

## A Study about the Relationship between Environmental Awareness and the Level of Awareness of Green Marketing Activities <sup>1</sup>

### Çevre Bilinci ve Yeşil Pazarlama Faaliyetleri Farkındalık Düzeyi Arasındaki İlişki Hakkında Bir Çalışma

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#### Abstract

The aim of the study is to determine whether the environmentalism, economics, consciousness, responsibility, sensitivity and media dimensions, which are effective on environmental awareness and environmentally friendly product awareness, differ with green product purchasing behavior according to the demographic characteristics of green consumers and to determine the relationship and effects between them. The quantitative method was adopted in the study and the data were collected by convenience sampling method. The sample size of the study, which collected data with an online questionnaire, consists of 404 participants. In the study, frequency analysis, descriptive statistics, validity, reliability and normality test, independent sample t test, anova analysis, correlation analysis and regression analysis were conducted. Within the scope of the study, the level of environmental awareness and awareness of environmentally friendly products and marketing activities of the participants differ according to age and educational status. According to the environmental awareness and environmentally friendly product awareness of the participants, their satisfaction with the product they purchased differs. Participants' awareness of green marketing activities shows a significant difference according to their satisfaction with the purchased product. There is a positive relationship between environmental awareness and awareness of environmentally friendly products and awareness of green marketing activities. Environmental awareness and environmentally friendly product awareness affect the level of awareness of green marketing activities. It has been determined that individuals with environmental awareness have green product purchasing behavior and most of them have environmental awareness. In addition, the majority of the participants were found to be sensitive about environmental pollution.

**Keywords:** Environmental Awareness, Green Consumer, Green Marketing.

**Jel Codes:** M30, M31, M39.

#### Öz

Araştırmanın amacı, çevre bilinci ve çevre dostu ürün bilinci üzerinde etkili olan çevrecilik, iktisadilik, bilinçlilik, sorumluluk, duyarlılık ve medya boyutlarının yeşil tüketicilerin demografik özelliklerine göre yeşil ürün satın alma davranışı ile farklılaşarak farklılaşmadığı, aralarındaki ilişki ve etkileri belirlemektir. Yapılan çalışmada nicel yöntem benimsenmiş olup, veriler kolayda örnekleme yöntemi ile toplanmıştır. Çevrim içi anket ile veri toplanan çalışmanın örnekleme hacmi 404 katılımcıdan oluşmaktadır. Çalışmada; frekans analizi, betimsel istatistikler, geçerlilik, güvenilirlik ve normallik testi, bağımsız örneklem t testi, anova analizi, korelasyon analizi ve regresyon analizi yapılmıştır. Çalışma kapsamında, yaş ve eğitim durumuna göre katılımcıların hem çevre bilinci ve çevre dostu ürün bilinci hem de pazarlama faaliyetleri farkındalık düzeyi farklılaşmaktadır. Katılımcıların çevre bilinci ve çevre dostu ürün bilincine göre satın aldıkları üründen memnuniyet durumları farklılaşmaktadır. Katılımcıların yeşil pazarlama faaliyetleri farkındalığı satın alma ürünüden duydukları memnuniyete göre anlamlı bir farklılık göstermektedir. Çevre bilinci ve çevre dostu ürün bilinci ile yeşil pazarlama faaliyetleri farkındalık düzeyi arasında pozitif ilişki vardır. Çevre bilinci ve çevre dostu ürün bilincinin yeşil pazarlama faaliyetleri farkındalık düzeyini etkilemektedir. Çevre bilincine sahip olan bireylerde yeşil ürün satın alma davranışının olduğu ve büyük bir kısmının çevre bilincine sahip olduğu tespit edilmiştir. Ayrıca, katılımcıların çoğunluğunun çevre kirliliği konusunda duyarlı oldukları saptanmıştır.

**Anahtar Kelimeler:** Çevre Bilinci, Yeşil Tüketici, Yeşil Pazarlama.

**Jel Kodları:** M30, M31, M39.

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## 1. INTRODUCTION

It has lived together with many species since the time that humanity has been waiting for. Today, the rapidly increasing population, unplanned urbanization, multiple ecological problems and the depletion experienced with the rapid advancement of industry have caused environmental problems to increase rapidly. The natural balance is disrupted with the fluctuations in the environmental environment every day and many explosion problems arise instantly. It is forgotten or ignored that resources are limited. Consumers have become more conscious about the environmental effects of products. Consumers now want products to be environmentally friendly, use fewer natural resources and be recyclable, and they prefer green products. Businesses that meet the needs and demands of consumers design environmentally friendly products and continue the process from product production to consumption with environmentally friendly marketing activities. Environmentally friendly products have basic features such as not being harmful to human, animal and nature health, not containing elements that will harm the environment, and preventing the waste of energy and scarce resources. As people become more sensitive to the environment and environmental problems, businesses also carry out activities in accordance with this sensitivity. Green marketing has become a tool for protecting the environment for future generations. With the increasing concerns about environmental protection over time, the concept of green marketing has become a subject that businesses should focus on (Yazdanifard and Mercy, 2011: 640).

In the section following the introduction, the theoretical background, reen consumption, environmental awareness, green marketing and focal points will be briefly explained. Then, the research model and assumptions were tested under the leadership of data and method. The analyses were interpreted. Finally, suggestions for future applications and practices were presented based on the research results.

Minimizing the negative effects of environmental problems, which have become one of the most important problems of today's world, is one of the main goals of many institutions and organizations. For this reason, countries, non-governmental organizations, companies and individuals have become more sensitive to their problems. It is true that in today's competitive conditions, an important part of companies' marketing strategies is efforts to understand the consumer and adapt them to the target audience. Therefore, it is thought that the study will help determine the target audience of green marketing, that is, the recipients of the relevant messages. In line with this information, the purpose of this study is to determine whether there is a difference in terms of demographic factors in consumers' environmentally friendly product purchasing behaviors and environmentally friendly product awareness. In this study, a quantitative approach was adopted and a survey method was applied. Due to constraints such as time and cost, a single method was preferred. In subsequent studies, it should be applied together with a qualitative approach and the sample size should be increased.

It is useful to increase the size in order for the results to be more understandable and generalizable. It may be possible. In addition, similar studies can be conducted with different variables and different analysis methods and a study covering a wider population can be conducted. In future studies, environmental awareness and environmentally friendly

product problems can be examined in specific product categories or sectors. Similarly, by applying different sampling methods, it can be possible to reach audiences with more homogeneous views on green marketing and contribute to marketing practitioners and academic literature. In addition, future studies on the subject should focus on professional groups in different provinces and it would be useful to include academicians. This study aims to contribute to the literature and practitioners with its original results.

## 2. LITERATURE REVIEW

Green marketing meets the needs and demands of consumers with an ecological approach. Therefore, one of the main reasons why companies adopt green marketing is the increasing environmental awareness of consumers and their tendency to prefer products that do not harm the environment (Varinli, 2008: 33). With the increasing importance of the environment, consumers are turning to environmentally friendly alternatives. The terms "green consumption" and "green consumer" emerged and these terms environmental debates (Schlegelmilch et al., 1996: 36).

In green consumption patterns, green consumers are considered rational and conscious consumers who will protect the world by making small changes such as choosing eco-labeled products and recyclable products, as well as the choices they make in daily life (Huttunen and Autio, 2010: 150). Therefore, these consumers, who are environmentally sensitive and responsible individuals, pay higher prices and take care to consume green (produced without harming the environment) substances (Turan, 2014: 6). Green consumers in general environmentally friendly and environmentally conscious people who buy green products that are above standard is defined as. Green consumers believe that personal consumption is an effective way to protect the environment. that there is a way forward. The topic of consumers' purchasing behavior covers many different areas. Green purchasing behavior is defined as purchasing products that can be reused or recycled and therefore refers to the consumption of people who are sensitive to ecological issues (Ramesh and Rajakumar, 2019: 147). Consumers' green purchasing behavior practices are generally linked to ethical, responsible, environmentally friendly and sustainable purchasing. This behavior includes purchasing energy-efficient products, preferring biodegradable and recyclable products, avoiding overly packaged products, purchasing locally sourced and fair-trade products (Do Paço et al., 2019: 1001). Green consumption means buying and using products that are environmentally friendly and do the least harm to the environment. This includes decisions such as using fewer electrical appliances and hybrid cars that produce fewer carbon dioxide emissions, harnessing the energy of the sun and wind to generate electricity, and buying organic vegetables and fruit. (Ar, 2009: 60). Green consumers are those who are interested in new products, research about these products and consumers who share this information with others. Since human beings are creatures that live in harmony with nature and the environment, they are affected by the problems occurring in nature (Aktaş, 2014: 154). As environmental problems become more serious, people's environmental awareness has started to increase accordingly. People who are faced with environmental problems want to minimize the damage to the environment by changing their lifestyles (Kuduz, 2011: 87).

Environmental awareness is defined as a psychological behavior that reflects an individual's awareness, value judgments and behavioral intentions regarding environmental issues

(Zheng, 2010: 56-59). Reasons such as increasing world population, unconscious consumption and loss of respect for the environment have made it necessary to take environmental protection measures. Protecting the environment is only possible if individuals have sufficient environmental awareness. In the study model, the relationship between environmental awareness and willingness to purchase environmentally friendly products and green marketing awareness level according to the demographic characteristics of green consumers was examined.

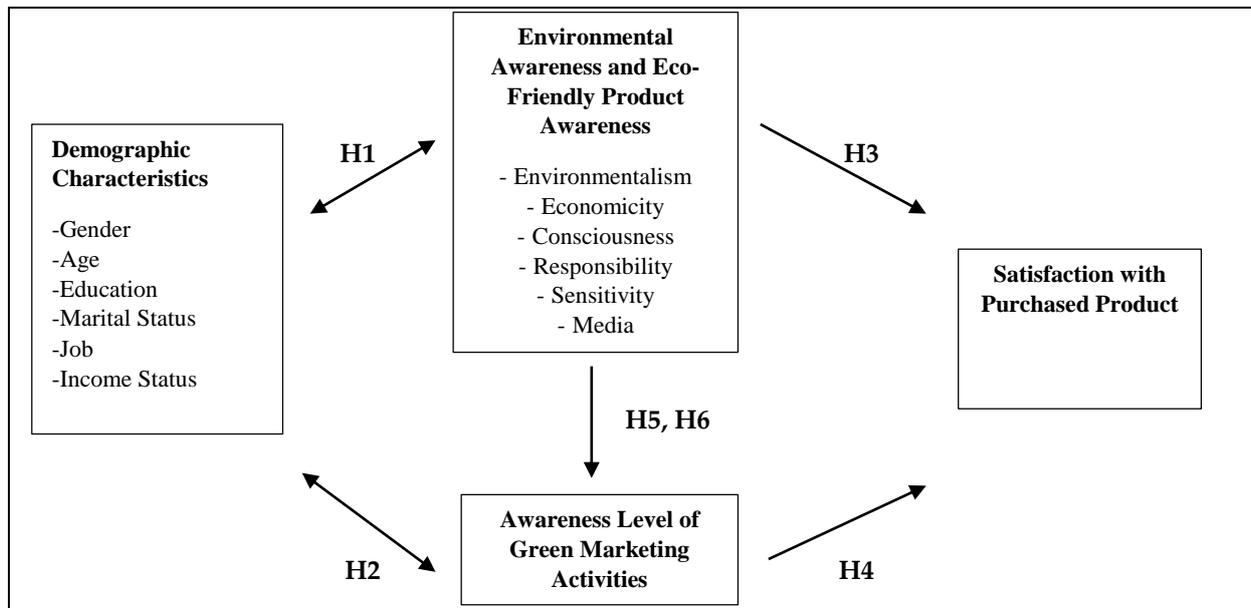


Figure 1. The Research Model

### 3. METHOD

Environmentalism that has an impact on environmental awareness and environmentally friendly product awareness by examining environmental awareness and green marketing literature. The aim of this study is to reveal whether there is a difference between the economic, consciousness, responsibility, sensitivity and media dimensions and green product purchasing behavior according to the demographic characteristics of green consumers, and to reveal their relationship and effects.

Convenience sampling method as a sampling method; It is the easiest, lowest cost and easiest to implement sampling (İslamoğlu and Alnıaçık, 2016: 202). In the research, a quantitative method was adopted and the online survey method was used as the data collection method.

The survey form was filled out online by reaching the participants through their social media accounts. Between 17.05.2023 and 30.06.2023, the data collection process was completed by reaching 471 participants within the borders of Antalya province. At the end of the elimination of the survey form filled by 67 participants, who were found to be incomplete or incorrect during the survey, the surveys of 404 participants were evaluated.

For the validity and reliability of the questionnaire form, “green marketing activities awareness level” scale prepared by Çetin (2020), “environmental awareness and environmentally friendly product awareness” scale prepared by Karaca (2020) and “green product purchase” scale prepared by Saba (2020) were used.

In the study, data were collected using the Statistical Package for Social Sciences (Statistical Package for The Social Sciences-SPSS) 25.0 package program. The measurement tool the reliability was determined with Cronbach's Alpha. The “kurtosis” and “skewness” coefficients were used to determine whether the data fit the normal distribution (Karadeniz, 2020: 79). Kalaycı (2010) stated that the kurtosis and skewness coefficients should be between -3 and +3 for the data to be suitable for normal distribution. The relationship between the dependent and independent variables was analyzed and determined by Pearson correlation test. Then, hierarchical regression analysis was used to examine the effect. In addition, frequency analysis, independent samples t-test, ANOVA analysis, correlation analysis, and regression analysis were performed for statistical analysis. Analyses were performed according to the 95% confidence interval.

Burdur Mehmet Akif Ersoy University ethics committee approval was received with the decision numbered GO 2023/301, meeting number 2023/05, meeting date 03.05.2023.

#### 4. FINDINGS

In the study, the data were analyzed in the Statistical Package for the Social Sciences (SPSS) 25.0 package program. The relationship between the dependent and independent variables was determined by the Pearson correlation test. Hierarchical regression analysis was then applied to examine the effect in addition, frequency analysis, frequency analysis for variables with more than one option, independent sample t test, anova analysis, correlation analysis and regression analysis were performed from a statistical perspective. The analysis was performed according to the 95% confidence interval.

##### 4.1. Descriptive Statistics

The scope of the research consists of 471 respondents. 67 survey forms were removed from the scope of the research because they were filled out incompletely or incorrectly. The remaining 404 survey forms were analyzed. Since Sekaran and Bougie (2016: 264) considered a sample size of 384 to be sufficient in a universe of 1,000,000 and above, the survey forms of 404 people obtained are above the sample size deemed sufficient. The frequency analysis results of the demographic information of the participants are given in Table 1.

**Table 1.** Demographic Information of Participants

Demographic Information		Frequency (f)	Percentage (%)
Gender	Woman	219	54,2
	Male	185	45,8
	Total	404	100,0
Age	18-25 age	62	15,3
	26-35 age	210	52,0
	36-45 age	93	23,0
	Ages 46 and above	39	9,7
	Total	404	100,0

Educational Status	Primary education	22	5,4
	High school	61	15,1
	Associate Degree	69	17,1
	Licence	195	48,3
	Postgraduate	57	14,1
	Total	404	100,0
Marital Status	Married	242	59,9
	Single	162	40,1
	Total	404	100,0
Job	Student	48	11,9
	Private Sector Employee	90	22,3
	Public Employee	155	38,4
	Freelance	37	9,2
	Housewife	33	8,2
	Retired	35	8,7
	Unemployed	6	1,5
	Total	404	100,0
Income Status	5000 TL and below	59	14,6
	5001- 10000 TL	64	15,8
	10001- 15000 TL	71	17,6
	15001- 20000 TL	85	21,0
	20001- 25000 TL	69	17,1
	Above 25001 TL	56	13,9
	Total	404	100,0
	Purchasing Green Products		
Have you ever consciously purchased environmentally friendly (green) products?	Yes	40	100,0
		4	
The types of environmentally friendly products you buy	Food products	183	21,2
	Cleaning products	177	20,5
	Textile products	106	12,3
	Personal care products	110	12,8
	High energy efficiency products (such as electrical appliances, led bulbs, hybrid cars, etc.)	122	14,2

	Recyclable products	164	19,0
	Total	862	100,0
Are you satisfied with the product you purchased?	Yes	394	97,5
	No	10	2,5
	Total	404	100,0

The results of the frequency analysis on the demographic characteristics of the participants are as follows; the total number of people is 404; 54.2% are female and 45.8% are male. 15.3% of the participants are 18-25, 52% are 26-35, 23% are 36-45, and 9.7% are 46 years of age and over. 5.4% of the participants have primary school, 15.1% have high school, 17.1% have an associate degree, 48.3% have a bachelor's degree, and 14.1% have a postgraduate degree. 59.9% of the participants are married and 40.1% are single. When the professions of the participants are examined; 11.9% are students, 22.3% are private sector employees, 38.4% are public employees, 9.2% are freelancers, 8.2% are housewives, 8.7% are retired, and 1.5% are unemployed. 14.6% of the participants have an income of less than 5000 TL, 15.8% have an income of 5001- 10000 TL, 17.6% have an income of 10001- 15000 TL, 21% have an income of 15001- 20000 TL, 17.1% have an income of 20001- 25000 TL, and 13.9% have an income of over 25001 TL. There are 3 items about purchasing green products. 100% of the participants answered yes to the question "Have you ever consciously purchased environmentally friendly (green) products before?" 21.2% of the participants were food products, 20.5% were cleaning products, 12.3% were textile products, and 12.8% were personal care products. The types of environmentally friendly products purchased by the participants were; 14.2% were energy efficient products (such as electrical appliances, LED bulbs, hybrid cars, etc.), and 19% were recyclable products.

### **Descriptive Expressions, Normality and Reliability Values of the Scales Used in the Study**

The correlation ( $r$ ), calculated as the reliability coefficient of the test, is used to interpret the degree to which the differences in test scores are real and the degree to which they are due to an error factor. The reliability coefficient (Cronbach's Alpha) takes a value between 0.000 and 1.000. As the coefficient approaches 1.000, the reliability of the data is interpreted as high; as it approaches 0.000, the reliability of the data is interpreted as low. Reliability analysis is the degree to which the research scale consistently measures the conceptual structure. In reliability analysis, the reliability coefficient is measured by the Cronbach's Alpha value (Gürbüz and Şahin, 2016: 309-325).

The item averages and standard deviations of the research scales; environmental awareness and environmentally friendly product awareness and green marketing activities awareness level scales are given in Table 2 and Table 3.

**Table 2.** Item Means of Environmental Awareness and Eco-Friendly Product Awareness Scale

	Scale items	N	Average	Standard Deviation
<b>Dimension 1: Environmentalism</b>				
1	Environmental issues are important to me.	404	4,46	,825
2	When purchasing a product, I consider how it will affect my environment and other consumers.	404	4,18	,783
3	I see myself as an environmentally sensitive individual.	404	4,17	,742
4	I believe I can protect the environment by buying environmentally friendly products.	404	4,17	,913
5	When buying products, I always act with the awareness of buying products that will pollute the environment less.	404	4,06	,878
6	If I have to choose between two equal products, I will always buy the one that causes less harm to people and the environment.	404	4,25	,816
7	I do not buy products that I understand have the potential to harm the environment.	404	4,06	,895
8	I do not buy products from companies that do not respect the environment.	404	4,01	,929
9	I am very interested in organic, ecological and natural products	404	4,17	,826
10	When buying cosmetics, household goods, food, cleaning products, etc., I pay great attention to environmental friendliness.	404	4,11	,820
11	I am concerned about the harmful effects of environmental pollution on me and my family.	404	4,34	,800
12	I try to convince my family members and friends not to buy products that harm the environment.	404	3,86	,923
<b>Dimension 2: Economicity</b>				
13	I try to use electrical appliances at times when electricity consumption is low	404	3,93	1,006
14	I make a concerted effort to reduce the amount of electricity I use.	404	4,01	,898
15	At home, I choose low-voltage bulbs that consume less energy.	404	4,38	,771
16	The household appliances I buy consume less electricity than other brands.	404	4,20	,833
17	Whenever possible, I try to buy products that are packaged in reusable containers.	404	3,99	,927

<b>Dimension 3: Consciousness</b>				
18	I can tell whether many products are environmentally friendly by the signs and symbols on them.	404	4,02	,824
19	I can tell whether many products are environmentally friendly by the information about their ingredients.	404	4,00	,861
20	I like to make use of things that are going to be thrown away and make or create other things out of them.	404	4,02	,898
21	The behavior of consumers who purchase the products of socially responsible businesses can have a positive impact on society in terms of environmental awareness.	404	4,20	,797
<b>Dimension 4: Responsibility</b>				
22	It is important to buy products made from recycled paper to help protect our forests.	404	4,39	,759
23	Our country faces a serious solid waste problem.	404	4,37	,759
24	Businesses should encourage consumers to recycle solid waste (advertisements, various gifts, etc.)	404	4,45	,752
<b>Dimension 5: Responsiveness</b>				
25	I prefer to buy recycled products such as paper, plastic and glass.	404	4,23	,811
26	I don't believe that people in our country are doing enough to protect the environment.	404	4,19	,964
<b>Dimension 6: Media</b>				
27	All warnings about environmental pollution are made by the media.	404	3,45	1,164
28	Despite all the warnings, we do nothing to protect the environment.	404	3,93	1,024

In Table 2, the item with the highest mean in the “environmental awareness and environmentally friendly product awareness scale” is item 1 “environmental issues are important to me” ( $\bar{X}=4,46$ ), while the item with the lowest mean is item 27 “all warnings about environmental pollution are made by the media” ( $\bar{X}=3,45$ ).

**Table 3.** Item Means of Green Marketing Activities Awareness Level Scale

	Scale items	N	Average	Standard Deviation
1	If I learn that the packaging of the products I buy is harmful to the environment, I will stop buying them.	404	3,89	,917
2	If I learn that the product I buy is produced in a way that harms the environment, I will stop using it	404	4,00	,956
3	I do not prefer over-packaged products.	404	3,96	,918
4	Advertising of environmentally friendly products has an impact on purchasing behavior.	404	4,18	,847
5	Environmental issues/problems published in the media affect my purchasing behavior	404	4,09	,857
6	I prefer products with labels that indicate that they do not harm the environment.	404	4,17	,749
7	When buying household electrical appliances, I prefer A+ class (energy efficient).	404	4,52	,710
8	When I buy detergent, I pay attention to the amount of phosphate it contains.	404	3,61	1,114
9	I do not buy sprays or deodorants containing gases that damage the ozone layer.	404	3,63	1,159
10	I prefer products that are produced in the country as much as possible, as I consider the natural resources wasted during the transportation of the products.	404	3,90	1,003
11	I am willing to pay more for environmentally friendly products than I pay for other products.	404	3,76	1,049
12	When choosing between two products, I prefer the environmentally friendly one.	404	4,20	,804
13	I prefer products made from recycled materials.	404	4,10	,797
14	When shopping, I prefer to use biodegradable materials such as nets, paper bags, cotton bags and linen bags as much as possible.	404	4,11	,894

In Table 3, the item with the highest mean in the “green marketing activities awareness level scale” is item 7 “I prefer A+ class (energy saving) when purchasing electrical household goods” ( $\bar{X}=4.52$ ), while the item with the lowest mean is item 8 “I pay attention to the amount of phosphate it contains when purchasing detergent” ( $\bar{X}=3.61$ ).

Table 4 shows the general scale statements of the participants. The means and standard deviations of the dimensions of the research scales of environmental awareness and environmentally friendly product awareness; environmentalism, economy, consciousness,

responsibility, sensitivity, media, and the mean and standard deviation of the items related to the green marketing activities awareness level scale are shown in Table 4.

**Table 4.** Descriptive Values and Averages Regarding Scales

**ÇBÇD = The item means and standard deviations for Environmental Awareness and Environmentally Friendly Product Awareness are as follows:**

Scale dimensions	Cronbach's Alpha	N	Average	Standard Deviation	Skewness	Kurtosis
Environmentalism	,918	404	4,19	,60	-1,235	2,864
Economics	,834	404	4,04	,69	-,799	1,064
Consciousness	,771	404	4,12	,64	-,989	2,044
Responsibility	,620	404	4,04	,69	-,628	,309
Sensitivity	,637	404	4,37	,65	-1,379	2,910
Media	,436	404	3,82	,85	-,722	,706
ÇBÇD	,951	404	4,12	,57	-1,143	2,934

\* Very Low (1.00-1.80), Low (1.81-2.60), Medium (2.61-3.40), High (3.41-4.20), Very High (4.21-5.00). (Arithmetic Mean Values)

**YPFFD = The item mean and standard deviation of Green Marketing Activities Awareness Level are as follows:**

Scale dimensions	Cronbach's Alpha	N	Average	Standard Deviation	Skewness	Kurtosis
YPFFD	,926	404	4,00	,65	-,748	,699

\* Very Low (1.00-1.80), Low (1.81-2.60), Medium (2.61-3.40), High (3.41-4.20), Very High (4.21-5.00). (Arithmetic Mean Values)

In Table 4, the means, standard deviations, median, mode, normality values and reliability values of the two main scales “environmental awareness and environmentally friendly product awareness” (EAA) and “green marketing activities awareness level” (GPAA) and the 6 sub-dimensions of this scale are given. The conformity of the scale expressions used in the research to normal distribution can be understood by the fact that the mean, median and mode have equal or close values. Cronbach’s Alpha coefficient; If  $0.60 \leq \alpha \leq 0.80$ , the scale is quite reliable, and if  $0.80 \leq \alpha \leq 1.00$ , the scale is highly reliable (Kayış, 2008: 405). It is understood that the data are distributed between the skewness/kurtosis range of  $-/+ 3$  and this shows a normal distribution. According to Table 4, the Cronbach's Alpha (mean) value of the participants is as follows environmental awareness and environmentally friendly product awareness is 0.95; high. Cronbach's Alpha value of green marketing activities awareness levels is 0.926; it is seen that it is high.

#### 4.1.1. Analysis of Hypotheses

The main and sub hypotheses for the purpose of the study are as follows:

**H1: There is a statistically significant difference between demographic characteristics and environmental awareness and environmentally friendly product awareness.**

H1a: There is a statistical relationship between gender and environmental awareness and environmentally friendly product awareness

H1b: There is a statistically significant difference between age and environmental awareness and environmentally friendly product awareness.

H1c: There is a statistically significant difference between education and environmental awareness and environmentally friendly product awareness.

H1d: There is a significant difference between marital status and environmental awareness and environmentally friendly product awareness

H1e: There is a statistically significant difference between occupation and environmental awareness and environmentally friendly product awareness.

H1f: There is a significant difference between income level and environmental awareness and environmentally friendly product awareness

**H2: There is a statistically significant difference between demographic characteristics and the level of awareness of green marketing activities.**

H2a: The relationship between gender and awareness of green marketing activities

H2b: There is a statistically significant difference between age and awareness level of green marketing activities.

H2c: There is a significant difference between education and awareness level of green marketing activities

H2d: There is a statistically significant difference between marital status and awareness level of green marketing activities.

H2e: There is a statistically significant difference between occupation and awareness level of green marketing activities

H2f: There is a statistically significant difference between income level and awareness level of green marketing activities

**H3: There is a statistically significant difference between the level of environmental awareness, environmentally friendly product awareness according to the variable of satisfaction with the purchased product.**

**H4: There is a statistically significant difference between the level of awareness of green marketing activities and the variable of satisfaction with the purchased product.**

**H5: There is a statistically significant and positive relationship between environmental awareness, environmentally friendly product awareness and green marketing activities awareness level.**

**H6: Environmental awareness and environmentally friendly product awareness have a statistically significant effect on the level of awareness of green marketing activities.**

H6a: Environmental awareness and awareness of environmentally friendly products through green marketing activities

H6b: Environmental awareness and eco-friendly product awareness have a statistically significant effect on green marketing activities

H6c: Environmental awareness and eco-friendly product awareness have a statistically significant effect on green marketing activities

H6d: Environmental awareness and environmentally friendly product awareness have a statistically significant effect on green marketing activities.

H6e: Environmental awareness and environmentally friendly product awareness have a statistically significant effect on green marketing activities.

H6f: Environmental awareness and environmentally friendly product awareness have a statistically significant effect on green marketing activities.

**4.1.1.1. Independent Groups T Test and One Way Analysis of Variance (One Way ANOVA)**

The t-test measures whether there is a significant difference on a given subject. Multiple comparison tests; if there is a difference between the groups, it is first determined whether the groups are homogeneous and the multiple comparison (post-hoc) test is used to determine which group is different from the other. If homogeneity is provided, tests for equality of variances are used. If homogeneity is not provided, tests for unequal variances are used (Karagöz, 2017: 200). Therefore, first, it should be tested whether the variances are equal and the groups should be homogeneous (Durmuş, et al., 2016: 124). The differences between demographic characteristics and environmental awareness, environmentally friendly product awareness and green marketing activities awareness level dimensions (including sub-dimensions) were examined. The research results of the main hypotheses and sub-hypotheses are as follows:

**H1: There is a statistically significant difference between demographic characteristics and environmental awareness and environmentally friendly product awareness.**

**H2: There is a statistically significant difference between demographic characteristics and the level of awareness of green marketing activities.**

**Table 5.** Independent Sample T-Test Results of Environmental Awareness, Environmentally Friendly Product Awareness and Green Marketing Activities Awareness Level According to Gender Variable

Dimensions	Gender	N	$\bar{X}$	SS	T	P
Environmentalism	Woman	219	4,2158	,52859	,816	,415
	Male	185	4,1653	,68589		
Economics	Woman	219	4,0557	,60609	,222	,824
	Male	185	4,0400	,78375		
Consciousness	Woman	219	4,1164	,59202	-,207	,836
	Male	185	4,1297	,70088		

Responsibility	Woman	219	4,0837	,67547	1,099	,272
	Male	185	4,0072	,72144		
Sensitivity	Woman	219	4,3950	,60799	,666	,506
	Male	185	4,3514	,70773		
Media	Woman	219	3,7945	,84390	-,666	,506
	Male	185	3,8514	,86810		
ÇBÇD	Woman	219	4,1416	,49711	,510	,610
	Male	185	4,1118	,64900		
YPFFD	Woman	219	4,0104	,58689	,115	,908
	Male	185	4,0027	,73557		

p<0,05\*

When Table 5 is examined; there is no statistically significant difference between the environmental awareness and environmentally friendly product awareness of the participants according to gender (p=610>0.05). There was no statistically significant difference between the participants' awareness levels of green marketing activities according to gender variable (p=908>0.05). H1a and H2a hypothesis is not accepted.

**Table 6.** Anova Analysis Results of Environmental Awareness, Environmentally Friendly Product Awareness and Green Marketing Activities Awareness Level According to Age Variable

Dimensions	Age	N	$\bar{X}$	SS	F	P	Bonferonni
Environmentalism	<sup>1</sup> 18-25 age	62	4,0941	,54749	4,085	,007*	3>4
	<sup>2</sup> 26-35 age	210	4,1865	,57902			
	<sup>3</sup> 36-45 age	93	4,3522	,57724			
	<sup>4</sup> Ages 46 and above	39	4,0021	,80010			
Economics	<sup>1</sup> 18-25 age	62	4,0323	,71992	2,320	,075	-
	<sup>2</sup> 26-35 age	210	4,0390	,65520			
	<sup>3</sup> 36-45 age	93	4,1720	,63833			
	<sup>4</sup> Ages 46 and above	39	3,8308	,90326			
Consciousness	<sup>1</sup> 18-25 age	62	4,1855	,60553	3,315	,020*	3>4
	<sup>2</sup> 26-35 age	210	4,0881	,60251			
	<sup>3</sup> 36-45 age	93	4,2527	,60511			
	<sup>4</sup> Ages 46 and above	39	3,8974	,90087			
Responsibility	<sup>1</sup> 18-25 age	62	4,0591	,65987	1,837	,140	-
	<sup>2</sup> 26-35 age	210	4,0460	,68979			
	<sup>3</sup> 36-45 age	93	4,1398	,62423			
	<sup>4</sup> Ages 46 and above	39	3,8291	,90764			

Sensitivity	<sup>1</sup> 18-25 age	62	4,3065	,63604	1,966	,119	-
	<sup>2</sup> 26-35 age	210	4,3857	,60995			
	<sup>3</sup> 36-45 age	93	4,4731	,68113			
	<sup>4</sup> Ages 46 and above	39	4,1923	,81608			
Media	<sup>1</sup> 18-25 age	62	3,8710	,84415	,187	,905	-
	<sup>2</sup> 26-35 age	210	3,8143	,84649			
	<sup>3</sup> 36-45 age	93	3,8333	,88568			
	<sup>4</sup> Ages 46 and above	39	3,7436	,86505			
ÇBÇD	<sup>1</sup> 18-25 age	62	4,0916	,54558	3,190	,024*	3>4
	<sup>2</sup> 26-35 age	210	4,1187	,54197			
	<sup>3</sup> 36-45 age	93	4,2546	,51953			
	<sup>4</sup> Ages 46 and above	39	3,9332	,79490			
YPFFD	<sup>1</sup> 18-25 age	62	3,9528	,67018	2,102	,099	-
	<sup>2</sup> 26-35 age	210	4,0034	,63075			
	<sup>3</sup> 36-45 age	93	4,1252	,56887			
	<sup>4</sup> Ages 46 and above	39	3,8297	,91218			

p<0,05\*

Table 6 shows the results of the ANOVA analysis according to the age variable of the participants of the participants' environmental awareness and environmentally friendly product awareness scale showed a statistically significant difference according to the environmental awareness and environmentally friendly product awareness scale average, environmentalism and awareness sub-dimensions (p=024<0.05). The results of the ANOVA analysis on the age variable of the participants' awareness levels of green marketing activities showed a statistically significant difference in the environmentally friendly and environmentally conscious product awareness scale average, environmentalism and awareness sub-dimensions (p=099<0.05). The H1b and H2b hypothesis were accepted.

**Table 7.** Anova Analysis Results of Environmental Awareness, Environmentally Friendly Product Awareness and Green Marketing Activities Awareness Level According to Educational Status Variable

Dimensions	Education	N	$\bar{X}$	SS	F	P	Bonferonni
Environmentalism	<sup>1</sup> Primary education	22	3,9394	,74143	1,783	,131	-
	<sup>2</sup> High school	61	4,3251	,51070			
	<sup>3</sup> Associate Degree	69	4,1546	,68020			
	<sup>4</sup> Licence	195	4,1893	,56818			
	<sup>5</sup> Postgraduate	57	4,2061	,65259			
Economics	<sup>1</sup> Primary education	22	3,6818	,85448	4,074	,003 *	2>1,4
	<sup>2</sup> High school	61	4,2820	,55783			
	<sup>3</sup> Associate Degree	69	4,1449	,67203			
	<sup>4</sup> Licence	195	3,9990	,68489			
	<sup>5</sup> Postgraduate	57	3,9930	,72994			
Consciousness	<sup>1</sup> Primary education	22	3,7841	,90730	2,322	,056	-
	<sup>2</sup> High school	61	4,2664	,50800			
	<sup>3</sup> Associate Degree	69	4,1123	,65380			
	<sup>4</sup> Licence	195	4,1179	,61200			
	<sup>5</sup> Postgraduate	57	4,1272	,71358			
Responsibility	<sup>1</sup> Primary education	22	3,6364	,82878	3,331	,011*	2>1
	<sup>2</sup> High school	61	4,2514	,60448			
	<sup>3</sup> Associate Degree	69	4,0290	,68537			
	<sup>4</sup> Licence	195	4,0479	,68613			
	<sup>5</sup> Postgraduate	57	4,0175	,73035			

Sensitivity	<sup>1</sup> Primary education	22	4,0682	,72859	2,291	,059	-
	<sup>2</sup> High school	61	4,4836	,56985			
	<sup>3</sup> Associate Degree	69	4,2826	,74989			
	<sup>4</sup> Licence	1 95	4,4205	,59429			
	<sup>5</sup> Postgraduate	57	4,3333	,75198			
Media	<sup>1</sup> Primary education	22	3,6364	,90214	5,179	,000*	2>4,5
	<sup>2</sup> High school	61	4,1639	,65014			
	<sup>3</sup> Associate Degree	69	4,0217	,80181			
	<sup>4</sup> Licence	195	3,6923	,90400			
	<sup>5</sup> Postgraduate	57	3,7193	,79067			
ÇBÇD	<sup>1</sup> Primary education	22	3,8263	,74078	3,051	,017*	2>1
	<sup>2</sup> High school	61	4,3009	,46367			
	<sup>3</sup> Associate Degree	69	4,1330	,63484			
	<sup>4</sup> Licence	195	4,1110	,52834			
	<sup>5</sup> Postgraduate	57	4,1109	,62075			
YPFDD	<sup>1</sup> Primary education	22	3,7045	,89738	2,897	,022*	2>1
	<sup>2</sup> High school	61	4,1897	,58100			
	<sup>3</sup> Associate Degree	69	4,0859	,62996			
	<sup>4</sup> Licence	195	3,9755	,65361			
	<sup>5</sup> Postgraduate	57	3,9398	,63656			

p<0,05\*

In Table 7, according to the variable of environmental awareness and environmentally friendly product awareness education status of the participants, a statistically significant difference was found in the environmental awareness and environmentally friendly product

awareness scale average, economics, responsibility, media sub-dimensions as a result of anova analysis ( $p=017<0.05$ ). As a result of ANOVA analysis, statistically significant differences were found in the means of environmental awareness and green product awareness, economic efficiency, responsibility, media segmentation and awareness level measurements of green marketing activities according to educational level variables ( $p=022<0.05$ ). Hypothesis H1c and H2c was accepted.

**Table 8.** Independent Sample T-Test Results of Environmental Awareness, Environmentally Friendly Product Awareness and Green Marketing Activities Awareness Level According to Marital Status Variable

Dimensions	Marital status	N	$\bar{X}$	SS	T	P
Environmentalism	Married	242	4,2025	,64248	,398	,691
	Single	162	4,1780	,54708		
Economics	Married	242	4,0587	,70259	,360	,719
	Single	162	4,0333	,67842		
Consciousness	Married	242	4,1147	,65733	-,300	,765
	Single	162	4,1343	,62377		
Responsibility	Married	242	4,0275	,73142	-,744	,457
	Single	162	4,0802	,64328		
Sensitivity	Married	242	4,4153	,68630	1,513	,131
	Single	162	4,3148	,60250		
Media	Married	242	3,7624	,89161	-1,676	,095
	Single	162	3,9074	,79051		
ÇBÇD	Married	242	4,1293	,59664	,059	,953
	Single	162	4,1259	,53260		
YPFDD	Married	242	4,0100	,66044	,117	,907
	Single	162	4,0022	,65714		

$p<0,05^*$

According to the t-test (independent sample) results of the participants in Table 8; environmental awareness and environmentally friendly product awareness There is no statistically significant difference according to marital status variable ( $p=953>0.05$ ). The participants' green marketing activities awareness no statistically significant difference was found according to the marital status variable ( $p=907>0.05$ ). H1d and H2d hypothesis was not accepted.

**Table 9.** Anova Analysis Results of Environmental Awareness, Environmentally Friendly Product Awareness and Green Marketing Activities Awareness Level According to Occupation

Dimensions	Job	N	$\bar{X}$	SS	F	P	Bonferonni
Environmentalism	Student	48	4,0434	,58396	,722	,632	-
	Private Sector	90	4,2676	,60975			
	Public Employee	155	4,1914	,55701			
	Freelance	37	4,2072	,70945			
	Housewife	33	4,1818	,47982			
	Retired	35	4,2000	,78283			
	Unemployed	6	4,2222	,76316			
Economics	Student	48	3,9042	,74490	,672	,672	-
	Private Sector	90	4,1378	,70926			

	Public Employee	155	4,0606	,64400			
	Freelance	37	3,9838	,76213			
	Housewife	33	4,0667	,54006			
	Retired	35	4,0229	,82572			
	Unemployed	6	4,0000	,77974			
Consciousness	Student	48	4,0885	,58685	,263	,954	-
	Private Sector	90	4,1861	,59558			
	Public Employee	155	4,1161	,63660			
	Freelance	37	4,1419	,73725			
	Housewife	33	4,0758	,53211			
	Retired	35	4,0571	,85982			
	Unemployed	6	4,1250	,66615			
Responsibility	Student	48	3,9792	,69923	,716	,637	-
	Private Sector	90	4,0852	,67330			
	Public Employee	155	4,0903	,65279			
	Freelance	37	3,9640	,80808			
	Housewife	33	4,0505	,65150			
	Retired	35	3,9048	,85395			
	Unemployed	6	4,3333	,76012			
Sensitivity	Student	48	4,1875	,69669	1,124	,347	-
	Private Sector	90	4,4278	,64721			
	Public Employee	155	4,4258	,60783			
	Freelance	37	4,2568	,65215			
	Housewife	33	4,3788	,59987			
	Retired	35	4,4000	,81168			
	Unemployed	6	4,3333	,87560			
Media	Student	48	3,7500	,89324	1,522	,170	-
	Private Sector	90	3,9833	,73228			
	Public Employee	155	3,7613	,83615			
	Freelance	37	3,9459	,93381			
	Housewife	33	3,9242	,88495			
	Retired	35	3,5714	,87568			
	Unemployed	6	3,5833	1,56258			
ÇBÇD-	Student	48	4,0074	,58601	,658	,684	-
	Private Sector	90	4,2044	,56778			
	Public Employee	155	4,1325	,51985			
	Freelance	37	4,1168	,67141			
	Housewife	33	4,1277	,45193			
	Retired	35	4,0857	,74267			
	Unemployed	6	4,1429	,66356			
YPFFD	Student	48	3,9137	,71731	1,253	,278	-
	Private Sector	90	4,1048	,58031			
	Public Employee	155	3,9553	,65809			
	Freelance	37	4,0965	,73371			
	Housewife	33	4,1147	,44426			
	Retired	35	3,8776	,81911			
	Unemployed	6	4,2262	,63954			

p<0,05\*

According to the results of ANOVA analysis of the participants in Table 9; environmental awareness and environmentally friendly product awareness did not show a statistically significant difference according to the occupation variable ( $p=684>0.05$ ). The participants' green marketing activities awareness levels did not show a statistically significant difference according to the occupation variable ( $p=278>0.05$ ). The H1e and H2e hypothesis was not accepted.

**Table 10.** Anova Analysis Results of Environmental Awareness, Environmentally Friendly Product Awareness and Green Marketing Activities Awareness Level According to Income Status Variable

Dimensions	Income	N	$\bar{X}$	SS	F	P	Bonferonni
Environmentalism	5000 TL and below	59	4,1427	,57069	,924	,465	-
	5001- 10000 TL	64	4,1536	,76624			
	10001- 15000 TL	71	4,1408	,62243			
	15001- 20000 TL	85	4,3078	,59859			
	20001- 25000 TL	69	4,2162	,47557			
	Above 25001 TL	56	4,1518	,56499			
Economics	5000 TL and below	59	4,0508	,72359	1,388	,228	-
	5001- 10000 TL	64	4,0187	,81628			
	10001- 15000 TL	71	3,9718	,71658			
	15001- 20000 TL	85	4,2047	,60865			
	20001- 25000 TL	69	4,0551	,60768			
	Above 25001 TL	56	3,9321	,67826			
Consciousness	5000 TL and below	59	4,1780	,59642	1,217	,300	-
	5001- 10000 TL	64	4,0117	,81702			
	10001- 15000 TL	71	4,0282	,69891			
	15001- 20000 TL	85	4,2206	,62964			
	20001- 25000 TL	69	4,1594	,51978			
	Above 25001 TL	56	4,1161	,53505			
Responsibility	5000 TL and below	59	4,0791	,71207	1,501	,189	-
	5001- 10000 TL	64	4,0417	,81542			
	10001- 15000 TL	71	3,8685	,69802			
	15001- 20000 TL	85	4,1608	,65387			
	20001- 25000 TL	69	4,0966	,64449			
	Above 25001 TL	56	4,0238	,64152			
Sensitivity	5000 TL and below	59	4,2797	,70265	1,249	,285	-
	5001- 10000 TL	64	4,3906	,77903			
	10001- 15000 TL	71	4,3732	,69033			
	15001- 20000 TL	85	4,4941	,59509			
	20001- 25000 TL	69	4,3986	,56607			
	Above 25001 TL	56	4,2500	,57997			
Media	5000 TL and below	59	3,9237	,88480	,676	,642	-
	5001- 10000 TL	64	3,7813	,97131			
	10001- 15000 TL	71	3,6761	,72259			
	15001- 20000 TL	85	3,8706	,89360			
	20001- 25000 TL	69	3,8333	,86461			
	Above 25001 TL	56	3,8482	,76823			
ÇBÇD-	5000 TL and below	59	4,1186	,57921	1,142	,338	-
	5001- 10000 TL	64	4,0876	,72458			
	10001- 15000 TL	71	4,0488	,59450			
	15001- 20000 TL	85	4,2433	,53414			

	20001- 25000 TL	69	4,1522	,45554			
	Above 25001 TL	56	4,0791	,50904			
YPPFD	5000 TL and below	59	4,0690	,66914	1,847	,103	-
	5001- 10000 TL	64	3,9408	,77451			
	10001- 15000 TL	71	3,8561	,70592			
	15001- 20000 TL	85	4,1487	,60751			
	20001- 25000 TL	69	4,0290	,55725			
	Above 25001 TL	56	3,9656	,60194			

p<0,05\*

According to Table 10, the results of ANOVA analysis of the participants; environmental awareness and environmentally friendly product awareness did not show a statistically significant difference according to income status ( $p=338>0.05$ ). The participants' green marketing activities awareness levels did not show a statistically significant difference according to income status ( $p=103>0.05$ ). The H1f and H2f hypothesis was not accepted. As a result, hypothesis H1 and H2 are rejected.

**Table 11.** Independent Sample T-Test Results of Environmental Awareness, Environmentally Friendly Product Awareness and Green Marketing Activities Awareness Level According to the Variable of Satisfaction with the Purchased Product

Dimensions	Satisfaction	N	$\bar{X}$	SS	T	P
Environmentalism	Yes	394	4,2136	,59008	4,470	,000*
	No	10	3,3667	,65758		
Economics	Yes	394	4,0635	,68092	2,744	,006*
	No	10	3,4600	,90456		
Consciousness	Yes	394	4,1428	,62554	4,044	,000*
	No	10	3,3250	,85025		
Responsibility	Yes	394	4,0618	,69113	2,381	,018*
	No	10	3,5333	,77300		
Sensitivity	Yes	394	4,3871	,64643	2,335	,020*
	No	10	3,9000	,84327		
Media	Yes	394	3,8236	,85678	,451	,652
	No	10	3,7000	,78881		
ÇBÇD	Yes	394	4,1449	,56061	3,824	,000*
	No	10	3,4571	,60861		
YPPFD	Yes	394	4,0230	,64649	3,124	,002*
	No	10	3,3714	,83354		

p<0,05\*

**H3:** There is a statistically significant difference between the level of environmental awareness, environmentally friendly product awareness according to the variable of satisfaction with the purchased product.

**H4: There is a significant difference between the central level of green marketing activities and the variable of satisfaction with the purchased product.**

The results of the independent sample t-test in Table 11 show that the participants responded “yes” to all variables except the media sub-dimension according to the variables of satisfaction with purchased products and environmental awareness and environmental consciousness ( $p=000<0.05$ ). Hypothesis H3 was accepted. The results of the independent sample t-test for the variable of satisfaction with the purchased products found statistically significant differences in favor of the participants in all variables except the media sub-dimension. Participants' level of awareness of green marketing activities.

All variables were found statistically significant except for the significant difference in favor of the participants who answered “yes” in the media sub-dimension ( $p=002$ ). Hypothesis H4 was accepted.

**4.1.1.2. Correlation Analysis**

The correlation coefficient (r) calculated as a result of correlation analysis can take a value between -1 and 1. A coefficient value of 1 indicates a perfect linear relationship between two variables. A coefficient value of -1 indicates that there is a perfect relationship between the variables but the direction of this relationship is inverse (Erdoğan, 2009: 116-117). To interpret the correlation coefficient, the p value should be as follows:  $p<0.05$ .

**H5: There is a statistically significant and positive relationship between environmental awareness, environmentally friendly product awareness and green marketing activities awareness level.**

The results of Pearson correlation analysis for the study variables are shown in Table 12.

**Table 12.** Pearson Correlation Analysis Results for Variables

	1-	2-	3-	4-	5-	6-	7-	8-
1- Environmentalism	1							
	-							
2- Economics	,821**	1						
	,000	-						
3- Consciousness	,791**	,743**	1					
	,000	,000	-					
4- Responsibility	,673**	,703**	,661**	1				
	,000	,000	,000	-				
5- Sensitivity	,718**	,672**	,660**	,636**	1			
	,000	,000	,000	,000	-			

6- Media	,446**	,496**	,418**	,519**	,338**	1		
	,000	,000	,000	,000	,000	-		
7- ÇBÇD	,954**	,909**	,866**	,803**	,779**	,580**	1	
	,000	,000	,000	,000	,000	,000	-	
8- YPFFD	,817**	,811**	,755**	,721**	,604**	,539**	,870**	1
	,000	,000	,000	,000	,000	,000	,000	-

p<0,01\*\*, p<0,05\*

Table 12 describes the results of the Pearson correlation analysis; Since there is a significant and positive ( $r=0.817$ ;  $p=0.000$ ) high relationship between green marketing activities awareness level and environmentalism; H5a hypothesis was accepted. Since there is a significant and positive ( $r=0.811$ ;  $p=0.000$ ) high relationship between green marketing activities awareness level and economics; H5b hypothesis was accepted. Since there is a significant and positive ( $r=0.755$ ;  $p=0.000$ ) high relationship between green marketing activities awareness level and consciousness; H5c hypothesis was accepted. Since there is a significant and positive ( $r=0.721$ ;  $p=0.000$ ) high relationship between green marketing activities awareness level and responsibility; H5d hypothesis was accepted. Since there is a significant and positive ( $r=0.604$ ;  $p=0.000$ ) high relationship between green marketing activities awareness level and sensitivity; H5e hypothesis was accepted. Since there is a significant and positive ( $r=0.539$ ;  $p=0.000$ ) medium level relationship between green marketing activities awareness level and media; H5f hypothesis was accepted. Since there is a significant and positive ( $r=0.580$ ;  $p=0.000$ ) high level relationship between environmental awareness, environmentally friendly product awareness and green marketing activities awareness level; H5g hypothesis was accepted.

#### 4.1.1.3. Regression Analysis

The significance level corresponding to the "f" value obtained as a result of the Anova test to examine whether the regression model is significant or not is a factor in deciding whether the model is appropriate or not. The significance level of the "t" value corresponding to the "Beta" coefficient is also given in the "Sig." section. If the significance level is less than 0.05 ( $p<0.05$ ), it is concluded that the variable in question makes a statistically significant contribution to the explanatory power of the model (Altunışık et al., 2007: 204-209).

In this study, hierarchical regression analysis was preferred because it gave more accurate results. The regression analysis hypotheses and sub-hypotheses of the research are as follows;

**H6: Environmental awareness and environmentally friendly product awareness have a statistically significant effect on the level of awareness of green marketing activities.**

The results of the hierarchical regression analysis are shown in Table 13.

**Table 13.** Results of Hierarchical Regression Analysis Conducted to Determine the Effect of Environmental Awareness and Environmentally Friendly Product Awareness on Green Marketing Activities Awareness Level

	Independent Variable	Dependent Variable	R <sup>2</sup>	F	Beta	T	P	Tolerance	VIF	Durbin Watson
Model 1	Still	Awareness	,667	807,661	,282	2,129	,034	-	-	-
	Environmentalism				,888	28,419	,000	1,000	1,000	
Model 2	Still	Awareness	,727	536,766	,235	1,958	,051	-	-	1,977
	Environmentalism				,505	10,189	,000	,327	3,062	
	Economics				,409	9,435	,000	,327	3,062	
Model 3	Still	Awareness	,750	403,707	,078	,660	,510	-	-	
	Environmentalism				,434	8,901	,000	,309	3,241	
	Economics				,311	6,998	,000	,285	3,512	
	Responsibility				,210	6,176	,000	,477	2,095	
Model 4	Still	Awareness	,759	318,666	,002	,016	,987	-	-	
	Environmentalism				,431	9,015	,000	,309	3,241	
	Economics				,283	6,414	,000	,278	3,598	
	Responsibility				,173	4,988	,000	,444	2,253	
	Media				,092	4,090	,000	,697	1,436	
Model 5	Still	Awareness	,766	265,076	-	-,566	,572	-	-	
	Environmentalism				,350	6,693	,000	,250	3,995	
	Economics				,253	5,730	,000	,268	3,728	
	Responsibility				,148	4,231	,000	,426	2,350	
	Media				,092	4,158	,000	,697	1,436	
	Consciousness				,152	3,557	,000	,332	3,011	
Model 6	Still	Awareness	,770	226,205	,029	,241	,810	-	-	
	Environmentalism				,392	7,273	,000	,232	4,313	
	Economics				,267	6,049	,000	,265	3,770	
	Responsibility				,171	4,814	,000	,403	2,484	
	Media				,086	3,897	,000	,690	1,449	
	Consciousness				,167	3,920	,000	,327	3,059	

Sensitivity	-2,850 ,005 ,426 ,105	2,350
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When the results of the hierarchical regression analysis conducted to determine the effect of environmental friendliness and green marketing activities on the level of awareness are analyzed in Table 13, it is seen that while explaining 66.7% of awareness in the first model, the rate of explaining the variance of awareness increases to 72.7% when economics is added in the second model, the rate of explaining the variance increases to 75% when responsibility is added in the third model, the rate of explaining the variance increases to 75% when media is added in the fourth model, the rate of explaining the variance increases to 75.9% when media is added in the fourth model, the rate of explaining the variance increases to 76.6% when consciousness is added in the fifth model, and the rate of explaining the variance increases to 77% when sensitivity is added in the sixth model. In the fifth model, when consciousness was added, the variance increased to 76.6%, and in the sixth model, when sensitivity was added, the variance increased to 77%.

P value (coefficient of significance): The p value obtained from a statistical test determines whether the null hypothesis can be rejected. Statistically, if the P value is less than 0.05, the null hypothesis is rejected and the alternative hypothesis is accepted (Mendeş et al., 2005: 360). When I look at the p values in the factor row added in the research, all of them seem to be less than 0.05. In this context, since  $p=34 < 0.05$  for hypothesis H6, the effect of environmental awareness and environmentally friendly product awareness on the level of awareness of green marketing activities is considered statistically significant. Since  $p < 0.05$  for hypotheses H6a, H6b, H6c, H6d, H6e and H6f, the effect of environmental awareness and environmentally friendly product awareness on the level of green marketing activities environmentalism, economics, responsibility, media, consciousness and sensitivity is considered statistically significant. The Durbin-Watson coefficient, which tests whether there is autocorrelation; If it is between 1.5-2.5, it is determined that there is no autocorrelation in the model (Kalaycı, 2010: 264). As a result of the hierarchical regression analysis, the Durbin-Watson coefficient was found to be 1.977 and there was no autocorrelation in the model. Hypothesis H6 is accepted.

According to the results obtained within the scope of the research, the results of the research hypotheses are given in Table 14.

**Table 14.** Hypotheses and Findings of the Study

Hypotheses	Acceptance	Rejection
H1: There is a statistically significant difference between demographic characteristics and environmental awareness and environmentally friendly product awareness.		✓
H2: There is a statistically significant difference between demographic characteristics and the level of awareness of green marketing activities.		✓
H3: There is a statistically significant difference between the level of environmental awareness, environmentally friendly product awareness according to the variable of satisfaction with the purchased product.	✓	

H4: There is a statistically significant difference between the level of awareness of green marketing activities and satisfaction with the purchased product.	✓	
H5: There is a statistically significant and positive relationship between environmental awareness, eco-friendly product awareness and awareness of green marketing activities.	✓	
H6: There is a statistically significant effect of environmental awareness and eco-friendly product awareness on the level of awareness of green marketing activities.	✓	

## 5. DISCUSSION

Consumers demand that renewable resources that cause less pollution, reduce waste and recycle more are used more effectively in production and that products are safer for the ecosystem (Saritas, 2018: 18). In this period when businesses need to take urgent measures on environmental issues, it is of great importance that they bring a new perspective to the concept of green. Providing models integrated with this new approach and including projects that emphasize the scope and importance in this field will provide a better understanding and awareness of issues such as green consumer behavior and green consumption (Murphy, Steven, & Strong, 2020: 1-4). Increasing sensitivity to the environment harmonizes production, marketing and consumption processes with nature (Yüce, 2021: 12).

According to the researches, there are various factors that affect consumers' green product purchasing behavior. These factors are divided into three categories: demographic, psychographic and cultural. In this context, while developing green marketing strategies, businesses should analyze their target consumer groups well, inform consumers about environmentally friendly products and services, and take steps to meet their demands for green products and services (Özcan and Özgül, 2019: 17).

According to the results of the research; the participants' environmental awareness, environmentally friendly product awareness and green marketing activities awareness levels do not differ statistically according to their gender status. It does not overlap with Saba's (2019: 136) study, in his study, the "gender" variable shows a significant difference. It was observed that women were more environmentally conscious than men. It also differs statistically according to their age. This difference was found to be high in both the environmental awareness and environmentally friendly product awareness scale average and in the consciousness and environmentalism sub-dimensions of the 36-45 age group participants. This result is similar to Yıldız's (2022: 68) and Ilgar (2021: 70). The participants' environmental awareness, environmentally friendly product awareness and green marketing activities awareness levels differ statistically according to their educational status. This difference shows that participants with a high school education level have more environmentally conscious behavior than those with an associate degree and undergraduate degree. These obtained data are similar to Ilgar (2021: 70) and Erdem (2016: 78). Environmental awareness, environmentally friendly product awareness and green marketing activities awareness levels do not differ according to marital status. The research result is similar to Yıldız (2022: 69) and Erdem (2016: 78). Environmental awareness, environmentally friendly product awareness and green marketing activities awareness levels do not differ according to the occupation variable. The research result is similar to Erdem

(2016: 78) and Yıldız (2022: 69). Environmental awareness, environmentally friendly product awareness and green marketing activities awareness levels do not differ according to income status. The research result is similar to Yıldız (2022: 68) but not similar to Erdem (2016: 78). According to the independent sample t test result, environmental awareness, environmentally friendly product awareness and green marketing activities awareness levels according to the satisfaction with the purchased product variable, it was determined that there was a significant difference in favor of the participants who said yes in all variables except the media sub-dimension.

## **6. CONCLUSION**

When the results of the study were examined, it was determined that the participants' environmental awareness, environmentally friendly product awareness and marketing activities awareness levels varied according to age and education level. While the participants' satisfaction with the product they purchased varied according to environmental awareness and environmentally friendly product awareness, their awareness of green marketing activities also varied according to their satisfaction with the product they purchased.

In addition, there is a positive relationship between environmental awareness, environmentally friendly product awareness and green marketing activities awareness level, and environmental awareness and environmentally friendly product awareness affect the level of green marketing activities awareness. Environmental awareness and environmentally friendly product awareness differ according to education and age variables.

There is a statistically significant and positive relationship between the level of awareness regarding green marketing activities and environmentalism, economy, consciousness, responsibility, sensitivity, media and environmental awareness and environmentally friendly product awareness. Therefore, there is a significant and positive relationship between environmental awareness, environmentally friendly product awareness and green marketing awareness level.

As a result of the analyses conducted to evaluate the obtained data, it is seen that the participants' environmentally conscious individuals exhibit green product purchasing behavior and the vast majority of them have environmental awareness. In addition, it was determined that the majority of the questions regarding environmental pollution in the survey were sensitive to environmental pollution.

In this study, a quantitative approach was adopted and a survey method was applied. A single method was preferred due to constraints such as time and cost. In subsequent studies, applying the qualitative approach together and increasing the sample size will be beneficial in terms of making the results more understandable and generalizable. In addition, similar studies can be conducted using different variables and different analysis methods to reach a wider audience. In future studies, environmental awareness and environmentally friendly product issues can be examined specifically for certain product categories or sectors. Similarly, by applying different sampling methods, it is possible to reach audiences with more homogeneous views on green marketing awareness and contribute to marketing

practitioners and academic literature. It is expected that this study will shed light on future studies.

## 7. LIMITATIONS AND SUGGESTIONS FOR FURTHER RESEARCHES

In this study, convenience sampling method was used. A quantitative approach was adopted and survey method was applied. A single method was preferred due to constraints such as time and cost. In future studies, it would be beneficial to apply the qualitative approach together and increase the sample size in order to make the results more understandable and generalizable. It may be useful to make the capacity and volume results more understandable and generalizable with the qualitative solution that can be done later. In addition, a study covering similar groups, different analysis methods and a wider audience can be conducted.

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## AUTHORS' DECLARATION

**Publication Ethics Statement:** In all phases of the research, attention was paid to research and publication ethics.

**Contribution Rate Declaration:** Authors' contributions to the study are equal.

**Statement of Support and Acknowledgment:** The study did not receive support from any institution or organization.

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