilinci ve Çevresel Duyarlılıklarının Çeşitli Değişkenler Açısından İncelenmesi. İlköğretim Online, 16(3), 1174-1184.
- Akgül, M. B., Birinci, C., Göral, Ş. & Küçükkaya, S.(2017). An investigation of ecocentric and anthropocentric attitudes and antipathy towards environment in athletes. *International Journal of Human Sciences*, 14(4), 3405-3414.
- Arık, A., Yılmaz M. (2017). Fen Bilimleri Öğretmen Adaylarının Çevre Sorunlarına Yönelik Tutumları ve Çevre Kirliliğine Yönelik Metaforik Algıları. *Kastamonu Eğitim Dergisi*, 25(3),1147-1164.
- Atlı, K., Uzun, N., Saraç, C., Sağlam, N. & Sağlam, S. (2015). Öğrencilerin Ekosentrik, Antroposentrik ve Çevreye Yönelik Antipatik Tutumlarının Akademik Başarıları İle İlişkisi. *International Journal of Innovative Research in Education*, 2(1), 39-47.
- Bovenberg, Lans & Sjak Smulders; (1995), "Environmental Quality Pollution-Augmenting Technological Change in a Two Sector Endogenous Growth Model". *Journal of Public Economics*, 1, 369-391.
- Casey, P.J., & Scott K. (2006). Environmental concern and behaviour in an Australian sample within an ecocentrik antropocentric framework. *Australian Journal of Psychology*, *58*(2), 57 67.
- Çevre Kanunu. (1983). http://www.mevzuat.gov.tr (Erişim Tarihi: 26.05.2018)
- Demircioğlu, G., Demircioğlu, H. & Yadigaroğlu, M. (2015). Fizik, Kimya Ve Biyoloji Öğretmen Adaylarının Çevre Bilinç Düzeylerinin Değerlendirilmesi. *AdıyamanÜniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 2015(19), 167-193.
- Derman, İ. & Senemoğlu, N. (2015). Ortaöğretim 9 ve 12. Sınıf Öğrencilerini Sürdürülebilir Çevre Bilinci Düzeyleri. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 48(2), 61-82.
- Diken, E. H., Sert, Çıbık, A. (2009). İlköğretim Bölümü Öğretmen Adaylarının Çevre Bilincinin Cinsiyete Göre Değişiminin İncelenmesi. Bayburt Üniversitesi Eğitim Fakültesi Dergisi 4(1), 14-25.
- Drabo, A. (2010). Interrelationships between Health, Environment Quality and Economic Activity: What Consequences for Economic Convergence, pp. 1-34, Internet

- Address: https://halshs.archivesouvertes.fr/halshs-00552995, Date of Access: 12 05 2015
- Drager R. M. & Chandler E. W. (1993). Antropocentric Construct Validity And Measurement. *Journal Social Behavior and Personality*, 8, 169-188.
- Ecevit, E., & Çetin, M. (2016). Ekonomik Büyüme ve Çevre Kirliliğinin Sağlik Üzerindeki Etkisi: Türkiye İle İlgili Ampirik Kanit. *Erciyes Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 2016 (48), 83-98.
- Ersoy Quadır, S. (2015). Kamu Çalışanlarının Çevre Bilinçleri Üzerine Bir İnceleme (SelçukÜniversitesi, Konya Örneği). *Selçuk Üniversitesi Sosyal Bilimler Meslek Yüksek Okulu Dergisi*,17(1), 107-129.
- Erten, S. (2004). Çevre Eğitimi ve Çevre Bilinci Nedir, Çevre Eğitimi Nasıl Olmalıdır? *Çevre ve İnsan Dergisi, Çevre ve Orman Bakanlığı Yayın Organı*, 65/66, 1-13.
- Erten, S. (2007). Ekosentrik, Antroposentrik ve Çevreye Yönelik Antipatik Tutum Ölçeğinin Türkçeye Uyarlama Çalışması. *Eğitim Araştırmaları Dergisi, 28*, 67-74.
- Erten, S. & Aydoğdu, C. (2011). Türkiyeli ve Azerbaycanlı Öğrencilerde, Ekosentrik, Antroposentrik ve Çevreye Karşı Antipatik Tutum Anlayışları. *Hacettepe* Üniversitesi Eğitim Fakültesi Dergisi, *41(41)*, 158-169.
- Gangadharan, L. & Valenzuela, M. R. (2000). Interrelationships between Income, Health and the Environment: Extending the Environmental Kuznets Curve Hypothesis. *Ecological Economics*, 36, 513-531.
- Graham, L. E., Graham, J. M., & Wilcox, L. W. (2004). Bitki Biyolojisi. Ankra: Palme Yayıncılık.
- Hoşgör, H., Gündüz Hoşgör, D. & Tosun, N. (2015). Sağlık Bilimleri Fakültesi Öğrencilerinin Çevreye Yönelik Tutumlarının Belirlenmesi: Kıyaslamalı Bir Analiz. *Sağlık Bilimleri ve Meslekleri Dergisi*, 2(2), 198-208.
- Karaca, C. (2008). Çevre, İnsan ve Etik Çerçevesinde Çevre Sorunlarına ve Çözümlerine Yönelik Yaklaşımlar. *Çukurova Üniversitesi İktisadi İdari Bilimler Fakültesi Dergisi*, 12(1), 19-33.
- Karademir, A.H., Uludağ, G. & Cingi, M. A. (2017). Okul Öncesi Öğretmen Adaylarının Sürdürülebilir Çevreye İlişkin Davranış Düzeylerinin İncelenmesi. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, 1(41), 120-136.
- Karahan, G. (2009). Hemşirelik Öğrencilerinin Ekosentrik, Antroposentrik Ve Çevreye Yönelik Antipatik Tutumları. (Master's thesis). İstanbul Universitesi, İstanbul.
- Karakoç, A. G. (2004). Çevre Sorunlarına Etik Yaklaşım. Çevre Sorunlarına Çağdaş Yaklaşımlar: Ekolojik, Ekonomik, Politik ve Yönetsel Perspektifler içinde (Marin, M.C. veYıldırım, U., Eds.), Beta yayıncılık, 59-74, İstanbul.
- Katrakilidis, Constantinos; Ilias Kyritsis & Visvabharati Patsika; (2016). The Dynamic Linkages between Economic Growth, Environmental Quality and Health in Greece. *Applied Economics Letters*, 23(3), 216-221.
- Kayalı, H. (2018). Din Kültürü ve Ahlak Bilgisi Öğretmen Adaylarının Çevre Okuryazarlığı Üzerine Bir Araştırma. *Marmara Coğrafya Dergisi*, 37, 63-69.
- Keleş, R., Hamamcı, C. & Çoban, A. (2009). ÇevrePolitikası. Ankara: İmgeYayınevi
- Kortenkamp, K. V. & Moore, F. C. (2001). Ecocentrism and Anthropocentrism: Moral Reasoning About Ecological Commons Dilemmas. *Journal of Environmental Psychology*, 21, 261-272.
- MacKinnon, B., & Fiala, A. (2014). Ethics: Theory and Contemporary Issue. Nelson Education.
- Özdemir, A., & Yapıcı, E. (2010). Öğretmen Adaylarının Çevre Sorunlarına Yönelik Farkındalık ve İlgi Düzeylerinin Karşılaştırılması. *Anadolu Doğa Bilimleri Dergisi* 1(1).
- ÖzataYücel, E., & Özkan, M.(2014). Fen Bilimleri Öğretmen Adaylarının Çevre Algılarının Kelime İlişkilendirme Aracılığıyla Belirlenmesi. *e-Uluslararası Eğitim Araştırmaları Dergisi*, 5(4), 41-56.

- Sadık, F. (2013). Öğretmen Adaylarının Çevresel Tutum ve Bilgi Düzeylerinin Çeşitli Değişkenler Açısından İncelenmesi. *Pegem Eğitim ve Öğretim Dergisi*, 3(4), 69-82.
- Thompson, S.C.G. & Barton, M.A. (1994). Ecocentric and anthrocentric attitudes toward the environment. *Journal of Environmental Pschology*, 14,149-157.
- Tunç Alpak, G. (2015). Fen Bilgisi Öğretmen Adaylarının Çevreye Yönelik Etik Yaklaşımları İle Sürdürülebilir Çevreye Yönelik Tutumlarının İncelenmesi. (Mater's thesis). Adnan Menderes Universitesi, Aydın.
- Uyanık, G. (2016). Öğretmen Adaylarının Çevre Sorunlarına İlişkin Bilgi Düzeylerinin ve Tutumlarının İncelenmesi. *Online Fen Eğitimi Dergisi*, 1(1),30-41.
- Zayimoğlu Öztürk, F., Bayat, S. & Sarı. D. (2015). Öğrencilerin 4. Sınıf Sosyal Bilgiler Öğretim Programındaki Çevreyle İlişkili Kavramları İfade Etme Durumları. *Abant* İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi, 15(1), 216-230.

KAMU PERSONELİNİN SÜRDÜRÜLEBİLİR ÇEVRE AÇISINDAN TUTUMLARI

Arefe YURTTAŞ*

Kastamonu Universitesi, Kastamonu/Türkiye Atila ÇAĞLAR

Kastamonu Universitesi, Kastamonu/Türkiye

Özet (Turkish Abstract of Paper)

Dünyadaki tüm canlılar için yaşamın devamlılığının ilk koşulu yaşanabilir çevredir. Dolayısıyla doğal çevre tüm bireyler için vazgeçilmez bir ortam oluştururken çevreye verilen zararlar her canlı türünü önemli ölçüde ilgilendirmektedir. Nüfus ve yoğunluğun artmasıyla ortaya çıkan çevresel problemler ülkeleri önlem almaya ve daha çevreci bireyler yetiştirmeye zorlamaktadır. Özellikle bilinçsizce yapılan çevre kıyımları ve aşırı tüketimin neticesinde ortaya çıkan atıklar büyük bir sorun olmaktadır. Çevre her ne kadar bütün canlıların birlikte yaşadığı bir ortam olsa da çevreye karşı en büyük olumsuz etkiyi insan türü yapmaktadır.

Çevre konularında yapılan çalışmalar genellikle eğitimciler ve öğrencileri kapsayan eğitim ortamları üzerine odaklanmaktadır. Oysaki çevre ile ilgili olumlu veya olumsuz tüm olaylar toplumun bütünü tarafından dikkatlice takip edilmektedir. Bireylerin genellikle çevreye karşı tutumlarının ya insan merkezli (Antroposentrik) ya çevre merkezli (Ekosentrik) ya da tamamen çevre karşıtı olduğu bilinmektedir. Bu çalışma kamuda fiilen çalışan değişik branşta 300 personele uygulanmış ve onların bu üç tutumdan hangisine daha yatkın oldukları ve bunlara etki eden demografik özelliklerinin neler olduğunu ortaya çıkarmak için yapılmıştır. Uygulanan anket çevre merkezli tutumları ölçen 12, insan merkezli tutumları ölçen 8, çevreye yönelik antipatik tutumları ölçen 7 maddeden oluşan toplamda 27 madde içeren 7 ölçekli likert tipindedir. Ayrıca demografik özelliklerin yer aldığı başka bir anket de uygulanarak kişiler hakkında daha detaylı bilgiler alınmıştır. Kamu personelinin çevreye yönelik olarak göstermiş olduğu davranışlarda ekosentrik tutumun daha yüksek olduğu tespit edilmiştir. Çevreye göre antipatik tutumlarda erkeklerin negatif olarak anlamlı farklılık gösterdiği bulunmuştur. Yaşanılan yer değişkeninde de çevreye yönelik ekosentrik ve antroposentrik tutumlarda anlamlı farklılık gözlenmemiştir.

Anahtar kelimeler: Çevresel davranış, antroposentrik ve ekosentrik tutumlar sürdürülebilir çevre.

