http://www.tayjournal.com
https://dergipark.org.tr/tr/pub/tayjournal

Investigation of Attitudes towards Solid Waste and Recycling from a Social Perspective*

Kadir Karatekin, Prof. Dr.
Kastamonu University, Türkiye
kkaratekin@kastamonu.edu.tr
Orcid ID: 0000-0003-3807-7030

Sibel Oğuz Haçat, Associate Prof.
Kastamonu University, Türkiye
soguz@kastamonu.edu.tr
Orcid ID: 0000-0002-0764-1279

Fatıma Betül Demir, Dr., Corresponding Author
Bartın University, Türkiye
bdemir@bartin.edu.tr
Orcid ID: 0000-0002-3573-6160

Article Type: Research Article
Received Date: 07.09.2022
Accepted Date: 19.03.2023
Published Date: 31.03.2023
Plagiarism: This article has been reviewed by at least two referees and scanned via a plagiarism software
Doi: 10.29329/tayjournal.2023.537.08

Citation: Karatekin, K., Oğuz Haçat, S., & Demir, F. B. (2023). Investigation of attitudes towards solid waste and recycling from a social perspective. *Türk Akademik Yayınlar Dergisi (TAY Journal), 7*(1), 152-178.

*This study is an extended version of the study presented as an oral presentation at the IV. International Congress of Eurasian Social Sciences.

Abstract

Today, where the amount of consumption is increasing rapidly, waste management, which gains importance as recycling, recovery and reuse, is important how it is evaluated by the individuals who make up the social structure. Based on this idea, it was aimed to determine the attitudes of individuals from different sociocultural and socioeconomic levels towards solid waste and recycling in terms of various variables and to bring a social perspective to this issue. Scanning model was used in the research. "Attitude Scale Towards Solid Waste and Recycling" was used as a data collection tool. The sample of the research consists of 558 participants from different socioeconomic and sociocultural structures in line with the principle of voluntary participation. As a result of the research, it is seen that the attitudes of the participants towards solid waste and recycling are at a high level. In addition, it has been determined that various variables have an effect on the attitudes of the participants towards solid waste and recycling. Solid waste and recycling are subjects related to every aspect of life. From this point of view, it should be ensured that all individuals in the society develop their knowledge, behaviors and attitudes about solid waste and recycling.

Keywords: Solid waste, recycling, attitude, society.

Introduction

The natural environment in which we live, influence and are affected; It has been among the important agenda items of the world in the first quarter of the 21st century, as it was in the last quarter of the 20th century. The reason for this is that the relationship between man and the environment constantly develops against the environment and therefore people are faced with great problems. The environment can be defined as environmental problems that arise as a result of human interaction, and events that directly or indirectly affect the balance in the lives of living beings in nature (Güney, 1992, p. 3). It is possible to examine environmental problems under different main headings: problems arising from natural, human, economic, climate, hydrography, soil and vegetation characteristics (Özey, 2011). At first, societies did not pay much attention to the environmental problems mentioned above. However, environmental problems have begun to be noticed when situations such as global diseases, nutrition problems, radiation, and the decrease in natural resources have begun to affect them negatively (Çimen and Yılmaz, 2012). Therefore, cooperative actions between countries were needed to find solutions to global environmental problems (Hoel, 1991). Environmental issues were brought to the agenda for the first time at the international conference held in Stockholm in 1972 and attended by 113 countries. After this conference, environmental problems started to be discussed widely. the establishment of the United Nations Environment Program in 1974; It was the first meeting of the United Nations on sustainable development in Rio in 1993, the meeting of the World Conservation Union in 1994, the signing of the Kyoto Protocol in 1997, and the meeting of the 2002 United Nations World Sustainable Development Summit (Akıncı, 1996; Savaşçın, 2000; Özsoy, 2012). Although there are many important developments that deal with environmental problems, a definite solution to these problems has not been found and these problems have continued to increase.

Today, one of the important environmental problems is waste. Waste is constantly increasing for reasons such as economic growth, industrialization, urbanization and population growth. Wastes affect the environment and people directly or indirectly. These effects can be in biological, chemical and physical properties. Waste diseases such as plague, cholera, dysentery, tuberculosis, rabies, malaria; leakage in landfills causes water and gases. Therefore, wastes have some physical, biological and chemical damages to humans and other living things (Palabıyık, 2001). In order to prevent these

damages, waste management aiming at production and consumption without or with the least waste should be implemented effectively (Altınışık, 2014). Recycling, which is the most important element of waste management, is the recycling of recyclable wastes into secondary raw materials with various physical or chemical methods and reintegrating them into the production process (Ak and Genç, 2018). Solid waste management, which is one of the waste management, is the proper accumulation, collection and evaluation of urban wastes. Solid wastes constitute a major problem for human health and the environment (Cici, Şahin, Görgen and Deniz, 2005; Sharholy, Ahmad, Mahmood and Trivedi, 2008). Therefore, solid waste management is important for the living conditions of all living things, especially on a national and international scale. For this reason, it can be said that it is necessary to examine the solid waste management that comes with the increasing environmental problems of the 21st century in a social context in order to solve the solid waste problem.

For the solution of environmental problems, it is necessary to develop different perspectives in individuals by examining the concepts, ideas, experiences, values and lifestyles that lead individuals to establish a wrong relationship with the environment (Ünder, 1996). This can undoubtedly be achieved with an effective, life-oriented environmental education. With environmental education, it is aimed to provide individuals with positive and permanent behavioral changes and to ensure the active participation of individuals in the solution of problems (Şimşekli, 2004). When these goals are realized, it will be possible to talk about the existence of individuals who are environmentally conscious, who behave towards environmental protection, who produce less waste by reducing their consumption, and who know the importance of recycling for the environment. Therefore, environmental education should be included in the education process for the development of environmentally sensitive and responsible societies (Sauvé, 1996). According to Eryılmaz (2017, p. 171), with the increasing acceptance of environmental problems in the 20th century in the society and in the international arena, the environmental issue has begun to find a wider place in social sciences. Because, educational, psychological, sociological, economic, ideological, political, management, participation and cultural factors are effective and determinant in the behavior of individuals in environmental issues (Uzunoğlu, 1996; Karaca, 2018). Man is a product of the environment he lives in because he is a social being. The sociocultural environment constitutes the memory, behavior and personality of individuals (Ünal, 2010). Therefore, the way societies perceive the environmental problem, their reactions and sensitivities to the problems differ in terms of the cultural and economic development level, shape and degree of the society they live in. Therefore, environmental problems should be examined in the context of environmental sociology by considering social variables (Özdemir, 1988; Konak, 2010). As a matter of fact, the social roles and social status of individuals affect their routines, habits, daily behaviors such as shopping and consumption. Therefore, it can be said that individuals' environmental protection or non-environmental behaviors are affected by their social roles and status.

According to the cultural characteristics of social life, factors such as gender, age, education level, occupation, which determine the social role and status of individuals as well as their individual identity and personality, are important social variables. While gender, one of these factors, affects the identity and personality of individuals, their social roles and statuses, and their attitudes towards events, the age factor is an important variable that affects individuals' personal and social behaviors, perceptions and attitudes. Educational status, which is another factor, affects every aspect of individuals' lives by determining their role and status in the society they live in. The occupational factor, on the other hand, affects the perceptions, attitudes and expectations of individuals as a phenomenon that determines their

place in society (Akyüz, 1991; Karakaş, 2003; Keskin Gürel, 2008). In short, social stratification and the positions of people are very effective and decisive in their daily lives (Çelik, 2015). This is also true for environmental behavior. For example, the possibilities and abilities of coping with, avoiding or compensating for the risk situation related to environmental problems differ between different vocational and educational levels (Beck, 2010 as cited in Karaboğa, 2016).

Sociologists find it important to understand and explain society through professions, since they include many social indicators in their body (Aytaç, 2003, p. 16). Therefore, occupation is one of the important elements of social classification (Laroque, 1969). Occupation primarily affects the social status and income level of the individual and his/her family. In addition, the profession determines who and how the individual spends his/her daily life. It also affects the mental and physical health of the individual. In addition to these, the profession has the power to change the ideas, values, measures and behaviors of the individual (Eke, 1987). In addition, it can be said that it affects many factors such as individuals' habits, behaviors, thoughts, skills, values, child-rearing techniques, nutrition, and speech (Ergün, 1994).

In industrialized countries, professional groups such as doctors, lawyers, engineers and teachers, who have completed their organization, participate much more actively in political, economic and cultural activities (Cirhinlioğlu, 1996, p. 7). The leaders of the professions, like the aforementioned occupational groups, are generally aware of their social identity (Goode, 1996). In this respect, having a job and a profession has positive effects on one's life and character. In this sense, the work of the individual determines the daily life of the individual and the general flow of them life (Ergün, 1994). In this context, the applications to be made in the solution of environmental problems may vary according to demographic differences (Baldassare & Katz, 1992). Therefore, it can be said that factors such as education, profession, age have an impact on the way individuals perceive environmental problems and their sensitivity to environmental problems.

When the literature on the subject is searched; Ebreo, Hershey and Vining (1999) examined the relationship between individuals' beliefs about environmentally conscious consumerism regarding solid waste issues and environmental attitudes, motivations and recycling behaviors; Cici, Şahin, Görgen and Deniz (2005) examined the environmental awareness and knowledge levels of teacher candidates in the context of solid waste pollution in terms of teacher candidates studying at different universities; Akdoğan and Güleç (2007) examined the attitudes and thoughts on solid waste management in terms of municipal administrators; Çimen and Yılmaz (2012) examined primary school students' knowledge and recycling behaviors in terms of different grade levels and gender; Demirbağ and Güngörmüş (2012) examined the knowledge and behaviors of individuals regarding domestic solid waste management in terms of age, marital status, education and socioeconomic status, occupation, social security and the number of people living at home; Karatekin and Merey (2015) examined the attitudes of social studies teacher candidates towards solid waste and recycling in terms of various variables; It is seen that Ak and Genç (2018) examined the recycling perception and recycling behaviors of university students.

In this study, in order to determine the attitudes of individuals towards waste and recycling, gender, age, education level, occupation (housewife, worker, farmer, civil servant, student, teacher, academician, tradesman, youth, religious officer), income status, environmental problems. The variables of interest about the environmental protection association and membership status are discussed. How solid waste and recycling are perceived by various layers of society is a matter of curiosity both within

the framework of environmental sociology and environmental education. Based on the hypothesis that individuals may show different attitudes in different socio-demographic variables, this study aims to measure how individuals perceive solid waste and recycling. In this direction, the general aim of this research is to determine the attitudes of individuals with different sociocultural and socioeconomic levels towards solid waste and recycling in terms of various variables. For this purpose, answers to the following questions are sought:

1. What is the level of individuals' attitudes towards solid waste and recycling?

2. Do individuals' attitudes towards solid waste and recycling differ according to their gender?

3. Do individuals' attitudes towards solid waste and recycling differ according to their age?

4. Do individuals' attitudes towards solid waste and recycling differ according to their education level?

5. Do individuals' attitudes towards solid waste and recycling differ according to their occupations?

6. Do individuals' attitudes towards solid waste and recycling differ according to their income?

7. Do individuals' attitudes towards solid waste and recycling differ according to their level of interest in environmental problems?

8. Do individuals' attitudes towards solid waste and recycling differ according to their membership in the environmental protection association?

Method

The Research Method

In the research, scanning model was used in order to reveal the attitudes of individuals from different sociocultural and socioeconomic levels towards solid waste and recycling. The scanning model is the description of a situation that existed in the past or still exists by the researcher, without changing the event, object, or individuals, without having an experimental effect on them (Karasar, 2012). Since this research aims to describe the attitudes of individuals towards solid waste and recycling, and to examine how some variables that may be effective on these attitudes differentiate individuals' attitudes, the research was designed with a survey model.

Participant Group

The population of the research consists of individuals over the age of 18 living in Turkey. Maximum variation sampling method, one of the purposive sampling methods, was used to determine the sample of the study. For this reason, individuals with different sociocultural and economic lives were chosen as the sample of the research. Maximum diversity sampling was chosen in the research to determine what kind of similarities there are between the situations that show diversity (Yıldırım and Şimşek, 2016). In this context, the sample of the research consists of a total of 558 individuals from different socio-cultural and economic life levels, in line with the principle of voluntary participation. Information about the sample of the study is given in Table 1.

Table 1. *Distribution of the individuals participating in the study according to the variables*

Gender	*f*	%	Occupation	*f*	%
Female	268	48,0	Religious comissary	73	13,1
Male	290	52,0	Teacher	72	12,9
Age			Housewife	62	11,1
18-25 years old	135	24,2	Officer	56	10,0
26-40 years old	292	52,3	Employee	55	9,9
41-55 years old	108	19,4	Not working (young group)	50	9,0
56 years and older	23	4,1	Small business	49	8,8
Educational level			Academician	49	8,8
Primary school	20	3,6	Student	48	8,6
Middle school	27	4,8	Farmer	44	7,9
High school	96	17,2	Income status		
Associate degree	97	17,4	No income	91	16,3
Licence	222	39,8	1000 and below	45	8,1
Graduate	96	17,2	Between 1001-2000	33	5,9
State of interest in environmental issues			Between 2001-3000	81	14,5
Yes (Related)	523	93,7	Between 3001-5000	185	33,2
No (Not relevant)	35	6,3	5001 and above	123	22,0
Environmental protection association membership status			Total	558	100
Member	29	5,2			
Not a member	529	94,8			
Total	558	100			

The Data Collection

"Attitude Scale Towards Solid Waste and Recycling" developed by Karatekin (2013) was used as a data collection tool in the research. The measurement tool consists of 33 items in total. The scale has a five-point Likert-type feature as strongly agree (5), agree (4), undecided (3), disagree (2), strongly disagree (1). The scale consists of three dimensions. These dimensions are "Entrepreneurship and participation", "Belief" and "Interest and sensitivity". The Cronbach alpha reliability coefficient calculated to determine the reliability of the scale was determined as .882 for the first factor, .882 for the second factor and .877 for the third factor. The Cronbach alpha reliability coefficient of these three dimensions is over 0.70 (Karatekin, 2013). A "Personal Information Form" was added to the data collection tool by the researchers. In this form, questions about the demographic information of the participants (gender, age, educational status, occupation, income status, interest in environmental problems, membership in environmental protection association) were included.

Data Collection Process

The collection process of the research data was carried out through a questionnaire consisting of personal information and an attitude scale towards solid waste and recycling. As the data was collected during the pandemic process, the questionnaire was collected both face-to-face and online, taking into account the relevant conditions. The scale items were transferred to Google Form by the researchers and the online link link was shared with the participants. Simultaneously, the scale form was applied face-to-face by the researchers within the conditions of accessibility to the participants. Participation in the research was based on volunteerism and the consent of the participants was obtained. The application time of the form is approximately 5-10 minutes. The period of obtaining all the data of the study is 60 (2 months) days.

The Data Analysis

The data collected in the research were analyzed with the SPSS program regarding the sub-problems determined. First of all, negative items (1, 4, 5, 6, 8, 9, 10, 15, 16, 17, 20, 25, 31, 32) in the data collection tool were recoded, and total scores were calculated and analyzes were made on these scores. The t test (Independent Sample t Test) was used to determine whether the total scores differ in terms of gender, interest in environmental problems, and environmental protection association membership status variables; Analysis of ANOVA (one-way analysis of variance) was conducted to determine whether there was a difference in age, occupation, education and income status variables. The level of significance in the analyzes was determined as 0.05. Evaluation intervals were determined in order to determine the level of attitudes of the participants towards solid waste and recycling. These:

1	1.80 is too low
1.81	low between 2.60
2.61	between 3.40 medium
3.41	between 4.20 high
Between 4.21	5.00 was determined as a very high level.

Ethical Permits of Research

All rules stated to be complied with within the scope of "Higher Education Institutions Scientific Research and Publication Ethics Directive" were followed in this study. None of the actions mentioned under the heading of "Actions Against Scientific Research and Publication Ethics", which is the second part of the directive, have been carried out.

Ethics Committee Permission Information:

Name of the committee that made the ethical evaluation = Kastamonu Universit, Social and Human Sciences Research and Publication Ethics Commission

Date of ethical review decision= 25.03.2021

Ethics assessment document issue number= 1/49

Findings

Findings on Solid Waste and Recycling Levels of Individuals

The levels of individuals regarding the scores they got from the Attitudes Towards Solid Waste and Recycling Scale are given in Table 2.

Table 2. *Levels of individuals regarding solid waste and recycling*

Waste and Recycling	N	$\bar{X}$	S
Entrepreneurship and Participation	558	3,65	7,74
Belief	558	3,86	3,78
Interest and Sensitivity	558	4,02	5,16
Total	558	3,82	13,91

As seen in Table 2, the average score of the answers given by the participants to the Attitude Scale towards Solid Waste and Recycling is $\bar{X}$ =3.82. The average score for the answers to the Entrepreneurship and Participation dimension is $\bar{X}$=3.65, the average score for the Belief dimension is $\bar{X}$=3.86, and the average score for the Interest and Sensitivity dimension is $\bar{X}$=4.02. According to these results, it can be said that the attitudes of the participants towards solid waste and recycling are high.

When the solid waste and recycling dimensions are examined, it is seen that the solid waste and recycling attitudes of the participants are high for each dimension. The dimension with the lowest average is entrepreneurship and participation.

Findings and Interpretations on the Difference of Individuals' Attitudes towards Solid Waste and Recycling Scale Scores by Gender

Table 3 shows the results of the t-test performed to determine whether there is a significant difference in the Attitudes Scale towards Solid Waste and Recycling Scale scores of individuals according to the gender variable.

Table 3. T-*Test Results for differences in individuals' attitudes towards solid waste and recycling scale scores by gender*

	Dimensions	Gender	N	$\bar{X}$	S	sd	T	p
Solid Waste and Recycling	Entrepreneurship and Participation	Female	268	52,07	7,19	556	2,515	,012
		Male	290	50,43	8,16			
	Belief	Female	268	31,08	3,78	556	1,213	,226
		Male	290	30,69	3,78			
	Interest and Sensitivity	Female	268	44,51	5,12	556	1,058	,291
		Male	290	44,04	5,20			
	Total	Female	268	127,67	13,56	556	2,123	,034
		Male	290	125,17	14,15			

In the entrepreneurship and participation sub-dimension, the average of female participants was calculated as $\bar{X}$=52.07, and the average of male participants was calculated as $\bar{X}$=50.43. A significant difference was found in entrepreneurship and participation sub-dimension scores according to gender [$t_{(556)}$ = 2,515; p<0,05]. This difference is in favor of female participants. According to this finding, it can be said that female participants are more sensitive than male participants in taking action and behaving towards solid waste and recycling.

In the belief sub-dimension, the average of female participants was calculated as $\bar{X}$=31,08, and the average of male participants was calculated as $\bar{X}$=30.69. There was no significant difference in belief sub-dimension scores according to gender [$t_{(556)}$ = 1,213; p>0,05].

In the sub-dimension of interest and sensitivity, the average of female participants was calculated as $\bar{X}$=44.51, and the average of male participants was calculated as $\bar{X}$=44.04. There was no significant difference according to gender in the scores of interest and sensitivity sub-dimensions [$t_{(556)}$ = 1,058; p>0,05].

The average of the scores of the female participants in the solid waste and recycling scale was calculated as $\bar{X}$=127.67, and the average of the male participants was calculated as $\bar{X}$=125.17. Solid waste and recycling scale scores show a significant difference according to the gender of the participants [$t_{(556)}$ = 2,123; p<0,05]. This difference is in favor of female participants. According to these findings, it can be said that female participants have more positive attitudes towards solid waste and recycling than male participants.

Findings and Interpretations on the Differences in Individuals' Attitudes Towards Solid Waste and Recycling Scale Scores by Age Level

The results of the ANOVA analysis performed to determine whether there is a significant difference in the scores of the Attitudes towards Solid Waste and Recycling Scale of the individuals according to the age level are given in Table 4.

Table 4. *One-Way analysis of variance for age differences in individuals' attitudes towards solid waste and recycling scale scores*

Dimensions	Source of Variance	KT	sd	KO	F	P	Significant Difference
Entrepreneurship and Participation	Between groups	180,725	3	60,242	1,003	,391	-
	Within groups	33263,162	554	60,042			
	Total	33443,887	557				
Belief	Between groups	126,304	3	42,101	2,965	,032	2-4
	Within groups	7867,125	554	14,201			
	Total	7993,428	557				
Interest and Sensitivity	Between groups	359,244	3	119,748	4,574	,004	2-1
	Within groups	14504,894	554	26,182			
	Total	14864,138	557				
Total	Between groups	1580,797	3	526,932	2,746	,042	2-4 3-4
	Within groups	106301,922	554	191,881			
	Total	107882,719	557				

Entrepreneurship and participation sub-dimension scores of the participants did not differ significantly by age [$F_{(3-554)=}$ 1,003; p>0,05].

The belief sub-dimension scores of the participants showed a significant difference according to age level [$F_{(3-554)=}$ 2,965; p<0,05]. According to the results of the Bonferroni test, which was conducted to determine between which groups the difference was, the average belief score of the participants aged between 26-40 ($\bar{X}$=31,18) and the average of belief score of the participants aged 56 and over ($\bar{X}$=29.00) were found to be between the ages of 26-40. in favor of the participants. According to this finding, it can be said that the participants aged between 26-40 have higher beliefs about reducing waste and the benefits of recycling.

Participants' interest and sensitivity sub-dimension scores showed a significant difference according to age level [$F_{(3-554)=}$ 4,574; p<0,05]. According to the results of the Scheffe test, which was conducted to determine between which groups the difference was, the mean interest and sensitivity score of the participants aged between 18-25 ($\bar{X}$=43.27) and the mean score of interest and sensitivity of the participants aged between 26-40 ($\bar{X}$=44.91) in favor of the participants aged between 26-40.

The scores of the participants from the solid waste and recycling scale in general showed a significant difference according to the age level [$F_{(3-554)=}$ 2,746; p<0,05]. According to the results of the LSD test, which was conducted to determine between which groups the difference was, the mean score of the participants aged between 26-40 ($\bar{X}$=127,35) and the mean score of the participants over the age of 56 ($\bar{X}$=120.60) were in favor of the participants aged between 26-40. There is a significant difference. A significant difference was found between the mean score of the participants aged 41-55 ($\bar{X}$=127,35)

and the mean score of the participants aged 56 and over ($\bar{X}$=120.60) in favor of the participants aged 41-55.

When the average scores of both the overall total and sub-dimensions of the scale are examined, it is seen that the younger and older participants have lower attitudes towards solid waste and recycling.

Findings and Comments on the Differences in Individuals' Attitudes towards Solid Waste and Recycling Scale Scores by Education Level

The results of the ANOVA analysis performed to determine whether there is a significant difference in the scores of the Attitudes towards Solid Waste and Recycling Scale of the individuals according to the level of education are given in Table 5.

Table 5. *One-Way analysis of variance for the differences in ındividuals' attitudes towards solid waste and recycling scale scores by education level*

Dimensions	Source of Variance	KT	Sd	KO	F	P	Significant Difference
Entrepreneurship and Participation	Between groups	730,827	5	146,165	2,466	,032	1-4, 1-6 2-4, 2-6 3-4, 3-6
	Within groups	32713,060	552	59,263			
	Total	33443,887	557				
Belief	Between groups	126,304	5	112,018	8,318	,000	1-4, 1-5 1-6, 2-4
	Within groups	7867,125	552	13,466			
	Total	7993,428	557				
Interest and Sensitivity	Between groups	359,244	5	161,624	6,347	,000	1-4, 1-5 1-6
	Within groups	14504,894	552	25,464			
	Total	14864,138	557				
Total	Between groups	1580,797	5	1165,779	6,306	,000	1-4, 1-6 2-6
	Within groups	106301,922	552	184,880			
	Total	107882,719	557				

The entrepreneurship and participation sub-dimension scores of the participants showed a significant difference according to the education level [$F_{(5-552)=}$ 2,466; p<0,05]. According to the results of the Scheffe test, which was conducted to determine between which groups the difference was, the average score of the participants at the postgraduate level ($\bar{X}$=51.89), the average score of the participants at the primary school education level ($\bar{X}$=47.50), and the average score of the participants at the high school education level($\bar{X}$=49.60) in favor of the participants who are at the postgraduate level; The average score of the participants at the undergraduate education level ($\bar{X}$=51.81) and the average score of the participants at the high school education level($\bar{X}$=49.60) and the average score of the participants at the primary education level ($\bar{X}$=47.50) in favor of the participants at the undergraduate education level; The average score of the participants with associate degree education ($\bar{X}$=51,88) and the average score of the participants with high school education ($\bar{X}$=49.60) and the participants with primary education level ($\bar{X}$=47.50) in favor of the participants with associate degree education significant difference was found.

The belief sub-dimension scores of the participants showed a significant difference according to the education level [$F_{(3-552)=}$8,318; p<0,05]. According to the results of the Scheffe test, which was conducted to determine between which groups the difference was, the average score of the participants at the graduate level ($\bar{X}$=32.13) and the average score of the participants at the high school education level ($\bar{X}$=29.51), the average score of the participants at the secondary education level ($\bar{X}$=29.40) and the average score of the participants at the primary school education level ($\bar{X}$=28.60) in favor of the

participants at the graduate education level; A significant difference was found between the mean score of the participants at the undergraduate education level ($\bar{X}$=31.40) and the average score of the participants at the high school education level ($\bar{X}$=29.51) in favor of the participants at the undergraduate education level. This finding can be interpreted as the higher the education level of individuals, the more they believe in solid waste and recycling.

Participants' interest and sensitivity sub-dimension scores showed a significant difference according to education level [$F_{(3-552)=}$ 6,347; p<0,05]. According to the results of the Scheffe test, which was conducted to determine between which groups the difference was, the average score of the participants at the graduate level ($\bar{X}$=46.08) and the average score of the participants at the high school education level ($\bar{X}$=43.09), the average score of the participants at the secondary education level ($\bar{X}$=43.09) a significant difference was found between the mean score ($\bar{X}$=40.75) of the participants at the primary school education level ($\bar{X}$=42.37) and the participants at the graduate education level in favor of the participants. This finding can be interpreted as the higher the education level, the more interested and sensitive individuals are towards solid waste and recycling.

The scores of the participants from the solid waste and recycling scale in general showed a significant difference according to the education level [$F_{(3-552)=}$ 6,306; p<0,05]. According to the results of the Scheffe test, which was conducted to determine between which groups the difference was, the average score of the participants at the postgraduate level ($\bar{X}$=130.11), the average score of the participants at the high school education level ($\bar{X}$=122.20), and the average score of the participants at the primary school education level ($\bar{X}$=116.85) in favor of the participants who are at the postgraduate level; A significant difference was found between the mean score of the participants at the undergraduate education level ($\bar{X}$=127.74) and the average score of the participants at the primary school education level ($\bar{X}$=116.85) in favor of the participants at the undergraduate education level.

According to these findings, when all dimensions of the scale are evaluated together, it is seen that one of the most important factors affecting the sensitivity of the participants about solid waste and recycling is the level of education. This finding can be interpreted as the higher the education level, the more positive attitudes the participants have towards solid waste and recycling.

Findings and Comments on the Differences in Individuals' Attitudes Towards Solid Waste and Recycling Scale Scores by Occupation

The results of the ANOVA analysis performed to determine whether there is a significant difference in the scores of the Attitude Scale towards Solid Waste and Recycling of the individuals according to the occupational variable are given in Table 6.

Table 6. *One-Way analysis of variance for the differences in ındividuals' attitudes towards solid waste and recycling scale scores by occupation*

Dimensions	Source of Variance	KT	sd	KO	F	P	Significant Difference
Entrepreneurship and Participation	Between groups	1697,366	9	188,596	3,255	,001	2-5 9-5
	Within groups	31746,521	548	57,932			
	Total	33443,887	557				
Belief	Between groups	561,276	9	62,364	4,598	,000	2-7
	Within groups	7432,152	548	13,562			
	Total	7993,428	557				
Interest and Sensitivity	Between groups	1023,782	9	113,754	4,504	,000	2-10
	Within groups	13840,356	548	25,256			
	Total	14864,138	557				
Total	Between groups	7357,744	9	817,527	4,457	,000	2-5
	Within groups	100524,975	548	183,440			
	Total	107882,719	557				

As a result of the analysis, from the solid waste and recycling scale sub-dimensions; The entrepreneurship and participation sub-dimension scores of the participants showed a significant difference according to their occupations [$F_{(9-548)=}$ 3,255; p<0,05]. According to the results of the Tukey test, which was conducted to determine between which groups the difference was, a significant difference was found between the mean score of the participants who were teachers ($\bar{X}$=53.27) and the mean score of the participants who were workers ($\bar{X}$=47.92) in favor of the participants who were teachers. A significant difference was found between the mean score of the participants who were religious officials ($\bar{X}$=53.35) and the mean scores of the participants who were workers ($\bar{X}$=47.92) in favor of the participants who were religious officials.

The belief sub-dimension scores of the participants showed a significant difference according to their occupations [$F_{(9-548)=}$ 4,598; p<0,05]. According to the results of the Scheffe test, which was conducted to determine between which groups the difference was, a significant difference was found between the mean score of the participants who were teachers ($\bar{X}$=32,30) and the mean score of the participants who were tradesmen ($\bar{X}$=29.04) in favor of the participants who were teachers.

Interest and sensitivity sub-dimension scores of the participants showed a significant difference according to their occupations [$F_{(9-548)=}$ 4,504; p<0,05]. According to the results of the Scheffe test, which was conducted to determine between which groups the difference was, a significant difference was found between the mean score of the participants who were teachers ($\bar{X}$=46.31) and the mean score of the participants who were farmers ($\bar{X}$=41.61) in favor of the participants who were teachers.

The overall solid waste and recycling scale scores of the participants showed a significant difference according to the level of education [$F_{(9-548)=}$ 4,457; p<0,05]. According to the results of the Scheffe test, which was conducted to determine between which groups the difference was, a significant difference was found between the mean score of the participants who were teachers ($\bar{X}$=131,90) and the mean score of the participants who were workers ($\bar{X}$=121.03) in favor of the participants who were teachers.

When all dimensions of the scale are evaluated according to these findings, it is seen that the education level of the participants is related to their profession and affects their attitudes towards solid waste and recycling. It can be said that the attitudes of the participants, who are teachers, towards solid waste and recycling are more positive, since teaching is the most sensitive professional group and has

an environmental role. When the descriptive table regarding the profession variable is examined, it is seen that the average of the scores of teachers, civil servants, academicians, youth and religious officials from the solid waste and recycling scale is higher than that of students, housewives, workers, tradesmen and farmers, both in the overall scale and in the sub-dimensions.

Findings and Interpretations on the Differences in Individuals' Attitudes Towards Solid Waste and Recycling Scale Scores According to Income Status

The results of the ANOVA analysis performed to determine whether there is a significant difference in the scores of the Attitudes towards Solid Waste and Recycling Scale of the individuals according to the income status variable are given in Table 7.

Table 7. *One-Way analysis of variance for the differences in ındividuals' attitudes towards solid waste and recycling scale scores by ıncome status*

Dimensions	Source of Variance	KT	sd	KO	F	P	Significant Difference
Entrepreneurship and Participation	Between groups	397,058	5	79,412	1,326	,251	-
	Within groups	33046,830	552	59,867			
	Total	33443,887	557				
Belief	Between groups	360,126	5	72,025	5,208	,000	4-3 5-3
	Within groups	7633,303	552	13,828			
	Total	7993,428	557				
Interest and Sensitivity	Between groups	463,585	5	92,717	3,554	,004	5-1
	Within groups	14400,553	552	26,088			
	Total	14864,138	557				
Total	Between groups	3236,938	5	647,388	3,415	,005	4-3 5-3
	Within groups	104645,780	552	189,576			
	Total	107882,719	557				

Entrepreneurship and participation sub-dimension scores of the participants did not show a significant difference according to their income level [$F_{(5-552)=}$ 1,326; p>0,05].

The belief sub-dimension scores of the participants showed a significant difference according to their income level [$F_{(5-552)=}$ 5,208; p<0,05]. According to the results of the Scheffe test, which was conducted to determine between which groups the difference was, the average score of the participants with 5001 and higher income level ($\bar{X}$=31.52) and the average score of the participants with income level of 3001-5000 ($\bar{X}$=31.50) and income between 2001-3000 a significant difference was found between the mean score ($\bar{X}$=29.48) of the participants with a high income level of 5001 and in favor of the participants with an income level of 5001 and above. This finding can be interpreted as the higher the average income level of individuals, the more they believe in solid waste and recycling. Participants' interest and sensitivity sub-dimension scores showed a significant difference according to their income level [$F_{(5-552)=}$ 3,554; p<0,05]. According to the results of the Scheffe test, which was conducted to determine between which groups the difference was, a significant difference was found between the average score of the participants with an income level of 1000 and below ($\bar{X}$=42.22) and the average score of the participants with an income level of 5001 and above ($\bar{X}$=45.30) in favor of the participants with an income level of 5001 and above. This finding can be interpreted as the higher the income level, the more interested and sensitive individuals are towards solid waste and recycling.

The scores of the participants from the solid waste and recycling scale in general showed a significant difference according to their income level [$F_{(5-552)=}$ 3,415; p<0,05]. According to the results of the Bonferroni test, which was conducted to determine between which groups the difference was, the

average score of the participants with an income level of 5001 and above ($\bar{X}$=128.52), the average score of the participants with an income level of 3001-5000 ($\bar{X}$=128.26), and the income between 2001 and 3000 A significant difference was found between the mean score ($\bar{X}$=122.60) of the participants with a high income level of 5001 and in favor of the participants with an income level of 5001 and above. According to these findings, it can be said that the participants with high income levels have more positive attitudes towards solid waste and recycling.

Findings Concerning the Differences in Individuals' Attitudes towards Solid Waste and Recycling Scale Scores According to Their Interests in Environmental Problems

Table 8 shows the results of the t-test performed to determine whether there is a significant difference in the Attitudes towards Solid Waste and Recycling Scale Scores of individuals according to the variable of interest in environmental problems.

Table 8. *The t-test results for the difference in the attitudes towards solid waste and recycling scale scores of the ındividuals according to their ınterest in environmental problems*

	Dimensions	Interest in Environmental Problems	N	$\bar{X}$	S	sd	T	p
Solid Waste and Recycling	Entrepreneurship and Participation	Yes (Related)	523	51,78	7,36	556	6,92	,000
		No (irrelevant)	35	42,77	8,55			
	Belief	Yes (Related)	523	31,03	3,70	556	3,58	,000
		No (irrelevant)	35	28,68	4,39			
	Interest and Sensitivity	Yes (Related)	523	44,55	4,95	556	5,45	,000
		No (irrelevant)	35	39,77	6,22			
	Total	Evet (İlgili)	523	127,38	13,33	556	6,92	,000
		Hayır (ilgisiz)	35	111,22	13,87			

A significant difference was found in the scores of the entrepreneurship and participation sub-dimension according to the level of interest in environmental problems [$t_{(556)}$= 6.92; p<0.05]. According to this finding, it can be said that participants who are interested in environmental issues in entrepreneurial and participation behaviors towards solid waste and recycling are more sensitive than participants who are not interested in environmental issues.

A significant difference was found in belief sub-dimension scores according to the level of interest in environmental problems [$t_{(556)}$= 3.58; p<0.05]. According to this finding, it can be said that the participants who are interested in environmental problems have higher beliefs about solid waste and recycling than the participants who are not.

A significant difference was found in the scores of the sub-dimension of interest and sensitivity according to the state of interest in environmental problems [$t_{(556)}$=5.45; p<0.05]. According to this finding, it can be said that the participants who are interested in environmental problems are more interested and more sensitive about solid waste and recycling than the participants who are not.

Solid Waste and Recycling Scale Scores show a significant difference according to the participants' level of interest in environmental problems [$t_{(556)}$=6.92; p<0.05]. According to these findings, when all dimensions of the scale are evaluated, it can be said that the participants who are interested in environmental problems have more positive attitudes towards solid waste and recycling than the participants who are not interested.

Findings and Interpretations on the Differences in Individuals' Attitudes Towards Solid Waste and Recycling Scale Scores by Environmental Protection Association Membership Status

Table 9 shows the results of the t-test conducted to determine whether there is a significant difference in the scores of the Attitudes towards Solid Waste and Recycling Scale of the individuals according to the variable of membership to the environmental protection association.

Table 9. *T-Test results for the differences in ındividuals' attitudes towards solid waste and recycling scale scores by environmental protection association membership status*

	Dimensions	Environmental protection association membership status	N	$\overline{X}$	S	Sd	T	P
Solid Waste and Recycling	Entrepreneurship and Participation	Member	29	54,41	8,72			
		Not a member	529	51,04	7,66	556	2,28	,023
	Belief	Member	29	33,10	2,75			
		Not a member	529	30,76	3,80	556	3,26	,001
	Interest and Sensitivity	Member	29	46,75	5,07			
		Not a member	529	44,13	5,14	556	2,67	,008
	Total	Member	29	134,27	14,03			
		Not a member	529	125,94	13,79	556	3,16	,002

A significant difference was found in the scores of the entrepreneurship and participation sub-dimension according to the membership status of the environmental protection association [$t_{(556)} = 2,28$; $p<0,05$]. This difference is in favor of the participants who are members of the environmental protection association. According to this finding, it can be said that the participants who are members of the environmental protection association are more sensitive than the participants who are not members of the environmental protection association in terms of entrepreneurial and participation behaviors towards solid waste and recycling.

A significant difference was found in belief sub-dimension scores according to the membership status of the environmental protection association [$t_{(556)} = 3,26$; $p<0,05$]. This difference is in favor of the participants who are members of the environmental protection association. According to this finding, it can be said that the participants who are members of the environmental protection association have higher beliefs about solid waste and recycling than the participants who are not members of the environmental protection association.

A significant difference was found in the scores of the sub-dimension of interest and sensitivity according to the membership status of the environmental protection association [$t_{(556)} = 2,67$; $p>0,05$]. This difference is in favor of the participants who are members of the environmental protection association. According to this finding, it can be said that the participants who are members of the environmental protection association have a higher interest and sensitivity towards solid waste and recycling than the participants who are not members of the environmental protection association.

Solid waste and recycling scale scores show a significant difference according to the status of being a member of the environmental protection association of the participants [$t_{(556)} = 3,16$; $p>0,05$]. This difference is in favor of the participants who are members of the environmental protection association. According to these findings, when all dimensions of the scale are evaluated, it can be said that the participants who are members of the environmental protection association have more positive attitudes towards solid waste and recycling than the participants who are not members of the environmental protection association.

Discussion and Conclusion

According to the results obtained from the research, it has been determined that individuals' attitudes towards solid waste and recycling are at a high level. Karatekin and Merey (2015) found that social studies teacher candidates generally have positive attitudes towards solid waste and recycling. In a different study that determines the awareness and perception of university students about recycling, it is seen that the awareness of recycling is in certain areas such as homes and streets and that they use recycling at a minimum level in practice (Ak and Genç, 2018). In addition, although there are no studies that directly determine the levels of solid waste and recycling, Cici et al. (2005) found that the knowledge level of teacher candidates on solid waste pollution is not sufficient in their studies; Yücel, Altunkasa, Gucsay, Uslu and Say (2006) found in their study that individuals' environmental sensitivity is at a moderate level; Akdoğan and Güleç (2007), on the other hand, stated that the importance of solid waste management is not yet fully understood and studies on the subject are at the initial level; determined that municipalities' solid waste management is at the initial level. Keskin Gürel (2008), on the other hand, determined that individuals' sensitivity to environmental problems and their level of environmental awareness are not very high.

In the study, it is seen that the average of the attitude score of the participants in the "belief" and "interest and sensitivity" dimensions is high, while the average of the attitude points they get from the "entrepreneurship and participation" dimension is low. It can be said that the participants have positive thoughts, are interested and sensitive about solid waste and recycling activities, but they find less participatory behaviors. It can be said that the participants have positive thoughts, are interested and sensitive about solid waste and recycling activities, but they find less participatory behaviors. This result indicates that in the study conducted by Karatekin and Merey (2015), pre-service teachers' attitude scores in the dimensions of "belief" and "interest and sensitivity" were higher; Names from the "entrepreneurship and participation" dimension show that there is a common point with the result that the mean attitude score is lower than the other dimensions. In another study, it was determined that the mean scores of pre-service teachers' environmental awareness in the dimensions of "organic waste and composting" and "packaging preferences" were at a moderate level, while the averages of the scores they got from the dimensions of "recycling" and "waste reduction" were found to be at a good level (Cici et al., 2005).

The amount of solid waste produced per capita varies according to specific garbage production and its components, socio-economic and cultural structure of the population, consumption habits and many similar factors (Karagözoğlu, Özyonar, Yılmaz and Atmaca, 2009). According to the results obtained from the research, when the total attitude scores of the individuals towards solid waste and recycling are examined, there is a significant difference according to the gender variable. Accordingly, it is seen that female participants' attitudes towards solid waste and recycling are higher than male participants. The reason for this situation can be explained as the feeling of "responsibility towards the environment/nature", which is an important element of environmental awareness, is instinctively reflected in the attitudes and behaviors of women, especially due to its nature (Kabaş, 2004; Kükrer, 2012). In addition, most of the consequences of environmental problems concern women more. This situation necessitates them to manage them with an understanding of environmental management and sustainability (Güneş, 2013). The result of the study that determined the attitudes of social studies teacher candidates towards solid waste and recycling also supports this finding (Karatekin and Merey,

2015). In addition, in different studies related to the subject, it has been determined that women have higher environmental awareness and attitudes towards environmental problems than men (Yücel et al., 2006; Keskin Gürel, 2008; Ünal, 2010).

Another result of the study is that younger participants and older participants have lower attitudes towards solid waste and recycling. In Ericson's personality theory, the transition from adolescence to adulthood defines young age as "intimacy versus isolation". Individuals in this age group are in search of emotional relationships. He defines the middle age segment as "productivity versus stagnation". The task of individuals in this age group is to raise and shape the next generation. Adults who do not experience this sense of productivity may experience stagnation. The advanced age group is defined as "despair against self-integrity". Individuals in this age group may experience hopelessness or self-integrity when they evaluate their lives (Tuna, 2011). In this context, it can be said that middle-aged participants have higher attitudes towards solid waste and recycling in order to be beneficial to future generations compared to young and older individuals. While Keskin Gürel (2008) determined in her research that the sensitivity of young people to environmental problems is higher than that of the elderly, Ünal (2010) emphasizes that the sensitivity of individuals increases as they get older.

In the study, it was concluded that as the education level of the participants increased, their attitudes towards solid waste and recycling also increased positively. The qualitative aspect of the lifestyle is in close interaction with the level of education as the way in which the consumption standard is realized with the influence of emotions, thoughts and habits. As the level of education increases, it brings about changes in every aspect of a person's life (Eke, 1987). These findings related to the education level variable in this study are the findings of Yücel et al. (2006), showing that the level of consciousness, attitude and sensitivity towards the environment increases depending on the level of education; the results of Keskin Gürel (2008), who stated that sensitivity to environmental problems and environmental awareness differ according to educational status; the results of Ünal (2010), who determined that the participants with a high level of education have a high level of sensitivity to environmental problems; It is seen that this is in line with the results of Kükrer (2012), which shows that there is a significant difference between environmental responsibility and educational status.

In the research, it has been determined that there is a difference in the attitudes of the participants towards solid waste and recycling according to their profession. In this context, it has been determined that the average scores of teachers, civil servants, academicians, youth and religious officials from the solid waste and recycling scale are higher than students, housewives, workers, tradesmen and farmers, both in the overall scale and in the sub-dimensions. It was concluded that the attitudes of the participants, especially teachers, towards solid waste and recycling were more positive. In this sense, it can be said that the profession affects the lifestyles of individuals (Eke, 1987). Yücel et al. (2006) found that the average of the environmental awareness scores of civil servants, students and private sector employees was higher than that of farmers, retired, housewives, tradesmen, workers and the unemployed. It can be said that this result is partially similar to the result obtained from the research.

According to the results obtained from the research, it was concluded that as the income level of the participants increased, their attitudes towards solid waste and recycling also increased positively. Straughan and Roberts (1999) reveal in their study that income level is directly proportional to environmental responsibility. Yücel et al. (2006), on the other hand, emphasize that individuals' economic concerns can cause their attitude levels. Kükrer (2012) found in his study that as the income

level increases, environmental responsibility also increases. However, high income alone is not a sufficient factor for individuals to show environmental awareness. Cultural development also has a significant impact on environmental awareness (Hanay and Koçer, 2006). As a matter of fact, in a different study, it is seen that teacher candidates with low family income are more sensitive to the solution of solid waste problem and participation in recycling than teacher candidates with high income (Karatekin & Merey, 2015).

In the research, it has been determined that the participants who are interested in environmental problems have more positive attitudes towards solid waste and recycling than the participants who are not interested in environmental problems. While Öcal (2013) stated that as the level of pre-service teachers' interest in environmental issues increased, the average of their attitude scores towards the environment also increased, Karatekin, Kuş and Merey (2014) found that pre-service teachers had less interest in environmental issues. As a matter of fact, environmental problems arise from indifferent human behavior. Individuals who are not made aware of the problems that arise as a result of these behaviors remain indifferent and insensitive to events that they think do not directly affect them (Özmen, Çakmakçı Çetinkaya and Nehir, 2005).

In the study, it was concluded that the participants who are members of the environmental protection association have more positive attitudes towards solid waste and recycling than the participants who are not members of the environmental protection association. Çabuk and Karacaoğlu (2003) state that university students participate in the work of voluntary organizations working on the environment, but a significant part of the students never participate. Karatekin et al. (2014) stated in their study that teacher candidates are not members of any non-governmental organization related to the environment. Uysal (2018), on the other hand, emphasizes that individuals who are members of non-governmental organizations have more responsibility and exhibit participatory behavior. However, it can be said that being a member of environmental protection associations will be effective in increasing the environmental awareness of individuals. In this context, since the membership of individuals in non-governmental organizations related to the environment is very low, it is necessary to increase the number of members by promoting the organizations that show these activities (Yücel et al., 2006).

When the items belonging to the attitude scale towards solid waste and recycling are evaluated, the items that the participants mostly agree with are; "When I encounter a solid waste problem, I take initiatives for a solution", "I support the investments made for recycling even though it causes an increase in taxes", "I am aware of the environmental problems caused by solid waste", "I feel sad that solid wastes are not used in recycling". This shows that the attitudes of the participants on solid waste and recycling are generally participatory, interested and sensitive. This indicates that individuals who are sensitive and knowledgeable about recycling also have high general environmental knowledge (Vining and Ebreo, 1990). Demirbağ and Güngörmüş (2012) determined in their study that individuals have knowledge about recycling of wastes and that separating garbage is beneficial for the environment. According to Bartelings and Sterner (1999), when appropriate infrastructure that facilitates recycling is established, individuals are willing to devote more time to recycling.

When the items belonging to the attitude scale towards solid waste and recycling are evaluated, the items that the participants least agree with are; "I do not separate waste materials for recycling at home", "I do not believe that recycling of solid wastes will contribute to the country's economy", "Even

though there is a recycling bin around me, I do not separate the wastes and put them in the relevant bin". The low rate of participation in these items indicates that the participants do not support negative behaviors related to solid waste and recycling. Therefore, it can be said that the fact that the answers given to the items are not positive complement each other in the dimensions of entrepreneurship and participant, belief, interest and sensitivity regarding solid waste and recycling. In a study conducted by Demirbağ and Güngörmüş (2012), it was determined that it is important for individuals to separate domestic wastes, but they accumulate mixed wastes without separating them.

Recommendations

Solid waste and recycling are issues related to every aspect of life. From this point of view, it is possible to improve the knowledge, behavior and attitudes of men and middle-aged individuals about solid waste and recycling, especially based on the results of the research, especially for all individuals in the society. Therefore, it can be realized with a sensitive approach to these issues, with the idea that solid waste management and recycling are important. In this context, individuals' interest in environmental problems should be increased and their membership in environmental protection association should be encouraged.

Research results show that there is a linear relationship between education and attitudes towards solid waste and recycling. Therefore, in order for individuals to have positive attitudes towards solid waste and recycling, solid waste and recycling should be evaluated within the lifelong learning process.

Individuals involved in every phase of the production, distribution and consumption processes can be informed in terms of giving importance to the subject. For our future, every individual in the society should be sensitive to waste management and recycling. In this regard, it is important that relevant institutions take concrete steps (free courses, programs, seminars on waste and recycling).

References

Akdoğan, A., & Güleç, S. (2007). Sürdürülebilir katı atık yönetimi ve belediyelerde yöneticilerin katı atık yönetimiyle ilgili tutum ve düşüncelerinin analizine yönelik bir araştırma. [Sustainable solid waste management and a research on the analysis of the attitudes and behaviors of working in municipalities towards solid waste management]. *Journal of Hacettepe Üniversitesi İktisadi ve İdari Bilimler Fakültesi*, 25(1), 39-69. https://dergipark.org.tr/en/pub/huniibf/issue/7874/103457

Akıncı, M. (1996). *Oluşum ve yapılanma sürecinde Türk çevre hukuku*. [Turkish environmental law in the formation and structuring process]. Kocaeli Book Club.

Akyüz, H. (1991). *Eğitim sosyolojisinin temel kavram ve alanları üzerine bir araştırma*. [A research on the basic concepts and fields of the sociology of education]. Milli Eğitim Bakanlığı.

Ak, Ö., & Genç, A. T. (2018). Üniversite öğrencilerinin geri dönüşüm bilinci üzerine bir araştırma: Sakarya üniversitesi örneği. [A research on the recycling awareness of university students: The case of Sakarya University]. Jorunal of *Uluslararası Ekonomik Araştırmalar*, 4(2), 20-39. https://dergipark.org.tr/en/pub/ead/issue/48247/610773

Altınışık, T. (2014). *Ulusal geri dönüşüm*. [National recycling]. Bilim, Sanayi ve Teknoloji Bakanlığı.

Aytaç, Ö. (2003). Meslekler sosyolojisi açısından polislik mesleği. [The policing profession in terms of the sociology of occupations]. *Journal of Polis ve Sosyal Bilimler*, 1, 15-33.

Baldassare, M., & Katz, C. (1992). The personal threat of environmental problems as predictor of environmental practices. *Environment and Behavior*, 24(5), 602-616. http://dx.doi.org/10.1177/0013916592245002

Bartelings, H., & Sterner, T. (1999). Household waste management in a Swedish municipality: determinants of waste disposal, recycling and composting. *Environmental and Resource Economics*, 13(4), 473-491. https://link.springer.com/article/10.1023/A:1008214417099

Cici, M., Şahin, N., Görgen, İ., & Deniz, S. (2005). Öğretmen adaylarının katı atık kirliliği bağlamında çevresel farkındalık ve bilgi düzeyleri. [Environmental awareness and knowledge levels of teacher candidates in the context of solid waste pollution]. *Eğitim Bilimleri ve Uygulama*, 4(7), 37-50. http://www.ebuline.com/pdfs/7Sayi/7_3.pdf

Cirhinlioğlu, Z. (1996). *Meslekler ve sosyoloji*. [Professions and sociology]. İstanbul: Gündoğan.

Çabuk, B., & Karacaoğlu, Ö. C. (2003). Üniversiteli öğrencilerinin çevre duyarlılıklarının incelenmesi. [Examination of environmental awareness of university students]. *Journal of Ankara Üniversitesi Eğitim Bilimleri Fakültesi*, 36(1), 189-198.

Çelik, M. (2015). *Avukat, doktor ve öğretmen meslek gruplarının din anlayışı (Adana örneği).* [The religious understanding of lawyers, doctors and teachers (Example of Adana)]. (Dissertation Number. 398274). [Master Thesis, Üsküdar University], YÖK Thesis Center.

Çimen, O., & Yılmaz, M. (2012). İlköğretim öğrencilerinin geri dönüşümle ilgili bilgileri ve geri dönüşüm davranışları. [Information about recycling and recycling behaviors of primary school students]. *Journal of Uludağ Üniversitesi Eğitim Fakültesi*, 25(1), 2012, 63-74.

Demirbağ, B. C., & Güngörmüş, Z. (2012). Bireylerin evsel katı atık yönetimine ilişkin bilgi ve davranışları. [Knowledge and behavior of individuals regarding domestic solid waste management]. *Journal of Gümüşhane Üniversitesi Sağlık Bilimleri*, 1(3), 127-137.

Ebreo, A., Hershey, J., & Vining, J. (1999). Reducing solid waste: Linking recycling to environmentally responsible consumerism. *Environment and Behavior*, 31(1), 107-135.

Eke, B. (1987). Bir sosyal sınıf belirleyicisi olarak meslek faktörü. [Occupation factor as a social class determinant]. *Journal of İstanbul Üniversitesi İktisat Fakültesi*, 14, 377-401.

Ergün, M. (1994). *Eğitim sosyolojisi*. [Educational sociology]. İstanbul: Ocak.

Eryılmaz, Ç. (2017). Sosyal bilim paradigmaları çerçevesinde çevre sosyolojisi'nin kuramları ve kavramları. [Theories and concepts of environmental sociology within the framework of social science paradigms]. *Journal of Fırat Üniversitesi Sosyal Bilimler*, 27(1), 159-174. http://dx.doi.org/10.18069/firatsbed.346440

Güneş, G. (2013). Toplumsal cinsiyet ve çevre. [Gender and environment]. In G. Aras, L, Gültekin, G. Güneş, C. Ertung, & A. Şimşek (Eds.). *Toplumsal Cinsiyet ve Yansımaları* (ss. 17-46). Atılım University.

Güney, E. (1992). *Çevre sorunları ortam kirlenmesi*. [Environmental problems, environmental pollution]. Kayseri: Bizim Gençlik.

Goode, W. (1996). Topluluk içinde topluluk: Meslekler. [Community within community: Professions]. In Z. Cirhinlioğlu (Ed.). *Meslekler and sosyoloji* (ss. 67-80). Ankara: Gündoğan.

Hanay, Ö., & Koçer, N. (2006). Elazığ kenti katı atıkları geri kazanım potansiyelinin belirlenmesi. [Determination of the solid waste recovery potential of the city of Elazig]. *Journal of Fırat Üniversitesi Fen ve Mühendislik Bilimleri*, 18(4), 507-511.

Hoel, M. (1991). *Global environmental problems: The effects of unilateral actions taken by one country. Journal of environmental economics and management*, 20(1), 55-70. http://dx.doi.org/10.1016/0095-0696(91)90023-C

Kabaş, D. (2004). *Kadınların çevre sorunlarına ilişkin bilgi düzeyleri ve çevre eğitimi*. [Women's knowledge of environmental problems and environmental education]. (Dissertation Number. 191805). [Master Thesis, Gazi University], YÖK Thesis Center.

Karaca, Z. (2018). *Kent ve çevre sorunlarında toplumsal duyarlılık: Antakya örneği eğitimi*. [Social sensitivity in urban and environmental problems: Antakya example education]. (Dissertation Number. 531494). [Master Thesis, Hatay Mustafa Kemal University], YÖK Thesis Center.

Karakaş, M. (2003). *Türk polisinin mesleki profili*. [Occupational profile of the Turkish police]. Afyon: Afyon Kocatepe University.

Karatekin, K. (2013). Öğretmen adayları için katı atık ve geri dönüşüme yönelik tutum ölçeğinin geliştirilmesi: Geçerlik ve güvenirlik çalışması. [Developing an attitude scale towards solid waste and recycling for teacher candidates: Validity and reliability study]. *Journal of Uluslararası Avrasya Sosyal Bilimler*, 4(10), 71-90.

Karatekin, K., Kuş, Z., & Merey, Z. (2014). Sosyal bilgiler öğretmen adaylarının çevre sorunlarının çözümünde sosyal katılımları. [Social participation of social studies teacher candidates in solving environmental problems]. *İlköğretim Online*, 13(2), 345-361.

Karatekin, K., & Merey, Z. (2015). Attitudes of preservice social studies teachers towards solid wastes and recycle. [Attitudes of preservice social studies teachers towards solid wastes and recycle]. *Journal of Bayburt Eğitim Fakültesi*, 10(2), 297-314.

Karaboğa, T. (2016). Çevre sosyolojisinde çevre sorunlarına yönelik alternatif arayışlar. [Alternative searches for environmental problems in environmental sociology]. *Journal of Akademik Bakış*, 55, 716-726.

Karagözoğlu, M. B., Özyonar, F., Yılmaz, A., & Atmaca, E. (2009). Katı atıkların yeniden kazanımı ve önemi. [Recovery and importance of solid waste]. (Oral Presentation). *Solid Waste Management Symposium in Turkey* (June, 15-17), (pp. 15-17). YTÜ Turkey.

Karasar, N. (2012). Bilimsel araştırma yöntemi. [Scientific research method]. Ankara: Nobel.

Keskin Gürel, Ş. (2008). Çevre sorunlarına duyarlılık ve çevre Bilinci (Afyonkarahisar ili örneği). [Sensitivity to environmental problems and environmental awareness (Example of Afyonkarahisar province)]. (Dissertation Number. 229251). [Master Thesis, Afyon Kocatepe University], Thesis Center.

Konak, N. (2010). Çevre sosyolojisi: Kavramsal ve teorik gelişmeler. [Environmental sociology: Conceptual and theoretical developments]. *Journal of Selçuk Üniversitesi Sosyal Bilimler Enstitüsü*, 24, 271-283.

Kükrer, Ö. (2012). Tüketicilerin çevresel sorumluluklarının yeşil reklamlara yönelik tutumlarına etkisi: Eskişehir örneği. [The effect of consumers' environmental responsibilities on their attitudes towards green advertisements: The example of Eskişehir]. *Journal of Yasar University*, 26(7), 4505-4525.

Larouque, P. (1969). *Sosyal sınıflar*. [Social classes]. (Y. Gürbüz, Trans.). Ankara: Remzi Bookstore.

Öcal, T. (2013). Sosyal bilgiler öğretmen adaylarının çevre sorunlarına yönelik tutumlarının belirlenmesi. [Determining the attitudes of social studies teacher candidates towards environmental problems]. *Jornal of Marmara Coğrafya*, 27, 333-352.

Özdemir, Ş. (1988). *Türkiye'de toplumsal değişme ve çevre sorunlarına duyarlılık*. [Social change and sensitivity to environmental problems in Turkey]. Ankara: Palme.

Özey, R. (2009). *Çevre sorunları*. [Environmental problems]. Akif.

Özmen, D., Çakmakçı Çetinkaya, A., & Nehir, S. (2005). Üniversite öğrencilerinin çevre sorunlarına yönelik tutumları. [Attitudes of university students towards environmental problems]. *TSK Koruyucu Hekimlik Bülteni*, 4(6), 330-334.

Özsoy, S. (2012). İlköğretim öğrencilerinin çevre algılarının çizdikleri resimler aracılığıyla incelenmesi. [Examination of primary school students' environmental perceptions through the pictures they draw]. *Kuram ve Uygulamada Eğitim Bilimleri*, 12(12), 1117-1139.

Palabıyık, H. (2001). Belediyelerde kentsel katı atık yönetimi: İzmir büyükşehir belediyesi örneği. [Urban solid waste management in municipalities: The example of Izmir metropolitan municipality]. [Unpublished master thesis]. The University of Dokuz Eylül, İzmir.

Savaşçın, M. Y. (2000). Bütünsel çevre bilinci ve çevre yalanları. [Holistic environmental awareness and environmental lies]. İzmir: Duyal.

Sauvé, L. (1996). Environmental education and sustainable development: A further appraisal. *Canadian Journal of Environmental Education*, 1, 7-34.

Sharholy, M., Ahmad, K., Mahmood, G., & Trivedi, R. C. (2008). Municipal solid waste management in Indian cities–A review. *Waste management*, 28(2), 459-467.

Straughan, R., & Roberts, J. A. (1999). Environmental segmentation alternatives: A look at green consumer behaviour in the new millenium. *Journal of Consumer Marketing*, 16(6), 558-575. http://dx.doi.org/10.1108/07363769910297506

Şimşekli, Y. (2004). Çevre bilincinin geliştirilmesine yönelik çevre eğitimi etkinliklerine ilköğretim okullarının duyarlılığı. [The sensitivity of primary schools to environmental education activities aimed at improving environmental awareness]. *Journal of Uludağ Üniversitesi Eğitim Fakültesi*, 17(1), 83-92.

Tuna, Y. (2011). *Birey ve davranış*. [Individual and behavior]. Eskişehir Anadolu University.

Uysal, C. (2018). *Sınıf öğretmeni adaylarının ekolojik vatandaşlık düzeylerinin belirlenmesi.* [Determination of ecological citizenship levels of primary school teacher candidates]. (Dissertation Number. 532463). [Master Thesis, Kastamonu University], YÖK Thesis Center.

Uzunoğlu, S. (1996). Çevre eğitiminin amaçları, uğraşı alanları ve sorunları. [Objectives, fields of interest and problems of environmental education]. *Journal of Ekoloji*, 21, 7-12.

Ünal, V. (2010). *Çevre sorunları ve dindarlık ilişkisi "Kayseri örneği"*. [The relationship between environmental problems and religiosity "The example of Kayseri"]. (Dissertation Number. 279081). [Master Thesis, Selçuk University], YÖK Thesis Center.

Ünder, H. (1996). *Çevre felsefesi-etik ve metafizik görüşler*. [Environmental philosophy-ethical and metaphysical views]. İstanbul: Doruk.

Vining, J., & Ebreo, A. (1992). Predicting recycling behavior from global and specific environmental attitudes and changes in recycling opportunities. *Journal of Applied Social Psychology*, 22, 1580-1607.

Yıldırım, A., & Şimşek, H. (2016). *Sosyal bilimlerde nitel araştırma yöntemleri*. [Qualitative research methods in the social sciences]. Ankara: Seçkin.

Yücel, M., Altunkasa, F., Güçray, S., Uslu, C., & Say, N. P. (2006). Adana'da çevre duyarlılığı düzeyinin ve geliştirme olanaklarının araştırılması. [Investigation of the level of environmental awareness and development opportunities in Adana]. *Journal of Akdeniz Üniversitesi Ziraat Fakültesi*, 19(2), 217-228.

BIOGRAPHICAL NOTES

Contribution Rate of Researchers

Author 1: %33,4

Author 2: %33,3

Author 3: %33,3

Conflict Statement

There is no conflict of interest regarding the research.

Genişletilmiş Türkçe Özet

http://www.tayjournal.com
https://dergipark.org.tr/tr/pub/tayjournal

Toplumsal Bakış Açısıyla Katı Atık ve Geri Dönüşüme İlişkin Tutumların İncelenmesi

Giriş

Toplumlar ilk başlarda yukarıda belirtilen çevre sorunlarıyla çok fazla ilgilenmemişlerdir. Fakat küresel hastalıklar, beslenme sorunu, radyasyon, doğal kaynakların azalması gibi durumların kendilerini olumsuz bir şekilde etkilemeye başlamasıyla birlikte çevre sorunları fark edilmeye başlanmıştır (Çimen ve Yılmaz, 2012). Dolayısıyla küresel çevre sorunlarına çözüm bulmak için ülkeler arasında işbirlikli eylemlere ihtiyaç duyulmuştur (Hoel, 1991).

Günümüzde önemli çevre sorunlarından birisi ise atıklardır. Atıklar, ekonomik büyüme, sanayileşme ile birlikte kentleşme ve nüfus artışı gibi nedenlerle sürekli artmaktadır. Atıklar, çevreyi ve insanları doğrudan veya dolaylı olarak etkilemektedir. Bu etkiler biyolojik, kimyasal ve fiziksel özelliklerde olabilmektedir. Atıklar veba, kolera, dizanteri, tüberküloz, kuduz, sıtma gibi hastalıklara; çöp depolama yerlerinde oluşan sızıntı sulara ve gazlara neden olmaktadır. Dolayısıyla atıkların fiziksel, biyolojik ve kimyasal açıdan insanlara ve diğer canlılara birtakım zararları söz konusudur (Palabıyık, 2001).

Eryılmaz'a (2017, s. 171) göre, 20. yüzyılda artan çevre sorunları toplumda ve uluslararası alanda kabul edilmesiyle birlikte çevre konusu sosyal bilimlerde daha geniş yer bulmaya başlamıştır. Çünkü çevre ile ilgili konularda bireylerin davranışlarında eğitim, psikolojik, sosyolojik, ekonomik, ideolojik, politik, yönetim, katılım ve kültürel unsurlar etkili ve belirleyicidir (Uzunoğlu, 1996; Karaca, 2018). Toplumsal yaşamın kültürel özelliklerine göre kişilerin bireysel kimlik ve kişiliğinin yanında toplumsal rol ve statülerini de belirleyen cinsiyet, yaş, öğretim durumu, meslek gibi faktörler önemli sosyal değişkenlerdir. Bu faktörlerden cinsiyet, bireylerin kimlik ve kişiliğini, toplumsal rol ve statülerini, olaylar karsısındaki tutumlarına etki ederken, yaş faktörü, bireylerin kişisel ve toplumsal davranış, algılama ve tutumlarını etkileyen önemli değişkenlerdir. Bir diğer faktör olan öğrenim durumu, bireylerin yaşadığı toplumdaki rol ve statüsünü belirleme ile yaşamlarının her alanını

etkilemektedir. Meslek faktörü ise bireylerin toplumdaki yerini tayin eden bir olgu olarak algılama, tutum ve beklentilerine etki etmektedir (Akyüz, 1991; Karakaş, 2003; Keskin Gürel, 2008).

Bu çalışmada ise, bireylerin atık ve geri dönüşüme ilişkin tutumlarını belirlemek amacıyla cinsiyet, yaş, öğrenim durumu, meslek (ev hanımı, işçi, çiftçi, memur, öğrenci, öğretmen, akademisyen, esnaf, gençler, din görevlisi), gelir durumu, çevre sorunları hakkında ilgi, çevre koruma derneğine üyelik durumu değişkenleri ele alınmıştır. Katı atık ve geri dönüşümün toplumun çeşitli tabakaları tarafından nasıl algılandığı hem çevre sosyoloji hem de çevre eğitimi çerçevesinde merak konusudur. Farklı sosyo-demografik değişkenlerde, bireylerin farklı tutumlar gösterebileceği hipotezinden hareketle bu çalışma, bireylerin katı atık ve geri dönüşümü nasıl algıladığını ölçmeye yöneliktir. Bu doğrultuda bu araştırmanın genel amacı farklı sosyokültürel ve sosyoekonomik düzeye sahip bireylerin çeşitli değişkenler açısından katı atık ve geri dönüşüme ilişkin tutumlarını tespit etmektir. Bu amaç doğrultusunda aşağıdaki sorulara cevap aranmaktadır:

1. Bireylerin katı atık ve geri dönüşüme ilişkin tutumları ne düzeydedir?

2. Bireylerin katı atık ve geri dönüşüme ilişkin tutumları cinsiyetlerine göre farklılaşmakta mıdır?

3.Bireylerin katı atık ve geri dönüşüme ilişkin tutumları yaşlarına göre farklılaşmakta mıdır?

4.Bireylerin katı atık ve geri dönüşüme ilişkin tutumları eğitim düzeylerine göre farklılaşmakta mıdır?

5.Bireylerin katı atık ve geri dönüşüme ilişkin tutumları mesleklerine göre farklılaşmakta mıdır?

6.Bireylerin katı atık ve geri dönüşüme ilişkin tutumları gelir durumlarına göre farklılaşmakta mıdır?

7.Bireylerin katı atık ve geri dönüşüme ilişkin tutumları çevre sorunları hakkındaki ilgi düzeyine göre farklılaşmakta mıdır?

8.Bireylerin katı atık ve geri dönüşüme ilişkin tutumları çevre koruma derneğine üyelik durumuna göre farklılaşmakta mıdır?

Yöntem

Araştırmada farklı sosyokültürel ve sosyoekonomik düzeye sahip bireylerin katı atık ve geri dönüşüme ilişkin tutumlarını ortaya koyabilmek amacıyla tarama modeli kullanılmıştır. Tarama modeli, araştırmacı tarafından olay, nesne, bireyleri değiştirmeden, onlara deneysel bir etkide bulunmadan, geçmişte var olan veya hala var olan bir durumu olduğu şekliyle betimlenmesidir (Karasar, 2012). Araştırmanın evrenini Türkiye'de yaşayan 18 yaş üzeri bireyler oluşturmaktadır. Araştırmanın örnekleminin belirlenmesinde amaçlı örnekleme yöntemlerinden maksimum çeşitlilik örnekleme yöntemi kullanılmıştır. Çeşitlilik gösteren durumlar arasında ne tür benzerliklerin olduğunu tespit etmek için araştırmada maksimum çeşitlilik örneklemesi seçilmiştir (Yıldırım ve Şimşek, 2016). Bu bağlamda araştırmanının örneklemini gönüllü katılım ilkesi doğrultusunda, farklı sosyokültürel ve ekonomik yaşam düzeylerinde yer alan toplam 558 birey oluşturmaktadır.

Araştırmada veri toplama aracı olarak Karatekin (2013) tarafından geliştirilen "Katı Atık ve Geri Dönüşüme Yönelik Tutum Ölçeği" kullanılmıştır. Ölçme aracı toplam 33 maddeden oluşmaktadır. Ölçek üç boyuttan oluşmuştur. Bu boyutlar "Girişimcilik ve katılım", "İnanç" "İlgi ve duyarlılık" boyutlarıdır. Ölçeğin güvenirliğini belirlemek için hesaplanan Cronbach alfa güvenilirlik katsayısı birinci faktör için .882, ikinci faktör için .882 ve üçüncü faktör için .877 olarak tespit edilmiştir.

Araştırma verilerinin toplanma süreci, kişisel bilgi ve katı atık ve geri dönüşüme yönelik tutum ölçeğinden oluşan anket formu aracılığı ile gerçekleştirilmiştir. Verilerin toplanması pandemi sürecinde gerçekleşmesi üzerine ilgili koşullar dikkate alınarak anket formu hem yüz yüze hem de çevrimiçi olarak toplanmıştır. Araştırmada toplanan veriler, belirlenen alt problemlere ilişkin olarak SPSS programı ile analiz yapılmıştır.

Bulgular

Katı atık ve geri dönüşüm boyutları incelendiğinde, her bir boyut için katılımcıların katı atık ve geri dönüşüm tutumlarının yüksek olduğu görülmektedir. Ortalamanın en düşük olduğu boyut girişimcilik ve katılımdır. Katı atık ve geri dönüşüm ölçek puanları katılımcıların cinsiyetine göre anlamlı farklılık göstermektedir. Bu farklılık kadın katılımcıların lehinedir. Hem toplam hem de alt boyutlardaki ortalama puanlara bakıldığında genç ve yaşlı katılımcıların katı atık ve geri dönüşüme yönelik tutumlarının daha düşük olduğu görülmektedir. Ölçeğin tüm boyutları bir arada değerlendirildiğinde, katılımcıların katı atık ve geri dönüşüm konusundaki duyarlılığını etkileyen en önemli faktörlerden birinin eğitim düzeyi olduğu görülmektedir. Bu bulgu, eğitim düzeyi yükseldikçe katılımcıların katı atık ve geri dönüşüme yönelik tutumlarının daha olumlu olduğu şeklinde yorumlanabilir. Bu bulgulara göre, ölçeğin tüm boyutları değerlendirildiğinde, katılımcıların eğitim düzeylerinin meslekleri ile ilgili olduğu, katı atık ve geri dönüşüme yönelik tutumlarını etkilediği görülmektedir. Katılımcıların genel olarak katı atık ve geri dönüşüm ölçeğinden aldıkları puanlar, gelir düzeylerine göre anlamlı farklılık göstermiştir. Katı atık ve geri dönüşüm ölçeği puanları, katılımcıların çevre sorunlarına olan ilgilerine göre anlamlı bir farklılık göstermektedir. Katı atık ve geri dönüşüm ölçek puanları, çevre koruma derneğine üye olma geneline göre bakış açısını göstermektedir.

Sonuç ve Tartışma

Araştırmadan elde edilen sonuçlara göre, bireylerin katı atık ve geri dönüşüme yönelik tutumlarının yüksek düzeyde olduğu tespit edilmiştir. Karatekin ve Merey (2015) çalışmalarında sosyal bilgiler öğretmeni adaylarının katı atık ve geri dönüşüm konusunda genel olarak olumlu tutumlara sahip olduklarını tespit etmiştir. Araştırmadan elde edilen sonuçlara göre, bireylerin katı atık ve geri dönüşüme yönelik toplam tutum puanları incelendiğinde cinsiyet değişkenine göre anlamlı farklılık göstermektedir. Buna göre, kadın katılımcıların katı atık ve geri dönüşüme yönelik tutumlarının erkek katılımcılara göre daha yüksek olduğu görülmektedir. Bu durumun nedeni, çevre bilincinin önemli öğesi olan "çevreye/doğaya karşı sorumluluk" duygusunun, yaradılışı gereği özellikle kadınların tutum ve davranışlarına içgüdüsel olarak yansıdığı şeklinde açıklanabilir (Kabaş, 2004; Kükrer, 2012).

Araştırmanın bir diğer sonucu ise, yaşı daha küçük olan katılımcılar ile yaşı daha büyük olan katılımcıların katı atık ve geri dönüşüme yönelik tutum düzeylerinin daha düşük olduğu görülmektedir. Keskin Gürel (2008) yaptığı araştırmada gençlerin çevre sorunlarına ilişkin duyarlılıklarının yaşlılara göre daha yüksek olduğunu tespit etmiştir. Araştırmada katılımcıların eğitim düzeyleri yükseldikçe katı atık ve geri dönüşüme yönelik tutumlarının da olumlu bir şekilde arttığı sonucuna ulaşılmıştır. Yaşama

tarzının nitel yönü, tüketim standardının duygu, düşünce ve alışkanlıkların etkisiyle gerçekleştiriliş tarzı olarak, eğitim düzeyi ile sıkı bir etkileşim halindedir. Eğitim seviyesi yükseldikçe, kişinin hayatının her yönünde değişiklik meydana getirmektedir (Eke, 1987).

Araştırmada katılımcıların mesleklerine göre katı atık ve geri dönüşüme yönelik tutumlarında bir farklılık olduğu tespit edilmiştir. Bu çerçevede hem ölçeğin genelinde hem de alt boyutlarda öğretmenlerin, memurların, akademisyenlerin, gençlerin ve din görevlilerinin katı atık ve geri dönüşüm ölçeğinden aldıkları puanların ortalamasının, öğrenci, ev hanımı, işçi, esnaf ve çiftçilerden daha yüksek olduğu tespit edilmiştir. Özellikle öğretmen olan katılımcıların katı atık ve geri dönüşüme yönelik tutumlarının daha olumlu olduğu sonucuna ulaşılmıştır. Bu anlamda meslek, bireylerin yaşam tarzlarını etkilediği söylenebilir (Eke, 1987). Katılımcıların gelir düzeyi yükseldikçe katı atık ve geri dönüşüme yönelik tutumlarının da olumlu bir şekilde arttığı sonucuna ulaşılmıştır. Straughan ve Roberts (1999) çalışmasında, gelir düzeyinin çevre sorumluluğu ile doğru orantılı olduğunu ortaya koymaktadır. Araştırmada çevre sorunları hakkında ilgili olan katılımcıların, çevre sorunları hakkında ilgili olmayan katılımcılara göre katı atık ve geri dönüşüme yönelik tutumlarının daha olumlu olduğu tespit edilmiştir. Öcal (2013) öğretmen adaylarının çevre konularıyla ilgilenme düzeyleri arttıkça çevreye yönelik tutum puanlarının ortalamasının da arttığını belirtimektedir. Araştırmada çevre koruma derneğine üye olan katılımcıların, çevre koruma derneğine üye olmayan katılımcılara göre katı atık ve geri dönüşüme yönelik tutumlarının daha olumlu olduğu sonucuna ulaşılmıştır. Çabuk ve Karacaoğlu (2003) çalışmasında üniversite öğrencilerinin çevre konusunda çalışan gönüllü kuruluşların çalışmalarına katıldıklarını fakat öğrencilerin önemli bir kısmının ise asla katılmadıklarını belirtmektedir.

Öneriler

Katı atık ve geri dönüşüm, yaşamın her alanı ile ilişkili konulardandır. Bu açıdan düşünüldüğünde toplumda yer alan tüm bireyler başta olmak üzere, özellikle araştırma sonuçlarına dayalı olarak, erkeklerin ve orta yaş sınıfındaki bireylerin katı atık ve geri dönüşüm ile ilgili bilgi, davranış ve tutumlarının geliştirilmesi sağlanabilir. Dolayısıyla bireylerin katı atık yönetimi ve geri dönüşümün önemli olduğu fikri ile bu konulara duyarlı bir yaklaşımla gerçekleşebilir. Bu bağlamda bireylerde çevre sorunları hakkındaki ilgileri artırılmalı ve çevre koruma derneğine üyelikleri teşvik edilmelidir.