# Factors That Affect Green Product Purchasing Behaviors of Consumers

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#### Abstract

Ecocide has been increasing in developed and developing countries due to industrialization as well as limitless needs of human beings and limited resources in the nature and the unconscious use of these limited resources. In developed and developing countries, organizations have noticed the environmental consciousness in time and started to direct their marketing strategies. With the environmental consciousness gaining importance, the concept of green marketing was proposed for the first time in a seminar about "environmental marketing" organized by American Marketing Association in 1975. Green marketing is releasing eco-friendly products, which satisfy the requirements and the needs of consumers, into the market. Due to consumer consciousness that has increased in recent years, the demand for eco-friendly products is high. For this reason, the studies regarding the introduction of eco-friendly products to the consumers and researching the factors that affect the preference of these products have gained importance day by day. In this study, the effects of demographics of the consumers in Istanbul on the purchase of green products have been examined. The data used in the study are the surveys collected by doing face-to-face interviews with 531 families. In the research it has been determined that 64.0% of the respondents purchase green products and 36.0% do not purchase. Chi-square analysis has been used to determine whether the green product purchasing behaviors differ according to demographics. According to the results of the analysis, a significant relation has been determined between green product purchasing behaviors and gender, age, education, profession, marital status and income. Additionally, factor analysiswere applied by using SPSS 20 program. Afterwards, reliability analysis and Kolmogorov-Smirnov normal distribution test have been applied to the subdimensions of the scale of Consumer Thoughts about Green Product. As it has been observed that the distribution is not normal in the scale, Mann-Whitney U and Kruskal Wallis tests from non-parametric tests have been carried out.

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With the results of the applied tests, it has been determined that the factor of Reliability and Environmental Consciousnessdiffers according to gender, the factor of Reliability and Environmental Consciousness and the factor of Mediadiffer according to age, the factorsof Reliability and Environmental Consciousness and Expectations from Producers differ according to education and income and thefactor of Media differs according to profession.

Keywords: Consumer, green product, thought, behavior, purchasing.

## Tüketicilerin Yeşil Ürün Satın Alma Davranışlarını Etkileyen Faktörler

## Özet

İnsanların ihtiyaçlarının sınırsız, doğadaki kaynakların sınırlı olması ve sınırlı olan bu kaynakların bilinçsizce kullanılmasının yanısıra; gelişmiş ve gelişmekte olan ülkelerde, sanavilesmeden dolavı cevre tahribatı artmaktadır. Sanavilesmis veya sanavilesme sürecinde olan ülkelerde, işletmeler zaman içerisinde çevre bilincinin farkına varmış ve pazarlama stratejilerine yön vermeye başlamışlardır. Çevre bilincinin önem kazanmasıyla, Yeşil pazarlama kavramı ilk kez, Amerikan Pazarlama Birliğinin 1975 yılında düzenlediği 'çevreyle ilgili pazarlama' konulu bir seminerde ortaya konmuştur. Yeşil pazarlama tüketicilerin istek ve ihtiyaçlarını karşılayan doğa ile dost ürünlerin pazarlamaya sunulmasıdır. Son yıllarda artan tüketici bilincinden ötürü çevre dostu ürünlere talep daha fazla olmaktadır. Bu nedenle, literatürde çevre dostu ürünlerin tüketiciyle buluşturulması ve bu ürünlerin tercihi üzerindeki etkili faktörlerin arastırılması vönündeki bircok calısma gün gectikce önem kazanmaktadır. Bu calısmada, İstanbul İlinde ailelerin demografik özelliklerinin yeşil ürünü satın alması üzerine etkisi incelenmiştir. Çalışmada kullanılan veriler 531 aile ile yüz yüze görüşerek yapılan anketlerden olusmustur. Arastırmada tüketicilerin %64,0'ünün yeşil ürünü satın aldığı, %36,0'sının ise almadığı belirlenmiştir. Yeşil ürün satın alma davranışlarının demografik özelliklerine göre farklılık gösterip göstermediği Ki kare analizi ile tespit edilmiştir. Analiz sonuçlarına göre cinsiyet, yaş eğitim, meslek, medeni durum, gelir arasında anlamlı bir ilişki bulunmuştur. Ayrıca; bu çalışmadaSPSS 20 kullanılarak faktör analizi yapılmıştır. Daha sonra, Yeşil Ürün ile ilgili Tüketici Düşünceleri Ölçeği Alt Boyutlarına güvenilirlik analizi, KolmogorovSmirnov normal dağılım testi yapılmıştır. Ölçekte dağılımın normal olmadığına karar verilerek nonparametric testlerden, Mann Whitney U ve Kruskal Wallis testleri yapılmıştır. Uygulanan test sonuçlarında, Güvenirlik-Çevrecilik Bilinci

faktörünün cinsiyete göre farklılık gösterdiği, Güvenirlik- Çevrecilik Bilinci ve Medya Faktörünün yaşa göre farklılık gösterdiği, Güvenirlik- Çevrecilik Bilinci ve Üreticiden Beklenenlerin eğitime göre farklılık gösterdiği, Medya Faktörünün mesleğe göre, gelir faktörünün Güvenirlik- Çevrecilik Bilincine göre farklılık gösterdiği tespit edilmiştir

Anahtar kelimeler: Tüketici, yeşil ürün, düşünce, davranış, satın alma.

## Introduction

With the development of industry and technology, the changes in the supply and demand have caused large damages on environment. The producers who did not behave consciously about the use of resources acted as if the resources would never be used up and the consumers hedonically started to buy many products which had become available thanks to mass production without thinking whether they are harmful to the environment or not. Within time, toxic waste, stack gases and packaging waste which takes centuries to dissolve in the nature started to create severe environmental problems in the air, sea and soil. The producers and consumers who faced with these problems have started to notice the environmental consciousness within the course of time.

For consumers, environmentalism was defined as "the time of awakening" in 1960s, in 1970s it was defined as "the time to make the move", in 1980s, it was defined as "the time to be economic" and in 1990s, it was defined as "the power in the market" (Ay and Ecevit 2005). It has been observed that the mankind, who had not attached sufficient importance to environmental issues until 1970s, has started to realize the mentioned issues since the beginning of 1970s due to the ecological problems which get worse (Karalar andKiracı, 2011). Important steps were taken in the direction to determine the profile of environmentally concerned consumers in 1970s and 1980s. In the studies that were carried out, mainly the issues about the purposes of the consumers to purchase ecologically packaged products, the role of benefit to motivate their environmentalist behaviors

and the examination of the consumption models about environment have been touched on. These researches suggest that environmentally concerned consumers are an important part of the market although they are few in number and they will provide the opportunity to distinguish the potential consumers according to being environmentally concerned (Newell and Green, 1997:53). 1990s have been named as "the decade of the environment" and social and environmental concerns have gained more importance by consumers in their decisions to choose products and vendors. During this period, there has been an increase in the sales of green products. Within this scope, organizations have attached importance to environment in order to establish competition in their decisions about marketing and managing(Menon et al., 1999:2).

The recent effects of environmental problems have reached to severe dimensions such as climate changes, global warming and shortage of water resources. In this situation, the impact of which has started to be felt, the increasing level of education has made the consumers more conscious and the change in the consumption behaviors of the consumers has had an impact on their purchasing behaviors. From now on, among thousands of products consumers prefer the products which are less harmful to the environment, which consume less energy, which are more concerned about the environment, and which are organic. Therefore, organizations should not ignore the needs and preferences of the consumers (Kuduz, 2011).

Today, organizations have understood that they cannot exist without being sensible to environmental problems, no matter which sector they are in. Accordingly, organizations need to include environmental dimensions of each activity they are carrying out in their business strategies and longterm plans, because environmental consciousness in any kind of market provides a competitive advantage. At this point, both in trade and service industries the term of green marketing have emerged and the organizations have taken yet another turn with the support and force of consumers, stakeholders and the governments(Atayand Dilek, 2013).

# 1.1. Green Product

Green product has been defined as the products which do not harm living creatures, which do not pollute the environment, which consume the sources less, which can be recycled (Erbaşlar, 2007), and it was also be defined as the product which tends to extend and save the natural environment by saving energy and the sources and decreasing and eliminating the wastes and poisonous materials (Ottman, 2006:24), and it was defined as the products which are produced with the production methods that do not harm the environment, which are durable and nontoxic and which can be recycled (Emginand Türk, 2004:9).

Moisander listed the features that "the green product" must have as below (2007:405):

- $\checkmark$  Not being harmful to human or animal health,
- ✓ Not being harmful to the environment during the processes of production, use and annihilation,
- ✓ Not consuming energy and the sources a lot during the processes of production, use and annihilation,
- ✓ Not causing extra waste materials because of extra packaging and short time of expiration,
- $\checkmark$  Not requiring unnecessary use or not torturing animals
- $\checkmark$  Not using harmful materials to the environment or universe.

Dereli and Baykaşoğlu (2002) stated that while producing green products, the processes such as the use of clean technology, ecofriendly design and production, design for environment, design for disassembly, design to reuse – recycle – reproduce and reconvert have igained importance.

# 1.2. Green Consumer

Due to the fact that the concept of environmental marketing has got into marketing sector, it has been observed that the sub-concepts starting with

the term "green" has been started to be originated. One of these concepts is "green consumer". Green or environmentally conscious consumers are the people who target to protect the environment and themselves by using their purchasing power (Odabaşı, 1992). Green consumerism includes the researches and evaluations regarding products based on green consumption and explains the new consumer behavior related to environmental protection (Ottman, 1992). Green consumers are the consumers who can affect the environment with their purchasing decisions. Green consumers' consumption decisions which have social responsibility include the data research regarding the producers of the products they purchase, their production activities and practices, raw materials that are used in products and the effects of the products on environment during the process of use and after throwing to waste (Coddigton, 1993).

There are lots of definitions of green consumers in the literature. Shrum et al. (1995) stated that green consumers are the people who are interested in new products, who search for the data and who share their thoughts about the products with other people. Therefore, as well as being considered as thought leaders, it can be said that they can provide word-of-mouth information. These consumers are careful shoppers and they do not tend to purchase without thinking. They primarily consider the environment's needs while they are shopping, they are faithless to brand names and search for the information about the products. According to Elkington (1994) green consumers are the consumers who avoid using products which put people's health into danger; which are seriously harmful to environment during production, consumption and after consumption; which consume a great amount of energy; which cause extra wastes; which consist of materials that put the species and the environment into jeopardy and which can affect the other countries environmentally in a bad way. Kinear et al. (1974) describe the consumers who are environmentally concerned as the consumers whose perceived consumer activism towards pollution and receptiveness are high, who satisfy their personal curiosity about how the products work and who highly need to provide personal security.

## 1.3. Green Marketing

Green marketing was proposed and defined for the first time in a seminar about ecologic marketing organized by American Marketing Association in 1975. According to this definition, green marketing has been defined as positive or negative effects of marketing activities on environmental pollution, energy consumption and the consumption of other sources (Erbaslar, 2007). There have been lots of definitions for green marketing. The term "Green Marketing" was defined as the marketing which tries to decrease social and environmental effects caused by existing products and production systems and which introduces less harmful products and services (Peattie, 2001:129). Polonsky (1994:5) defined green marketing as satisfying the needs of people by giving harm to the environment at the very least. Uydacı(2002:84) defined it as the production of goods in accordance with the environmental protection principles. EmginandTürk(2004:7) defined it as "a marketing approach which aims not only customer satisfaction but also consideration of society's interests. The term green marketingis also used as ecological marketing, environmental marketing and sustainable marketing in the literature(Varinli, 2012 as cited in Prakash, 2002).

The perception of green marketing proposes the comprising of green quality starting from packaging of the product, through the use of product and until being a waste after consumption and for this purpose, it gives priority to informative signs and explanations in the process of product and service presentation (Düren, 2000: 209-210).

The aims of green marketing are as below (Uydacı, 1999);

- ✓ The aim of green marketing has to be optimizing the limited natural sources instead of creating new consumption areas,
- ✓ Green marketing has to focus on providing and protecting the natural balance and decreasing the energy consumption to the lowest level instead of producing products which are to be used and thrown away,

- ✓ Green marketing has to seek for the alternatives which will prevent the ecocide and decrease the environmental pollution caused by the industry,
- ✓ Green marketing has to tend to encourage the use of ecofriendly products, decrease the packaging process to the lowest level and create the consciousness of recycling in the society,
- ✓ Green marketing has to decentralize the responsibilities in order to provide system stability. It has to motivate the consumers, the states and volunteer organizations.

Due to the fact that green marketing has gained importance, environmental enterprises may bring higher incomes to the organizations and create a larger consumer loyalty. For instance, organizations can derive profit with cost saving by decreasing energy consumption and packaging wastes.Green retailing processes can even be pointed out as the best economical and environmental business application (McKinnon and Edwards, 2009:253).

# 2. Methodology

# 2.1. Sample and Means of Measuring

The main material of the survey is formed by the data of the questionnaires that were conducted with consumers in Istanbul in April and May, 2015. The sample size was determined according to the population data of Istanbul in TÜİK. According to the data in TÜİK, the population of Istanbul in 2014 is 14 377 018 (TÜİK, 2015).

The formula of the sample size from the determined population is as below (Arıkan, 2007);

$$n = \frac{N \cdot p \cdot q}{(N-1) \cdot D + p \cdot q}$$

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N= Population (14 377 018) p=0.5 q=0.5 D= $(e/z)^2$  (0,0425/1,96)<sup>2</sup> D= Error rate (0,00047018169) z= statistics value (1,96 and 95% confidence interval) n=531 (number of participants)

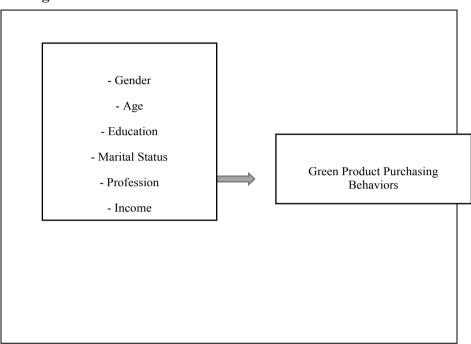
As a result of the calculation the sample size has been calculated as 531 within 95,0% confidence interval and 0,0425 margin of error. The questionnaires that were conducted on 800 people in 2015 had been distributed to the consumers randomly.

In this research, face-to-face survey method, which is the most common method in order to obtain applicable primary data, has been used. In order to prepare the survey form, previously prepared studies on the topic have been taken advantage of and the survey form has been developed by the researcher.5-point likert scale has been used for the scale of consumer thoughts about green product. Within this scope, the scoring ranges from "Strongly Disagree=1", "Disagree=2" "Undecided=3", "Agree=4" and "Strongly Agree=5".

## 2.2. The Aim and the Research Model

In this study, in research model 1, the aim is to determine the differences of Green Product Purchasing Behaviors of the consumers in accordance with their demographics. Within this context, questionnaires have been conducted to 531 participants in Istanbul. The demographical features of the participants are gender, age, education, marital status, profession and level of income. Within this scope, the research model below has been formed;

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YIL: 6 SAYI: 11
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# Figure 1:Research Model 1

 $H_1$  = There is a difference in green product purchasing behaviors of the consumers in accordance with gender

 $H_2$ = There is a difference in green product purchasing behaviors of the consumers in accordance with their age.

 $H_3$  = There is a difference in green product purchasing behaviors of the consumers in accordance with their educational status.

 $H_4$ = There is a difference in green product purchasing behaviors of the consumers in accordance with their marital status.

 $H_5$  = There is a difference in green product purchasing behaviors of the consumers in accordance with their profession.

 $H_6$  = There is a difference in green product purchasing behaviors of the consumers in accordance with their level of income.

In this study, the aim is to determine whether there is a difference in the Sub-dimensions of the Scale of Consumer Thoughts about Green Products in accordance with demographics.

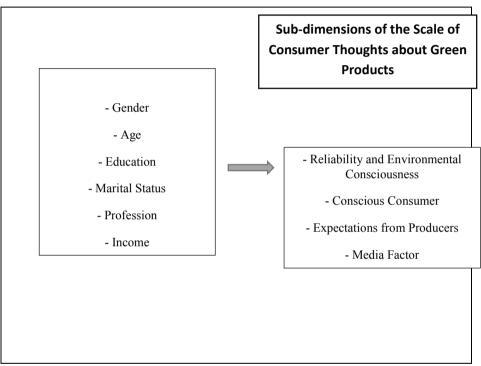


Figure2:Research Model 2

The main hypotheses according to the research model are as below;

 $H_1$ = There is a difference in the attitudes of the sub-dimensions of the Scale of Consumer Thoughts about Green Products in accordance with gender.

 $H_2$  = There is a difference in the attitudes of the sub-dimensions of the Scale of Consumer Thoughts about Green Products in accordance with age.

YIL: 6 SAYI: 11

 $H_3$ = There is a difference in the attitudes of the sub-dimensions of the Scale of Consumer Thoughts about Green Products in accordance with educational status.

 $H_4$  = There is a difference in the attitudes of the sub-dimensions of the Scale of Consumer Thoughts about Green Products in accordance with marital status.

 $H_5$ = There is a difference in the attitudes of the sub-dimensions of the Scale of Consumer Thoughts about Green Products in accordance with profession.

 $H_6$  = There is a difference in the attitudes of the sub-dimensions of the Scale of Consumer Thoughts about Green Products in accordance with level of income.

## 2.3. Analysis of the Data

In the study, SPSS 20 Statistics package software has been used in order to analyze the data. Within this scope, firstly the demographical features of the 531 consumers participating in the survey have been determined. Next, the differences of green product purchasing behaviors of the consumers in accordance with their demographics have been presented. Factor and reliability analyses have been conducted to the scale of consumer thoughts about green products. Four dimensions have emerged as the result of the factor analysis. Within this scope, the factor of Reliability and Environmental Consciousness has been determined as the most important factor. The second most important factor has been determined as Conscious Consumer, the third has been determined as Expectations from Producer and the fourth has been determined as Media Factor. It has been seen that Cronbach's Alpha values of these factors in the reliability test are above 0,50 and in acceptable level. Following that, Kolmogorov Smirnov normal distribution test has been carried out to the scale. As it has been observed that the distribution is not normal in the scale, Mann-Whitney U and Kruskal Wallis tests from non-parametric tests have been carried out. Mann Whitney U test has been conducted in

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order to determine whether the sub-dimensions of the scale of consumer thoughts about green products differin accordance with the gender of the participants or not and Kruskal Wallis tests have been done in order to determine age, education, marital status, profession and level of income.

## 3. The Research and Findings

It has been determined that 49,3% of the participants are males and 50,7% are females. 41,6% of the consumers are single, 52,8% are married and 5.6% are divorced. It has been determined that 23.7% of the participants are aged between 18 - 23; 15,4% are between 24 - 29; 18,5% are between 30 - 35; 12,8% are between 36 - 41; 11,7% are between 42 - 4147: 7.9% are between 48 - 53: 4.7% are between 54 - 59 and 5.3% are aged 60 and above. When the educational statuses of the family members are examined, it has been determined that 6,4% have primary school degree, 36,3% have secondary school degree, 21,2% have associate's degree, 26.9% have bachelor's degree, 8,1% have master's degree and 1,1% have doctorate's degree. When the average monthly incomes of the families are examined, it is observed that 15,6% of the participants have an income of 1000 TL and below, 12,8% have between 1001 - 1500 TL, 23,5% have between 1501 - 2000 TL, 23,4% have between 2001 - 2500 TL, 11,9% have between 2501 – 3000 TL, 5,6% have between 3001 – 3500 TL, 4,4% have between 3501 - 4000 TL and 2,8% have 4001 TL and above. When the professions of the participants are examined, it has been determined that 31,1% are private sector employees, 27,7% are civil servants, 9,6% are workers, 8,7% are housewives, 6,8% are retired, 5,6% are teachers, 4,7% are self employed, 1,3% are merchants and businessmen, 1,9% are pharmacists, 0,9% are academicians and 1,7% are doctors.

In the study, the demographics of the consumers green product purchasing behaviors have been shown in Table 1.

According to Diamantopoulos et al. (2003) dealing with the consumers from the point of socio-demographical features in green marketing is necessary due to the reasons below; -With a few exceptions, many studies failed in researching the effects of socio-demographical variables on data about green issues which are the parts of environmental consciousness, environmental attitudes and environmentally conscious behaviors.

-The environmental concern scales which were used in the past researches were not put through reliability and accuracy tests

-Many studies were carried out depending on the data that were collected in 1970s and 1980s. –Environmental studies are mainly American centred. Additionally due to the fact that the studies in other countries were not translated into English, the studies on the topic have remained American centred. The studies on American consumers, on the other hand, cannot represent the consumers in other countries well enough. However, the cultures of other countries, the environmental problems and their size, the availability of green products can cause green consumers of these countries have different socio-demographical features.

# Table 1: Green Product Purchasing Behavior According toDemographical Features

Do you Purchase Green Products?							
Frequency		Yes		No		Total	TheResults of
		%	Frequency	%	Frequency		Chi-Square Analysis
	Male	131	38,5	131	68,6	262	
							$\chi^2 = 44,202$
							df=1
Gender	Female 209	200	(1.5	(0)	21.4		P = 0,00
		209 61,5	60	31,4	269	p< 0,05 significant	
Total	·	340	100	191	100	531	

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	18-23	62	18,2	64	33,5	126	
	24-29	52	15,3	30	15,7	82	$\chi^2 = 17,674$ ,
	30-35	69	20,3	29	15,2	98	df=7
Age	36-41	46	13,5	22	11,5	68	P = 0.01
	42-47	42	12,4	20	10,5	62	· · ·
	48-53	30	8,8	12	6,3	42	p< 0,05 significant
	54-59	18	5,3	7	3,7	25	
	60 andover	21	6,2	7	3,7	28	
Total		340	100	191	100	531	
			/				$\chi^2 = 8,120$
	Married	195	57,4	85	44,5	280	df=2
Maritalstatus	Single	128	37,6	93	48,7	221	P = 0.01
	D: 1	17	5.0	12	( )	20	<b>p</b> < 0,05
	Divorced	17	5,0	13	6,8	30	significant
Total		340	100	191	100	531	
	1000 andbelow	42	12,4	41	21,5	83	
	1001-1500	32	9,4	36	18,8	68	$\chi^2 = 32,059,$
	1501-2000	75	22,1	50	26,2	125	df=7
	2001-2500	92	27,1	32	16,8	124	P = 0.00
Monthlyincomes	2501-3000	46	13,5	17	8,9	63	
	3001-3500	25	7,4	5	2,6	30	p< 0.05 significant
	3501-4000	19	5,6	4	2,1	23	
	4001 andover	9	2,6	6	3,1	15	
Total		340	100	191	100	531	
	Primaryschooldegree	28	8,2	6	3,1	34	
	Secondaryschooldegree	100	29,4	93	48,7	193	$\chi^2 = 28,840,$
Educationalstatus	Associate'sdegree	72	21,2	40	20,9	112	df= 5
Euucationaistatus	Bachelor'sdegree	104	30,6	39	20,4	143	P = 0.00
	Master'sdegree	34	10,0	9	4,7	43	<b>p</b> < 0,05
	Doctorate'sdegree	2	0,6	4	2,1	6	significant
						+	

	Retired	19	5,6	17	8,9	36	
	Civilservant	86	25,3	61	31,9	147	
	PrivateSectorEmployee	124	36,5	41	21,5	165	
	Housewife	28	8,2	18	9,4	46	χ²=26,642
	Worker	23	6,8	28	14,7	51	df= 10
Profession	Self-Employment	14	4,1	11	5,8	25	P=0,00
	Teacher	21	6,2	9	4,7	30	<b>p</b> <
	Merchant	6	1,8	1	0,5	7	0,05significant
	Doctor	8	2,4	1	0,5	9	
	Academician	4	1,2	1	0,5	5	
	Pharmacist	7	2,1	3	1,6	10	
Total		340	100	191	100	531	

In Table 1, when the demographical features of the consumers according to Green Product Purchasing Behavior are examined, it has been determined that 61,5% of the females and 38,5% of the males purchase green product. According to the results of the statistical analysis, it has been determined that there is a significant relation between groups in terms of green product purchasing behavior of gender factor. In other words females purchase green products more when compared to males.

According to Chi-square analysis, there is a significant relation between age and green product purchasing. When the age ranges are examined, it has been observed that young and middle-aged peoplepurchase green products more when compared to elderly people. In other studies; in his study,Soonthonsmai (2001) stated that the green consumers from Thailand and Western countries have similar demographical roots and people from both parts are young and well-educated. In contrast to this, in their study that were carried out on 1600 family members, Gilg et al (2005) stated that elderly people consume green products and these people are the generation of the World War II.

When the marital statuses are examined, it has been observed that married people (57,4%) purchase green products the most. According to the Chi-square analysis, a significant relation has been determined between

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marital status and green product purchasing.

When the monthly income levels are examined, it has been determined that the people who purchase green products the most are the ones that have a monthly income between 2001- 2500 TL (27,1%). According to the Chi-square analysis, a significant relation has been determined between income and green product purchasing.

According to the Chi-square analysis, a significant relation has been determined between education and green product purchasing. It is observed that the people who purchase green products the most are the ones that have bachelor's degree (30,6%).

In terms of profession, it has been determined that the people who purchase green products mostly work in private sector (36,5%). According to the Chi-square analysis, a significant relation has been determined between profession group and green product purchasing.

"Strongly Disagree=1", "Disagree=2" "Undecided=3", "Agree=4" and "Strongly Agree=5".	5	4	3	2	1
If I learn that the package of the product I purchase is harmful to the environment, I give up purchasing.	32,4	51,3	15,3	0,9	0,1
If I learn that the product I purchase was produced by harming the environment, I give up using it.	32,4	55,5	11,2	0,6	0,3
I do not prefer the products that were packaged extra.	30,4	43,1	21,8	4,4	0,3
The advertisement of eco-friendly products affects my purchasing behavior.	31,3	51,8	14,2	1,8	0,9
The environmental issues/problems on media affect my purchasing behavior.	35,4	49,6	12,4	2,4	0,3
I prefer products which are labeled as "not harmful for the environment".	32,2	50,4	15,3	1,8	0,3

Table 2: The Effect of Green Marketing Operations on Purchasing

#### Factors that affect green product purchasing behaviors of consumers $\cdot\,87$

When purchasing electrical appliances (such as fridge, oven, washing machine, iron, vacuum cleaner), I prefer the ones which are A+ class (energy efficient).	51,1	34,5	10,6	2,9	0,9
While purchasing detergents, I pay attention to the amount of phosphate in them.	15,9	26,3	22,4	24,5	10,9
I do not buy products such as sprays, deodorants which consist of gases that are harmful to the ozone layer.	29,8	33,3	16,5	16,5	3,8
As I am concerned about the natural sources that are used during the process of transportation of the products, I prefer domestic products.	23,0	48,3	20,4	8,0	0,3
I am willing to pay more for the eco- friendly products than the other products.	23,9	47,8	22,4	5,6	0,3
I prefer eco-friendly product when I choose between two products.	30,4	53,3	14,2	1,5	0,6
I prefer the products which are produced with recyclable materials.	28,3	57,2	13,9	0,3	0,3
I can affect other people by preferring the products of environmentally conscious firms.	26,5	52,5	17,8	2,9	0,3

When the effect of green marketing operations on purchasing is examined, it is observed that the consumers mostly answered "totally agree" to the question "When purchasing electrical appliances (such as fridge, oven, washing machine, iron, vacuum cleaner), I prefer the ones which are A+ class (energy efficient)" with the percentage of 51,1%, they mostly answered "agree" to the question "I prefer the products which are produced with recyclable materials." with the percentage of 57,2%, and they answered "totally disagree" (10,9%) and "disagree" (24,5%) to the question" While purchasing detergents, I pay attention to the amount of phosphate in them" (Table 2).

# Table 3: The Results of KMO and Barlett Tests of the Scale of Consumer Thoughts about Green Product

KasiserM	,824	
	χ <sup>2</sup> (Chi-Square)	1228,252
BartlettSphericityTesti	Df (Degrees of Freedom)	78
	P (Probability)	0,000*

In the study, factor analysis has been applied to the data of the scale of Consimer Thoughts about Green Product. Before that, KMO and Barlett's test have been used to determine whether the data set is appropriate for the factor analysis or not. The result of Kaiser-Meyer-Olkin (KMO) test has been found as 0,824 (Table3). This value shows that the data set is appropriate for factor analysis. As the p value of Barlett's test is 0,000 that is to say that p < 0,05, there are relations between the variables at an adequate level to carry out factor analysis.

Table 4: TheResults of Factor and Reliability Analyses of the
Scale of Consumer Thoughts about Green Product

		Factor load values	Explained Variance %	Cronbach's Alpha
Factor1	Green products do not harm the environment	,721		
	Green Products are reliable	,792	18,234	,74
	I try to learn the environmental effects of products before I purchase them.	,551	_	
	Consumers can individually help the protection of the environment with their decisions of purchasing green products	,699		

	From the signs on packages of products, I can understand if the product is harmful to the environment or not	,498	15,803	,70
Factor2	Encouraging precautions need to be taken about the production of environmentally conscious products against global warming which endangers the earth's future	,774		
	I try to put the containers, boxes or packages of the products (yoghurt containers, oil boxes or bottles etc) in to good use after consuming.	,590		
	I could understand if the product is environmentally friendly or not from the information of product content	,653		

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Factor 3	Organizations need to use green labeling systems on their products and increase the environmental consciousness of the consumers	,608	14,665	,61
	Ecological raw materials have to be used in production	,713		
	Organizations need to have environmental management standards (ISO 14000, BS 7750, EMAS)	,739		
Factor4	Organizations need to announce their eco- friendly applications to public through media.	,817	13,483	,71
	More information about green products has to be given by organizations and institutions through social media	,813		

4 sub-dimensions have emerged as a result of factor analysis to the data of the Scale of Consumer Thoughts about Green Product. Factor 1 has been named as Reliability and Environmental Consciousness, Factor 2 has been named as Conscious Consumer, Factor 3 has been named as Expectations from Producers and Factor 4 has been named as Media Factor. Cronbach's Alpha values of these four factors are above 0,50. As a result of factor analysis, 4 factors have been obtained that explain 62,2% of the total variance. Cronbach Alpha value for the whole scale of Consumer Thoughts about Green Product has been found as 0,82.

It has been determined that Factor 1 consists of 4 items and the factor

load values of the items in this sub-dimension ranges from 0,551 to 0,792; Factor 2 consists of 4 items and the factor load values of the items in this sub-dimension ranges from 0,498 to 0,774; Factor 3 consists of 3 items and the factor load values of the items in this sub-dimension ranges from 0,608 to 0,739; Factor 4 consists of 2 items and the factor load values of the items in this sub-dimension are 0,813 and 0,817.

Factor 1 consists of the items that green products do not harm the environment; green products are reliable; the consumer tries to learn the environmental effects of products before S/he purchase them and consumers can individually help the protection of the environment with their decisions of purchasing green products and this factor explains 18,234% of the variance.

Factor 2 consists of the items that from the signs on packages of products, the consumer can understand if the product is harmful to the environment or not; encouraging precautions need to be taken about the production of environmentally conscious products against global warming which endangers the earth's future; The consumer tries to put the containers, boxes or packages of the products (yoghurt containers, oil boxes or bottles etc) in to good use after consuming and the consumer could understand if the product is environmentally friendly or not from the information of product content. This factor explains 15,803% of the variance.

Factor 3 consists of the items that organizations need to use green labeling systems on their products and increase the environmental consciousness of the consumers; ecological raw materials have to be used in production and organizations need to have environmental management standards (ISO 14000, BS 7750, EMAS). This factor explains 14,665% of the variance.

Factor 4 consists of the items that organizations need to announce their eco-friendly applications to public through media and more information about green products has to be given by organizations and institutions through social media and it explains 13,483% of the variance.

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One-SampleKolmogorov-Smirnov Test							
		Factor 1	Factor 2	Factor 3	Factor 4		
N		340	340	340	340		
	Mean	8,0471	5,4029	5,2794	3,8735		
Normal Parameters <sup>a,b</sup>	Std. Deviation	2,18958	1,73443	1,60057	1,62354		
	Absolute	,118	,142	,144	,198		
Most Extreme Differences	Positive	,117	,142	,144	,198		
Differences	Negative	-,118	-,135	-,124	-,124		
Kolmogorov-Smirnov Z		2,174	2,615	2,654	3,658		
Asymp. Sig. (2-ta	ailed)	,000	,000	,000	,000		

## Table 5:Kolmogorov-Smirnov Test Results for the Subdimensions of the Scale of Consumer Thoughts about Green Product

 $H_0$  = Sub-dimensions of the scale of Consumer Thoughts about Green Product have normal distribution.

 $H_1$  = Sub-dimensions of the scale of Consumer Thoughts about Green Product do not have normal distribution.

As it can be seen in Table 5, since p<0,05, the hypothesis  $H_0$  is rejected. In other words, the sub-dimensions of the scale of consumer thoughts about green product do not have normal distribution Therefore, nonparametric tests have been conducted. As non-parametric tests, Mann-Whitney U and Kruskal Wallis tests have been conducted.

Mann Whitney U test has been conducted in order to determine whether the sub-dimensions of the scale of consumer thoughts about green products differ in accordance with the gender of the participants or not and Kruskal Wallis tests have been done in order to determine whether the subdimensions of the scale of consumer thoughts about green products differ in accordance with age, education, marital status, profession and level of income.

	Factor 1	Factor 2	Factor 3	Factor 4
Mann-Whitney U	12293,500	13362,000	13068,500	13799,500
Wilcoxon W	31796,500	32865,000	32571,500	24095,500
Ζ	-2,052	-,824	-1,161	-,323
Asymp. Sig. (2-tailed)	,040	,410	,246	,746
a. GroupingVariable: gender				

# Table 6:Mann Whitney U Test of the Sub-dimensions of the Scale of Consumer Thoughts about Green Product In Relation to Gender

 $H_0$  = In relation to gender, there is no difference in the attitudes of the sub-dimensions of the scale of consumer thoughts about green product.

 $H_1$  = In relation to gender, there is difference in the attitudes of the subdimensions of the scale of consumer thoughts about green product.

 $H_{1a}$  = In relation to gender, there is a difference in the attitudes of the sub-dimension of "Reliability and Environmental Consciousness".

 $H_{1b}$  = In relation to gender, there is a difference in the attitudes of the sub-dimension of "Conscious Consumer".

 $H_{1c}$  = In relation to gender, there is a difference in the attitudes of the sub-dimension of "Expectations from Producers".

 $H_{1d}$  = In relation to gender, there is a difference in the attitudes of the sub-dimension of "Media Factor".

When table 6 is examined, since, p<0,05, the hypothesis  $H_{1a}$  is accepted and since p>0,05, the hypotheses  $H_{1b}$ ,  $H_{1c}$   $H_{1d}$  are rejected.

The interpretations of the hypotheses are;

The interpretation of the hypothesis  $H_{1a}$  = It has been found that in relation to gender, there is a difference in the attitudes of the sub-dimension of "Reliability and Environmental Consciousness". When the mean rank values are examined, it has been observed that females (161,40) have more 'Reliability and Environmental Consciousness' in green consumption

when compared to males (183,03). This reveals the opinion that females are more environmentalist than the males. In the other studies, the same results were obtained. There are also studies whichstate that females are potentially more environmentalist than the males (Stern, et al , 1993; Lizuka, 2000). In the study of Diamantopoulos et al. (2003), it has been determined that females are more interested in the environment and have environmental behaviors.

The interpretation of the hypothesis  $H_{1b}$  = It has been found that in relation to gender, there is no difference in the attitudes of the subdimension of "Conscious Consumer".

The interpretation of the hypothesis  $H_{1c}$  = It has been found that in relation to gender, there is no difference in the attitudes of the subdimension of "Expectations from Producer". Both the females and males expect the same things from the producer.

The interpretation of the hypothesis  $H_{1d}$  = It has been found that in relation to gender, there is no difference in the attitudes of the subdimension of "Media Factor"

Table 7:Kruskal Wallis Test Results of the Differences in the Attitudes for the Sub-dimensions of the Scale of Consumer Thoughts about Green Product According to Age

	Factor 1	Factor 2	Factor 3	Factor 4
Chi-Square	23,175	8,472	10,197	14,741
df	7	7	7	7
Asymp. Sig.	,002	,293	,178	,039

While determining whether the sub-dimensions of the scale of consumer thoughts about green product differ in accordance with age, since the number of groups is more than two, Kruskal Wallis test has been conducted. Within this scope, the hypotheses below have been formed.

 $H_0$  = In relation to age, there is no difference in the attitudes of the subdimensions of the scale of consumer thoughts about green product.

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 $H_2$  = In relation to age, there is difference in the attitudes of the subdimensions of the scale of consumer thoughts about green product.

 $H_{2a}$  = In relation to age, there is a difference in the attitudes of the subdimension of "Reliability and Environmental Consciousness".

 $H_{2b}$  = In relation to age, there is a difference in the attitudes of the subdimension of "Conscious Consumer".

 $H_{2c}$ = In relation to age, there is a difference in the attitudes of the subdimension of "Expectations from Producers".

 $H_{2d}$  = In relation to age, there is a difference in the attitudes of the subdimension of "Media Factor".

As it can be observed in Table 7, since, p<0.05, the hypotheses 2a and 2d are accepted and since p>0.05, the hypotheses 2b and 2c are rejected.

According to the descriptive statistics that have been obtained from the results of Kruskal Wallis test for the sub-dimension of 'Reliability and Environmental Consciousness, it has been determined that the mean value (mean rank) of the people aged between 18-23 is 192,99; the mean value of the ones between 24-29 is 182,70; the mean value of the ones between 30-35 is 187,17; the mean value of the ones between 36-41 is 165,86; the mean value of the ones between 42-47 is 166,44; the mean value of the ones between 48-53 is 124,00, the mean value of the ones between54-59 is 104,11 and the mean value of the ones aged 60 and above is 141,97. When the mean values of 'Reliability and Environmental Consciousness' are examined, it has been determined that the averages of the ones aged between 18-23 (192,99) are higher than the others. In other words, 'Reliability and Environmental Consciousness' of the ones aged between18-23 is high when compared to the other consumers of the other age groups.

According to the descriptive statistics that have been obtained from the results of Kruskal Wallis test for the sub-dimension of 'Media Factor', it has been determined that the mean value (mean rank) of the people aged between 18-23 is 190,25; the mean value of the ones between 24-29 is 185,11; the mean value of the ones between 30-35 is 171,00; the mean

value of the ones between 36-41 is 175,08; the mean value of the ones between 42-47 is 171,99; the mean value of the ones between 48-53 is 141,04, the mean value of the ones between54-59 is 128,67 and the mean value of the ones aged 60 and above is 123,06. When the mean values of 'Media Factor' are examined, it has been determined that the averages of the ones aged between 18-23 (190,25) are higher than the others.. In other words, the people aged 18-23 attach more importance to 'Media Factor' when compared to the other consumers of the other age groups.

## Tablo 8:Kruskal Wallis Test Results of the Differences in the Attitudes for the Sub-dimensions of the Scale of Consumer Thoughts about Green Product According to Educational Status

	Factor 1	Factor 2	Factor 3	Factor 4
Chi-Square	13,013	3,784	17,509	6,936
df	5	5	5	5
Asymp. Sig.	,023	,581	,004	,225

 $H_0$  = In relation to educational status, there is no difference in the attitudes of the sub-dimensions of the scale of consumer thoughts about green product.

 $H_3$  = In relation to educational status, there is difference in the attitudes of the sub-dimensions of the scale of consumer thoughts about green product.

 $H_{3a}$ =In relation to educational status, there is a difference in the attitudes of the sub-dimension of "Reliability and Environmental Consciousness".

 $H_{3b}$  = In relation to educational status, there is a difference in the attitudes of the sub-dimension of "Conscious Consumer".

 $H_{3c}$  = In relation to educational status, there is a difference in the attitudes of the sub-dimension of "Expectations from Producers".

 $H_{3d}$  = In relation to educational status, there is a difference in the attitudes of the sub-dimension of "Media Factor".

As it can be observed in Table 8, since, p<0.05, the hypotheses 3a and 3c are accepted and since **p** >0.05, the hypotheses 3b and 3d are rejected.

According to the descriptive statistics that have been obtained from the results of Kruskal Wallis test for the sub-dimension of 'Reliability and Environmental Consciousness, it has been determined that the mean value (mean rank) of the people who have primary school degree is 145,66; the mean value of the people who have secondary school degree is 174,64; the mean value of the ones who have associate's degree is 148,83; the mean value of the ones who have bachelor's degree is 186,41; the mean value of the ones who have master's degree is 159,57 and the mean value of the ones who have doctorate's degree is 256,08. When the mean values of 'Reliability and Environmental Consciousness' are examined, it has been determined that the averages of the ones who have doctorate's degree (256,08) are higher than the others. In other words, 'Reliability and Environmental Consciousness' of the ones who have doctorate's degree high when compared to the other consumers.

According to the descriptive statistics that have been obtained from the results of Kruskal Wallis test for the sub-dimension of 'Expectations from Producers', it has been determined that the mean value (mean rank) of the people who have primary school degree is 140,39; the mean value of the people who have secondary school degree is 170,88; the mean value of the ones who have associate's degree is 167,13; the mean value of the ones who have bachelor's degree is 193,22; the mean value of the ones who have master's degree is 212,92. When the mean value of the ones who have doctorate's degree is 212,92. When the mean values of "Expectations from Producers' are examined, it has been determined that the averages of the ones who have doctorate's degree (212,92) are higher than the others. In other words, the ones who have doctorate's degree expect more from producers when compared to the other consumers.

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 Table 9: Kruskal Wallis Test Results of the Differences in the

 Attitudes for the Sub-dimensions of the Scale of Consumer Thoughts

 about Green Product According to Marital Status

	Factor 1	Factor 2	Factor 3	Factor 4
Chi-Square	6,490	,151	,336	1,93
df	2	2	2	2
Asymp. Sig.	,039	,927	,845	,381

 $H_0$  = In relation to marital status, there is no difference in the attitudes of the sub-dimensions of the scale of consumer thoughts about green product.

 $H_4$  = In relation to marital status, there is difference in the attitudes of the sub-dimensions of the scale of consumer thoughts about green product.

 $H_{4a}$  = In relation to marital status, there is a difference in the attitudes of the sub-dimension of "Reliability and Environmental Consciousness".

 $H_{4b}$  = In relation to marital status, there is a difference in the attitudes of the sub-dimension of "Conscious Consumer".

 $H_{4c}$  = In relation to marital status, there is a difference in the attitudes of the sub-dimension of "Expectations from Producers".

 $H_{4d}$  = In relation to marital status, there is a difference in the attitudes of the sub-dimension of "Media Factor".

As it can be observed in Table 9, since, p>0.05, the hypotheses 4b, 4c and 4d are rejected and since p<0.05, the hypothesis 4a is accepted.

According to the descriptive statistics that have been obtained from the results of Kruskal Wallis test for the sub-dimension of 'Reliability and Environmental Consciousness, it has been determined that the mean value (mean rank) of the people who are married is 185,30; the mean value of the singles is 173,38 and the mean value of the divorced is 158,01. When the mean values of 'Reliability and Environmental Consciousness' are examined, it has been determined that the averages of the married (185,30) are higher than the others. In other words, 'Reliability and Environmental Consciousness' of the married is high when compared to the other consumers.

Table 10: Kruskal Wallis Test Results of the Differences in the Attitudes for the Sub-dimensions of the Scale of Consumer Thoughts about Green Product According to Profession

	Factor 1	Factor 2	Factor 3	Factor 4
Chi-Square	14,673	14,288	12,171	20,748
df	10	10	10	10
Asymp. Sig.	,144	,160	,274	,023

 $H_0$  = In relation to profession, there is no difference in the attitudes of the sub-dimensions of the scale of consumer thoughts about green product.

 $H_5$  = In relation to profession, there is difference in the attitudes of the sub-dimensions of the scale of consumer thoughts about green product.

 $H_{5a}$  = In relation to profession, there is a difference in the attitudes of the sub-dimension of "Reliability and Environmental Consciousness".

 $H_{5b}$  = In relation to profession, there is a difference in the attitudes of the sub-dimension of "Conscious Consumer".

 $H_{5c}$  = In relation to profession, there is a difference in the attitudes of the sub-dimension of "Expectations from Producers".

 $H_{5d}$  = In relation to profession, there is a difference in the attitudes of the sub-dimension of "Media Factor".

As it can be observed in Table 10, since, p>0.05, the hypotheses 5a, 5b and 5c are rejected and since p<0.05, the hypothesis 5d is accepted.

According to the descriptive statistics that have been obtained from the results of Kruskal Wallis test for the sub-dimension of 'Media Factor', it has been determined that the mean value (mean rank) of the retired people

is 141,85; the mean value of the civil servants is 194,63; the mean value of the private sector employees is 147,95; the mean value of the housewives is 157,71; the mean value of the workers is 170,22; the mean value of the self-employed is 204,34, the mean value of the teachers is 198,21; the mean value of the merchants-businessmen is 205,08; the mean value of the doctors is 175,00; the mean value of the academicians is 221,38 and the mean value of the pharmacists is 138,43. When the mean values of 'Media Factor' are examined, it has been determined that the averages of the academicians (221,38) are higher than the others. In other words, the academicians attach more importance to 'Media Factor,' when compared to the other consumers.

# Table 11:Kruskal Wallis Test Results of the Differences in the Attitudes for the Sub-dimensions of the Scale of Consumer Thoughts about Green Product According to Level of Income

	Factor 1	Factor 2	Factor 3	Factor 4
Chi-Square	18,306	4,877	10,505	6,185
df	7	7	7	7
Asymp. Sig.	,011	,675	,162	,518

 $H_0$  = In relation to level of income, there is no difference in the attitudes of the sub-dimensions of the scale of consumer thoughts about green product.

 $H_6$  = In relation to level of income, there is difference in the attitudes of the sub-dimensions of the scale of consumer thoughts about green product.

 $H_{6a}$  = In relation to level of income, there is a difference in the attitudes of the sub-dimension of "Reliability and Environmental Consciousness".

 $H_{6b}$  = In relation to level of income, there is a difference in the attitudes of the sub-dimension of "Conscious Consumer".

 $H_{6c}$  = In relation to level of income, there is a difference in the attitudes of the sub-dimension of "Expectations from Producers".

 $H_{6d}$  = In relation to level of income, there is a difference in the attitudes of the sub-dimension of "Media Factor".

As it can be observed in Table 11, since, p>0.05, the hypotheses 6b, 6c and 6d are rejected and since p<0.05, the hypothesis 6a is accepted.

According to the descriptive statistics that have been obtained from the results of Kruskal Wallis test for the sub-dimension of 'Reliability and Environmental Consciousness, it has been determined that the mean value (mean rank) of the people whose monthly incomes are 1000 TL and below is 190,20; the mean value of the ones whose monthly incomes are between 1001-1500 TL is 182,34; the mean value of the ones whose monthly incomes are between 1501-2000 TL is 174,70; the mean value of the ones whose monthly incomes are between 2001-2500 TL is 159,64; the mean value of the ones whose monthly incomes are between 2501-3000 TL is 139,79; the mean value of the ones whose monthly incomes are between 3001-3500 TL is 215,50; the mean value of the ones whose monthly incomes are between 3501-4000 TL is 125,36 and the mean value of the ones whose monthly incomes are 4001 TL and above is218,89. When the mean values of 'Reliability and Environmental Consciousness' are examined, it has been determined that the averages of the ones whose monthly incomes are 4001 TL and above (218,89) are higher than the others. In other words, 'Reliability and Environmental Consciousness' of the ones whose monthly incomes are 4001 TL and above is high when compared to the other consumers of the other income groups

# Conclusion

One of the biggest problems today is environmental problems caused by industrialization. These environmental problems occur not only during the process of production but also after the production. The consumers who are aware of these environmental problems show changes in their consumption demands. It is observed that consumers prefer the green products which are less harmful to the environment, less polluting and recyclable.

In the research, it has been determined that a large majority of the consumers (64%) purchase green products., According to Chisquare analysis of the green product purchasing behaviors in relation to demographical features, a significant relation has been determined between green product purchasing behaviors and gender, age, education, profession, marital status and income. According to the results of Chisquare analysis, it is seen that females purchase green products more when compared to males. This reveals the opinion that the females behave more environmentally. It has been observed that according to age, young and middle-aged people purchase green products more when compared to elderly people. Due to the fact that young people have a higher educational leveland they use technological means of communications more commonly, they can reach environmental news quickly. Therefore, it is assumed that they prefer green products more. When marital status is examined, it is observed that the married people purchase green products the most.

According to the results of Chi-square analysis, a significant relation has been found between green product purchasing behaviors and education and income. As the level of education increases, the green product purchasing behavior increases, too. We can attribute this to the fact that educated people have more knowledge about environmental issues. Additionally, it has been found that there is a significant relation between green product purchasing and profession, as well.

The Scale of the Consumer Thoughts About Green Product has been determined by factor analysis. Within the scope, 4 sub-dimensions have emerged. The first and the most important has been determined as Reliability and Environmental Consciousness, Factor 2 has been determined as Conscious Consumer, Factor 3 has been determined as Expectations from Producers and Factor 4 has been determined as Media Factor. Mann Whitney U test and Kruskal Wallis tests have been conducted in order to determine whether the sub-dimensions of the scale of consumer thoughts about green products differ in accordance with demographical features or not. The interpretations below are the results of these tests;

It has been determined that the factor of Reliability and Environmental Consciousness differs according to gender. It has been determined that females have more 'Reliability and Environmental Consciousness' in green consumption when compared to males. The fact that females are more environmentally conscious has been revealed.

It has also been determined that the factor of Reliability and Environmental Consciousness and Media Factor differ according to age. It has been determined that 'Reliability and Environmental Consciousness' of the young people is higher when compared to the elderly people. Young people have more environmental knowledge and consciousness due to the fact that they use technological means of communications more commonly. Additionally, their high levels of education increase environmental consciousness. It has also been determined that young people attach more importance to 'Media Factor' when compared to the other consumers of the other age groups.

It has been determined that the factors of 'Reliability and Environmental Consciousness' and 'Expectations from Producers' differ according to education.When the marital statuses are examined, it has been observed that married people have more reliability and environmental consciousness when compared to others. It is assumed that the married people attach more importance to green product reliability and environmental consciousness due to their concerns and worries about a cleaner environment for their husbands/wives and children or the children to be born.

It has been determined that Media Factor differs according to profession. It has been found that academicians attach more importance to 'Media Factor,' when compared to the other consumers from other professions.

It has been determined that the people who have high levels of income have higher reliability and environmental consciousness when compared to other consumers. When the level of income increases, the people pay more attention to environmental problems they create without considering the prices of the products. On the other hand, the consumers with lower incomes check the prices of the products first. If the prices of the green products are higher than the other products, they do not purchase these products. While releasing the green products to the market, the organizations in the sector need to set their prices by considering the people with low incomes.

This study guides the organizations on sectoral basis by measuring the behaviors and thoughts of the consumers about "green product consumption". Therefore, it functions as a guide for lots of sectors and leads them when creating their marketing strategies.

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