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GREEN MARKETING: ATTITUDES OF CONSUMERS TOWARDS GREEN PRODUCTS

Master's Thesis

TUĞBA BAŞAK SARI

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Supervisor: PROF. DR. SELİME SEZGİN

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Prof. Dr. Selime SEZGİN
Director

I certify that this thesis meets all the requirements as a thesis for the degree of Master of Arts.

Prof. Dr. Selime SEZGİN
Program Coordinator

This is to certify that we have read this thesis and that we find it fully adequate in scope, quality and content, as a thesis for the degree of Master of Arts.

Examining Comittee Members

Prof. Dr. Selime SEZGİN   ----------------------

Prof. Dr. Nimet URAY   ----------------------

Yrd. Doç. Dr. Elif KARAOSMANOGLU   -----------------------

ABSTRACT

GREEN MARKETING: ATTITUDES OF CONSUMERS TOWARDS GREEN
PRODUCTS

Sarı, Tuğba Başak

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Parallel to increasing environmental degradation, consumers have become more concerned about environment and some of them, which are called green consumers, have been using their power of purchase in favor of environmentally friendly products. While the group of ecologically concerned consumers grows and are becoming a feasible market segment, understanding motivations of green purchase behavior become a major issue for the firms.

Aim of our study is to find out the determinants of attitudes towards green products and investigate significance level and direction of the relationship between ecologically conscious consumer behavior and environmental concern, perceived consumer effectiveness, and demographic characteristics of consumers. In order to reach our goal, a survey was administrated to 300 young working professionals living in Istanbul. According to the results of the study, psychographic variables which are environmental concern and perceived consumer effectiveness, were significantly correlated with ecologically conscious consumer behavior. The model consists of only environmental concern and perceived consumer effectiveness is the most appropriate model and demographic and socio-economic variables do not have any contribution on explaining ecologically conscious behavior.

Key Words: Green Marketing, Green Consumer, Consumer Behavior, Environment

ÖZET

YEŞİL PAZARLAMA: TÜKETİCİLERİN YEŞİL ÜRÜNLERE KARŞI TURUMLARI

Sarı, Tuğba Başak

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Çevresel bozulmaların etkisi ile tüketicilerin ekolojik konulardaki duyarlılıkları artmaya başlamıştır ve özellikle yeşil tüketiciler olarak adlandırılan tüketiciler satın alma güçlerini çevre dostu ürünler lehine kullanmaktadırlar. Çevresel problemlere duyarlı tüketici grubu geçtiğimiz 30 yıldır büyümekte ve şirketler için karlı bir pazar haline gelmektedir. Bu sebeple bu tüketici grubunun tanımlanması, yeşil tüketim davranışının altında yatan sebeplerin ve temel motivasyonların anlaşılması şirketler için önem taşımaktadır.

Bu çalışma ile, tüketicilerin yeşil ürünlere karşı tutumlarını belirleyen değişkenlerin saptanması ve çevreye duyarlı tüketici davranışı ile psikografik (ekolojik hassasiyet ve algılanan tüketici etkisi) ve demografik değişkenlerin ilişkisi olup olmadığı, bir ilişki varsa bu ilişkinin yönünün belirlenmesi amaçlanmıştır. Bu doğrultuda, İstanbul'da yaşayan ve çalışan 300 genç profesyonele anket ile ulaşılmıştır. Araştırmamızın sonuçlarına göre, psikografik değişkenler ile çevreye duyarlı tüketici davranışı arasında anlamlı bir korelasyon saptanmıştır. Ayrıca, yeşil tüketici davranışını açıklamak için en uygun modelin psikografik değişkenlerden oluşan model olduğu ve demografik değişkenlerin çevreye duyarlı tüketici davranışını açıklamada bir katkısı olmadığı sonucuna ulaşılmıştır.

Key Words: Yeşil Pazarlama, Yeşil Tüketici, Tüketici Davranışı, Çevre

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Ecologically Conscious Consumer Behavior : ECCB
Environmental Concern : EC
Perceived Consumer Effectiveness : PCE

1. INTRODUCTION

Almost for the last thirty-five years, consumers who are concerned about environmental issues have been using their power of purchase in favor of environmentally friendly products and have tried to find out solutions for those issues such as pollution and global warming. Today, focus on environmental and ecologic issues has become more prominent as number of ecologically concerned and aware consumers is increasing. It is identified that there are seven major categories of concern which are: concern for waste, wildlife, the biosphere, population, health, energy awareness, and environmental technology (Amine 2003).

Nevermore, effects of consumption on environmental degradation have being increasing over years. Many consumer products such as automobiles, laundry detergents, and artificial fertilizers have been the major causes of environmental deterioration (Kinnear *et al.* 1974). In order to solve ecologic problems, it is important to focus on consumption on what and how consumers consume which has become highly critical. Word Wildlife Fund's Living Planet Report is supporting this approach which focuses on consumption and the report states: "if everyone around the world consumed natural resources at the rate that we currently do in the UK, we would need three planets to support us" (Knight 2004, p:113).

George Fisk was one of the scholars who focused on the matter of consumption as a key solution for the "unprecedented" environmental crisis. In 1973, he brought "Theory of Responsible Consumption" and evoked both consumers and organizations to be more ecologically concerned while consuming and operating. Fisk (1973) alleged that a new attitude toward the meaning of consumption and a social organization to implement such an attitude are needed to fight with the environmental crisis (Fisk 1973).

Amine (2003) cited that two key issues arising from globalization of world markets are the impact of business activities on the environment and threats to sustainable development.

These issues are usually referred to as ''green'' issues (Amine 2003). It is obvious that increasing social and political pressure and attention on "green" issues have already changed the attitude of many multinational companies and that social responsibility has gathered strength over profit oriented dominant point of view. Furthermore, companies have moved beyond simply addressing pollution and waste disposal to looking for alternative package composition and design, alternative product formulations, and cause-related promotion in an effort to keep in-step with the environmental movement (Straughan and Roberts 1999). This altered attitude directed companies such as Ford, Nike, and Philips to produce environmentally friendly "green products" which brought them competitive advantage at the same time. On the other side of the coin, a new segment consisting of "green consumers" who are concerned about "green" issues and receive psychological benefits from buying environmentally friendly products has arisen.

While the group of green consumers grows and are becoming a large and feasible market segment, the emphasis on understanding motivations of green purchase behavior become a major issue for the firms. In order to clarify the underlying motives of environmentally conscious consumer behavior, diverse studies have been done for the last three decades.

Consisting of five chapters, aim of our study is to explain ecological consumer behavior in terms of psychographic and demographic characteristics of the consumers.

The second and third chapters introduce literature review of the subject. Green marketing notion and development of green marketing thought are explained in the second chapter. At the third chapter, various studies and results about green consumer behavior from literature is given. In addition, criteria which could explain ecological consumer behavior are summarized by the help of literature reviewing.

Forth chapter comprehends the research which is conducted in order to explain the relationship and find the direction of the relationship between environmentally conscious consumer behavior and ecological concern as well as perceived consumer effectiveness. Thereto, effects of the demographics such as gender and education on this relationship is investigated at the forth chapter. The sampling of the study is chosen from young professionals living in Istanbul and a survey has been conducted with the use of a primary data. Correlation and regression analysis and results of the hypotheses have been presented in this chapter.

Finally, conclusion of the study and discussion could be found at the last chapter.

2. GREEN MARKETING

Green marketing notion, development of green marketing thought, differences between green marketing and conventional marketing and green product are explained in this chapter.

2.1 DEFINITION OF GREEN MARKETING

Green marketing concept was first officially introduced by American Marketing Association (AMA) in ''Ecological Marketing'' workshop where effects of marketing on ecology was debated in 1975. Ecological marketing or in other words green marketing concept was described as studies on the positive or negative outcomes of marketing on pollution, energy consumption, and consumption of other sources (Erbaslar 2007).

According to the AMA's definition, green marketing is ''the development and marketing of products designed to minimize negative effects on the physical environment or to improve its quality'' and ''the efforts by organizations to produce, promote, package, and reclaim products in a manner that is sensitive or responsive to ecological concerns'' (AMA 2010).

Jain and Kaur (2004) cited that green marketing consists of all the marketing activities which cause the least damage to the environment or which have a positive effect on environment (Jain and Kaur 2004). In addition, green marketing is described as development and promotion of products which conserve environment (Clow and Baack 2007).

Besides environmentally friendly product design and markets, having environmentally friendly attitude should be a part of corporate culture. Consumers have heard about green marketing concept with such terms ''environmentally friendly'', ''ozone friendly'', or

"recoverable". However, green marketing concept is not limited to those terms that eco-marketing is applicable in a broad field such as consumer goods, industrial goods and even services (Erbaslar 2007).

According to Pride and Ferrel (1993), green marketing is organizations' efforts at designing, promoting, pricing and distributing products that will not harm the environment (Grove *et al,* 1996). In other words, as Grove *et al.* (1996) pointed out there are a vast number of diverse considerations to be addressed by companies in order to pursue a green marketing agenda such as:

i. Developing offerings that conserve energy and other natural resources in their production process;

ii. Creating advertisements and other promotional messages that accurately reflect a company's commitment to the environment;

iii. Setting prices for green products that balance consumers' sensitivity to cost against their willingness to pay more for environmental safety;

iv. Reducing pollutants and conserving resources in the transportation of products to market;

v. And a host of other marketing-related decisions (Grove *et al.* 1996).

In order to align themselves with the green initiative, organizations often focus on one or more of the three broad activities: reusing, recycling and reducing. Also referred to as the "3 R's formula for environmental management", the aim of these practices is controlling the amount of waste of natural resources. Organizations are able to play a significant role in protecting the environment by reusing packaging (e.g. offering products in refillable containers), recycling materials (e.g. reclaiming elements from used products), and reducing resource usage (e.g. conserving energy in the production process) (Grove et al. 1996).

Consequently, green marketing comprehends production, pricing, promotion and distribution activities of environmentally concerned products, by which firms achieve their goals while satisfying consumers' needs and wants. It is important to cause minimum damage to the environment while satisfying consumers' needs and wants.

2.2 DEVELOPMENT OF GREEN MARKETING THOUGHT

Effects of increased concerns about environmental issues on development of ecological marketing thought are unquestionable. First studies and theories were more attached with production and disposal that suggested macro solutions for pollution and use of resources. Grether (1974) for instance, stated that the socio-ecological environmental pressures on both business and government raise the issue of possible contribution of market structure analysis to the solution of problems in the area of public policy (Grether 1974).

Furthermore, Zikmund and Stanton (1971) introduced "backward channel" concept as a reverse distribution. They discussed that alleviating solid waste pollution may be treated as a marketing activity: that is, marketing of garbage and other waste materials. Backward channel theory suggested that recycling waste materials is essentially a "reverse-distribution" process starting with consumer instead of the producer as in traditional distribution. With the help of new institutions such as reclamation or recycling center solid wastes should be collected from consumers to be reused by producers (Zikmund and Stanton 1971).

Another scholar interested in ecological issues was George Fisk (1973) as he provided a "theory of responsible consumption" to marketing managers recognizing ecological imperatives. Responsible consumption refers to rational and efficient use of resources with respect to the global human population. Government, business, and consumers should consider the environmental cost and benefits when making consumption decisions. Theory of responsible consumption is provided as a guide for marketing managers that

environmental benefits and costs can be estimated in a gross fashion for every change in packaging, product design, promotional campaign or physical distribution facility (Fisk 1973).

A second wave of academic inquiry redefined the area in light of the increased environmental concern expressed in the 1980s (Straughan and Roberts 1999). Most of research was conducted in those years when very few consumers seriously evaluated a product's impact upon the environment. During this time there were not many environmentally responsible products available and studies of environmental responsibility focused on non-consumption behaviors such as energy conservation and political activism (Follows and Jobber 1999).

Besides, some studies mostly concentrated on consumers' intent of purchasing ecologically packaged products, motivations of ecologically conscious behavior, and consumption patterns which are related with environment. These researches revealed that although environmentally conscious consumers are limited, this group of consumers is very indispensable segment for marketers (Newell and Green 1997).

Too much attention and concern have been aroused that environmentalism has been identified as potentially the biggest business issue of the 1990s. Number of consumers who espouse a concern for the environment, or what has come to be labeled a "green orientation", have grown (Grove *et al*. 1996). According to the Roper Organization polls, "greenest" segment of consumers doubled between 1990 and 1992 (Shrum *et al.* 1995). It was widely believed that businesses would have to become more environmentally and socially sensitive in order to remain competitive (Straughan and Roberts 1999).

As a result, environmentally friendly product variety and sales rates have grown in 1990s. Effect of environmental concern on purchase decisions have increased and firms started to

take into consideration environmental concerns in order to gain competitive advantage. For example, 3M, DuPont, and McDonalds could be considered as successful firms in terms of reduction of wastes (Menon *et al*. 1999).

Within those years, green issues such as "greening" the marketing process, green marketing strategies for firms, segmenting and targeting green consumers, production and distribution of ecologically-friendly products gained reputation.

2.3 PHASES OF GREEN MARKETING AND COMPARISON WITH CONVENTIONAL MARKETING

Uydacı (2008) cited that green marketing consists of 4 stages which are green aiming, development of strategies, environmental orientation and social responsibility of business (Uydacı 2008).

Green aiming: In this phase, business produces green products for green consumers as well as other product categories which are non-green. For instance, in an automobile factory, hybrid cars take place in production line and the factory continues to produce sports cars which are considered as air polluting cars by green consumers.

Development of green strategies: Production of green and non-green products takes place in business. In this stage, business tries to develop green oriented strategies and determine environmental policies. Business take environmental precautions such as implementing waste treatment facilities and energy saving.

Green orientation: In this phase, business stops producing non-green products and focuses on only green products. As a consequence, non-green product demand is not important for business in this stage.

Social responsibility of business: Being green is not enough in this phase. Business reaches a social responsibility consciousness (Uydacı 2008).

Table 2.1: Environmental/sustainable marketing perspectives compared to traditional marketing

Objective / Perspective	Environmental Marketing	Traditional Marketing
Objective	Satisfy customer needs in an environmentally sustainable way, while earning a profit.	Satisfy customer needs at profit.
Perspective of Customer	The buyer of the product and the victim of all externalities; or all stakeholders.	The reason for existence.
Perspective of Government	An ally in the creation of sustainable economy to work and manage.	A regulator and limiter. To be managed.
Perspective of Demand	The redirection of demand towards products with low levels of externatility production.	The stimulation of all products. Most efforts placed on highest margin products.

Source: Miles, M. P., Russell G. R. (1997), "ISO 14000 Total Quality Environmental Management: The Integration of Environmental Marketing, Total Quality Management, and Corporate Environmental Policy", *Journal of Quality Management*, **2(1): 151-168.**

After highlighting phases of green marketing introduced by Uydacı (2008), it will be helpful to compare green marketing with conventional marketing. Miles and Russel (1997), provide us a brief summary of differences between environmental marketing and traditional marketing perspectives (Table 2.1). In addition to Table 2.1, Table 2.2 provides marketing mix classification in terms of green marketing (Miles and Russel 1997; pp.154-155).

Table 2.2: Marketing mix classification in terms of green marketing

Marketing Mix Function	Environmental Marketing	Traditional Marketing
PRODUCT Need satisfying instruments in an exchange.	Environmental design of product; products designed to facilitate long term use, energy efficient, efficient recycling, consider both the total cost of production and consumption.	Planned obsolescence, designing products to have shorter lives, disposable products, no concern about externalities from the production or consumption of product.
PLACE Where and how of availability	Lifecycle assessment, total cost assessment of distribution.	Distribution based on interrelationship between costs of distribution and strategic objectives.
MASS COMMUNICATION Non-personal message with goals of creating awareness, interest, and desire.	Environmental labeling. Move towards rational consumption.	Stimulation of both primary and selective demand utilizing mass media. Attempt to create desire for unsought goods. Focus on image and emotion of produts.
PERSONAL COMMUNICATION Personal messages with goals of maintaining awareness and interest and stimulating desire and sales.	Focus on meeting consumer needs at minimal cost to environment, while achieving long term profits.	Focus on meeting customer needs at a profit.
PRICE The cost and method of payment	Total cost assessment, full cost accounting or the explicit internalization of all external costs must be considered in setting price in relationship to strategic objectives and demand.	A strategic decision based on interrelationship between marketing objectives, financial objectives, and demand.

Source: Miles, M. P., Russell G. R. (1997), "ISO 14000 Total Quality Environmental Management: The Integration of Environmental Marketing, Total Quality Management, and Corporate Environmental Policy", *Journal of Quality Management*, **2(1): 151-168.**

2.4 GREEN PRODUCT

As a term, "green product" and "environmentally friendly product" are used commonly to describe those that help to protect or enhance the natural environment by conserving energy and/or resources and reducing or eliminating use of toxic agents, pollution, and waste (Ottman *et al*. 2006)

Green products should have some features such as: being not to be dangerous for human beings and animals; not to damage environment and not to expend huge amount of energy while production, consumption, and disposal; not to cause unnecessary waste because of its short life-cycle or over-packing, not to consist of materials which are harmful for the environment and the earth (Moisander 2007).

"Green product formula" is derived from 4S which are satisfaction, sustainability, social acceptability, and safety. Satisfaction is fulfilling consumers' needs and wants; sustainability is providing continuousness of product's resources; social acceptability is acceptability of product or business by society that it is environmentally-friendly; safety is not to hazard societies' or consumers' health (Erbaslar 2007).

For producers of green products, adding environmental features as an integral part of the design process has become one of the most important and challenging tasks of product development. Environmental features can include various design decisions, such as material selection, package design, and energy and solvent usage (Chen 2001).

Green product development, which addresses environmental issues through product design and innovation, is receiving significant attention from consumers, industries, and governments around the world (Chen 2001). In response to the increasing public interest in ecological protection, many companies have been actively engaging in designing and

marketing environmentally friendly products. For a long time, major paper companies have presented both recycled and non-recycled papers to their customers. In addition to the automobile manufacturers' efforts to produce and market electric vehicles such as Toyota and Ford, many other companies have introduced green products along with their traditional products, such as IBM's "Green" PS/2 Computer and NIKE's sneakers that are virtually free of carcinogenic PVCs (Amine 2003; Chen 200).

Besides multinational companies, national companies have launched new products that save energy and protect the planet. For instance, Vitra's new kitchen faucets save energy and water consumption up to 80 per cent. In addition, Arcelik named one of its dish washers as "Ekolojist", because it reduces use of water and introduced to market cloroflorocarbon (CFC) free fridges.

As green marketing must satisfy two objectives which are improved environmental quality and customer satisfaction, green appeals are not likely to attract mainstream consumers unless they also offer a desirable benefit such as cost savings or improved product performance. For instance, Philips' experience provides a valuable lesson. When Philips introduced "Marathon", their new CFL (compact fluorescent light), new design was offering the look and skill of conventional incandescent light bulbs, five-year life, and the promise of more than $20 in energy savings over the product's life span compared to incandescent bulbs (Ottman *et al*. 2006).

On the other hand, greening itself is not a well-defined concept. Producers, consumers, and the government may have different views on the "greenness" of a product as well as on its actual benefit to the environment. Although many producers have been complaining that some environmental regulations imposed by the government are too strict and can sometimes deter innovative solutions, environmentalists have been accusing some manufacturers of "green collar crime" misleadingly dishing up their products environmentally friendly (Chen 2001).

3. CONSUMER ATTITUDES TOWARDS GREEN PRODUCTS

As a part of the literature review, various studies and results about green consumer behavior and attitudes is presented in this chapter. In addition, criteria which could explain ecological consumer behavior are summarized.

3.1 ECOLOGICAL CONSUMER BEHAVIOR

With the growing concern about the future of the earth and its inhabitants, consumers have become "green consumers" who are worried about more than just the purchase and the consumption processes. They are also concerned about the production process, in terms of scarce resources consumed, and they are concerned with product disposal issues (e.g. recycling). As the number of green consumers grows, organizations recognize that these individuals may be cohesive enough to create a large and feasible market segment. Thus, organizations may pursue green marketing strategies because they find it profitable to do so. Organizations may become green because they realize that one segment of the customer base is greening (Zinkhan and Carlson 1995).

Young *at al*. (2008) defined green consumers as environmental, ethical and sustainable consumers who prefer products or services which do least damage to the environment as well as those which support forms of social justice. According to Shrum *et al*. (2005), green consumer is anyone whose purchase behavior is influenced by environmental concerns.

For consumers, the 1960s may be described as a time of "awakening", the 1970s as a "take action" period, the 1980s as an "accountable" time, and the 1990s as a "power in the marketplace" era (Kalafatis *et al*.1999, p.442). In addition, in a 1990 poll conducted by the J. Walter Thompson advertising agency, 82 per cent of the respondents stated that they would pay at least 5 per cent more for an environmentally friendly product. Advertising

Age poll conducted in 1992 have shown that for 70 per cent of the respondents, purchase decisions were influenced by environmental messages in advertising and product labeling (Shrum *et al*. 1995, p.71).

For the last three decades, there has been a progressive increase in environmental consciousness. Consumers have become more aware of the fact that the environment is more fragile and there are limits to the use of natural resources. This, in turn, stimulated a widespread feeling that the time for corrective action has arrived (Kalafatis *et al*. 1999). In North America, more than 60 per cent of the consumers are apprehensive of environmental issues while shopping. As a result, environmentally friendly retail products' market share increased up to 30 per cent among all retail product categories in the late 1990s (Follows and Jobber 1999, pp.723-724).

In 1994, a public opinion survey on environmental attitudes, which was held by participation of 22,000 world citizens from 22 countries, revealed that citizens around the world have been taking actions to protect the environment. Most popular was "green consumerism." In 16 of the 22 countries, over half of the respondents reported that they are avoiding products that are harmful to the environment. Over a quarter of the respondents in every nation said they had acted as green consumers in the previous year. Particularly high scores showed up for Canada, Chile, Finland, Norway, Switzerland, the United Kingdom, and Germany (Elkington 1994).

On the other hand, marketers complain that although researches indicate consumers are concerned about environment, this concern does not seem to translate into a change in purchase behavior (Schlossberg 1991). It would not be entirely accurate to allege that consumers who are concerned about environmental issues are eager to pay price premium for a green product because the only difference of those products is that they are environmentally-friendly. In other words, even green consumers may not accept paying higher prices because of only green appeals that are provided by the producer.

For example, the Nationwide Environmental Survey conducted in the US, revealed that 83 per cent of the respondents preferred buying environmentally safe products and 79 per cent reported they considered a firm's environmental reputation in purchase decisions. However, only 15 per cent said that environmental claims were "extremely or very believable". In addition, in an Advertising poll, more than the half of the respondents stated that they are distrustful of green advertising claims and they paid less attention to such messages (Shrum et al. 1995, p.71).

In addition, Kalafatis *et al*. (1999), stated that green products have failed to achieve the market success that was put toward about the environmental concern reported by consumers. Put simply, consumer actions and the purchase of environmentally friendly products do not match their reported preference for such products. Several reasons might be cited for this difference such as, consumers' mistrust of environmental claims, unwillingness to change purchasing habits, the effect of economic recession on purchasing behavior, and the level of perceived price differentials between green and other products (Kalafatis *et al*. 1999).

The "attitude/behavior gap" or "values/action gap" is where 30 per cent of consumers report that they are very concerned about environmental issues but they are struggling to translate this into purchases (Young *at al.* 2008). Many researches were conducted to identify and describe the environmentally conscious purchase behavior and to be able to explain and narrow the "attitude/behavior gap" or "values/action gap".

3.2 DRIVERS OF ENVIRONMENTALLY CONSCIOUS CONSUMER BEHAVIOR AND SEGMENTING GREEN CONSUMERS

Definition of green consumer is still ambiguous in spite of it being the subject of numerous researches, papers, and books. Where do green consumers live, how do they shop? Are

they ready to pay price premium for environmentally friendly products? If yes, what is the limit of price premium? In order to understand green consumers, all these questions should be answered.

There are numerous researches conducted for three decades, in order to investigate characteristics of consumers that are differentiated according to the levels of environmental concern and environmentally conscious behavior. Aim of this kind of consumer based studies is to determine characteristics of green consumers that differentiate them from other consumers,; so, it would be possible to make a clear segmentation of this type of consumer group. Such researches mostly focus on traditional demographic (age, education, income) and psychographic (attitudes, values) segmentation variables (Shrum *et al.* 1995).

Kinnear *et al.* (1974) alleged with their research that ecologically concerned consumers can be defined. The outcome of the research was that demographic variables except income do not explain ecological purchase behavior. However, psychographic variables are very strong to explain the ecological purchase behavior. As a result of the research, environmentally concerned consumers are open to new ideas and interested in the mechanics of goods. Besides, they satisfy their curiosity and they may have high need of personal security level (Kinnear *et. al.* 1974).

As it has been stated previously, demographic criteria are not enough to explain consumers' motivations through green products. Straughan and Roberts (1999) conducted a study which indicates that perceived consumer effectiveness (PCE) provides the greatest insight into ecologically conscious consumer behavior.

3.2.1 Demographic Criteria

Over years, many studies have been conducted to identify demographic variables that correlate with ecologically conscious attitudes and/or consumption. Such variables, if significant, offer easy and efficient ways for marketers to segment the market and capitalize on green attitudes and behavior. Those early studies of ecology and green marketing have focused on demographics such as age, gender, income, and education to explain green purchase decisions (Straughan and Roberts 1999).

According to the early studies which focused on **age** as one of the determinants of ecologically conscious consumption, the general belief is that younger individuals are likely to be more sensitive to environmental issues. There are a number of theories offered in support of this belief, but the most common argument is that those who have grown up in a time period in which environmental concerns have been a salient issue at some level, are more likely to be sensitive to these issues. However, some of the researches revealed that correlation between age and green attitudes is not significant (e.g. Kinnear *et al*. 1974). Others have found the relationship to be significant and negatively correlated with environmental sensitivity and/or behavior as predicted. As a result, the findings have been somewhat equivocal (Straughan and Roberts 1999).

A second demographic variable which have been examined is **gender**. The development of unique sex roles, skills, and attitudes has led most researchers to argue that women are more likely than men to hold attitudes consistent with the green movement. For instance, Diamantopoulos *et al*. (2003), Tikka *et.al*. (2000), and Mainieri *et.al.* (1997) found that women are more defensive to environment and consider environmental issues while consuming. Moreover, Nakıboğlu and Keleş (2008) noted that effect of gender difference on buying green products is not statistically significant; whereas women are more concerned about recycling and re-using of product packages (Nakıboğlu and Keleş 2008).

Finally, some researches have found no significant relationship between gender and green behavior (Samdahl and Robertson 1989).

As is the case with age-based green research, the results of gender-based investigations are still far from conclusive. Several studies have found the relationship not to be significant or opposite of the predicted relationship (Straughan and Roberts 1999).

Besides, a research by J. Walter Thompson found that most green consumers are older women, whereas those least green consumers tended to be younger males. A Roper Organization poll found a similar pattern that according to this study, greenest consumer category have a higher proportion of women, white collar workers and higher level of education (Shrum *et al.* 1995, p.73).

As mentioned above**, level of education** is another demographic variable that has been used to explain environmental attitudes and behavior. The hypothesized relationship has been fairly consistent across these studies. Specifically, education is expected to be positively correlated with environmental concerns and behavior. Although the results of studies examining education and environmental issues are somewhat more consistent than the other demographic variables discussed to this point, a definitive relationship between the two variables has not been established. The vast majority of these studies have found the predicted positive relationship (Straughan and Roberts 1999; Shrum *et al.* 1995). However, Samdahl and Robertson (1989) found the opposite, that education was negatively correlated with environmental attitudes; Aksoy and Erdoğan (2008) and Kinnear *et al.* (1974) found no significant relationship.

Income, as a forth demographic variable, is generally thought to be positively related to environmental concerns. The most common justification for this belief is that individuals can, at higher income levels, bear the marginal increase in costs associated with supporting

green causes and favoring green product offerings. Although several studies have shown the mentioned positive relationship between income and environmental attitudes and behaviors (Kinnear *et al.* 1974), some other studies have shown a non-significant direct effect of income on environmental awareness. Finally, a few studies have found the opposite, a negative relationship between income and environmental concerns (Straughan and Roberts 1999, Samdahl and Robertson 1989). One of the interesting hypotheses about income introduced by Newell and Green (1997) which alleges that differences between the perceptions of black and white consumers with respect to environmental issues decrease as both income and education go up (Newell and Green 1997).

Besides age, gender, education and income, **place of residence** has been another variable of interest that in nearly 30 years of research many studies have considered the correlation between place of residence and environmental concern. Hounshell and Liggett (1973) have found that those living in urban areas are likely to show more favorable attitudes towards environmental issues but they found no significant relationship between the two variables (Straughan and Roberts 1999).

Moreover, large number of studies found little or no relationship between demographic characteristics and environmentally conscious consumer behavior. In addition, the relationship found typically has less explanatory power than the psychographic characteristics (Shrum *et al,* 1995).

3.2.2 Psychographic Criteria

Not only demographic characteristics, but also psychographic characteristics were investigated to explain green attitudes and behaviors. Demographic characteristics address

the consumer group who buy products and services and psychographic criteria highlights reason of the purchase.

Psychographic characteristics describe consumers' structure of personality with variables such as sentimentality, benevolence, frugality, leadership, conservatism, radicalism and so on (Tek 1999). As a consequence, numerous researches have focused on the relationship between environmentally conscious consumer behavior and psychographic variables.

Hine and Gifford (1991) investigated the effect of a fear appeal relating to the anti-pollution movement on several different pro-environmental behaviors. Among the significant findings, the researchers found that political orientation was significantly correlated with verbal commitment. Specifically, their findings suggest that those with more liberal political beliefs are more likely to exhibit strong verbal commitment than those with more conservative political views. This is in keeping with the general perception of pro-environmental issues as being a part of the "liberal" mainstream (Straughan and Roberts 1999).

According to the research of Shrum *et al.* (1995), opinion leadership, interest in products and taking more care in shopping is associated significantly with making a special effort to buy green. In contrast, impulse buying and brand loyalty have no relation with making a special effort to buy green. In addition, the study reveals that a greater interest in products is associated with higher levels of switching brands to buy green. No relations are found between switching brands to buy green and impulse buying, opinion leadership, and brand loyalty (Shrum *et al,* 1995).

The relationship between attitudes and behavior is one that has been explored in a variety of contexts. In the environmental literature, the question has been addressed by exploring the relationship between the attitudinal construct, environmental concern, and various

behavioral measures and/or observations. Those studies examining environmental concern as a correlate of environmentally friendly behavior have generally found a positive correlation between the two (Straughan and Roberts 1999).

3.2.3 Environmental Concern

Environmental concern refers an individual's general orientation toward the environment and is determined by an individual's concern level. Environmental concern has been found to be a useful predictor of environmentally conscious behavior ranging from recycling behavior to green buying behavior. For example, consumers with a stronger concern for the environment are more likely to purchase products as a result of their environmental claims than those who are less concerned about the environmental issues (Kim and Choi 2005). Thereto, (Straughan and Roberts 1999) have found positive correlation between environmental concern and environmentally friendly attitudes.

An individual's environmental concern is also related to his or her fundamental beliefs or values (Stern and Dietz 1994) and can be determined by the individual's core value orientation. For instance, environmental concerns are positively influenced by altruistic values including biospherism, but negatively relate to egoistic values (Schultz and Zelezny 1999).

3.2.4 Perceived Consumer Effectiveness

Several studies have addressed the premise that consumers' attitudes and responses to environmental appeals are a function of their perceived consumer effectiveness (PCE). PCE refers to the extent to which individuals believe that their actions make a difference in solving a problem (Ellen *et. al*. 1991).

Ellen *et.al*. (1991) cited that PCE for environmental issues is also distinct from environmental attitudes and make a unique contribution to the prediction of environmentally conscious behaviors such as green purchase (Ellen *et.al*. 1991). Individuals with a strong belief that their environmentally conscious behavior will result in a positive outcome are more likely to engage in environmental behaviors. Accordingly, self-efficacy beliefs may influence the likelihood of performing green purchase behavior (Kim and Choi 2005).

Kinnear *et. al*. (1994) found that PCE was a significant predictor of ecological concern. (Kinnear *et al.,* 1974). Findings of Laskova (2007) are consistent with the findings of Kinnear *et.al*. (1994) that the study reveals a positive association between PCE and consumer specific environmental behavior (Laskova 2007).

Findings have been fairly conclusive that PCE is positively correlated with consumers' purchase intentions towards green products. Roberts (1996) found that this was the single strongest predictor of ecologically concerned consumer behavior; above all other demographic and psychographic correlates examined (Straughan and Roberts 1999).

3.2.5 Values and Lifestyles as Determinant of Green Consumer Behavior

Rokeach (1973) defined values as standards which guide a person's life and aim of existence. According to Schwartz (1994), values are guiding principles and desired purposes of a person or a social entity (Alnıaçık and Yılmaz 2008). Many researchers focused on attitudes and values to explain ecologically concerned consumer behavior such as Young *et al*. (2008), Fraj and Martinez (2007), Follows and Jobber (1999), and Kalafatis *et al*. (1999).

To verify the relationships established between values, life-styles, and consumers' ecological behavior, Fraj and Martinez (2007) have applied a structural equation analysis with the constructs obtained in the scales validation process. The findings have proved that individuals, who most value ecological matters, have a higher environmental behavior. Moreover, it has been confirmed that those individuals with an enterprising spirit, who are motivated by self-fulfillment by taking up new challenges, present a higher ecologically concerned behavior (Fraj and Martinez 2007).

Voluntary simplicity is another life-style variable that affects environmentally conscious consumption patterns. Voluntary simplicity is a life-style which is described as consuming only what is required to sustain life for many reasons including reducing personal ecological footprint. It is found in researches that consumers working and living in cities are quite far from voluntary simplicity approach because of having regular disposable income, being exposed to stimulants which lead consumption and increasing variation of needs. As a result, working consumers in cities are less likely to have environmentally conscious consuming patterns despite the fact that they are ecologically concerned (Kımıloğlu 2008).

Based on Schwartz's *norm-activation theory*, Stern *et al.* (1993) examined the role that social-altruism and egoism played in influencing green behavior. Specifically, their discussion centers on whether social-altruism, a concern for the welfare of others, is the only driver of environmentally friendly market behavior, or whether the positive effect of social-altruism is countered by the negative influence of egoism, which inhibits willingness to incur extra costs associated with environmentalism. However, social-altruism is not significant in predicting willingness to pay either higher income taxes or higher gasoline taxes (Straughan and Roberts 1999).

In another study, Stern and Dietz (1994) classified values as egoistic, social-altruistic or biospheric. The study reveals that social-altruistic and biospheric values are determinant of environmental attitudes (Stern and Dietz 1994).

Besides, the cross-national study of Schultz and Zelezny (1999) provides us an explanation of the relationship between values and environmental attitudes. According to the study, self-transcendent values, particularly universalism, appear to be the primary values having a positive correlation with New Environmental Paradigm (NEP) which sees humans as an integral part of nature. Meanwhile, the self-enhancement value of power is negatively related to NEP (Schultz and Zelezny 1999).

Alnıaçık and Yılmaz (2008) investigated in their research the relationship between some values of college students and environmentally conscious behavior. According to their research, there is a positive correlation between universalism and benevolence and environmentally conscious behavior. However, the correlation found is weak. Achievement and power values of college students have a negative and weak correlation with environmental attitudes (Alnıaçık and Yılmaz 2008).

3.3 SEGMENTATION CRITERIA FOR GREEN CONSUMERS

Understanding underlying motivations of ecologically conscious behavior and predicting and controlling the market consisting of these consumers provide a competitive advantage to the firms. In order to be able to use this competitive advantage, clear segmentation criteria should be established.

The research conducted by Straughan and Roberts (1999) revealed that demographic variables age, gender, and education were significantly correlated with environmentally conscious consumer behavior when considered individually. Yet demographic variables are

not enough to explain that all of the psychographic variables were also significantly correlated with environmentally conscious consumer behavior. In light of the findings of the study, Straughan and Roberts (1999) offered segmentation criteria for green consumers.

According to the study of Straughan and Roberts (1999), the psychographic measures more accurately discriminate between varying degrees of ecologically conscious consumer behavior. As such, managers and researchers must ask how useful the typical profile of the green consumer (young, mid- to high-income, educated, urban women) is in terms of marketing applications. From the results of the studies, the use of either a psychographics-only model (incorporating PCE and altruism) or a mixed model (incorporating a range of demographics and psychographics) should be preferred as a segmentation criteria for green consumers (Straughan and Roberts 1999).

Straughan and Roberts (1999) also stress on the relative importance of PCE in explaining environmentally conscious consumer behavior. Specifically, the results of the study suggest that an individual must be convinced that his or her pro-environmental actions will be effective in fighting environmental deterioration. This has implications for a variety of marketing activities. It suggests that environmental-based marketing efforts should be explicitly linked with beneficial outcomes. Simply claiming to be "green" is no longer enough. Instead, marketers must show how consumers choosing green products are helping in the struggle to preserve the environment (Straughan and Roberts 1999).

The market segment formed by environmentally conscious consumers is growing. The number of consumers who are aware of environmental problems and try to do something about it is increasingly higher. As mentioned before, the results of the research conducted by Fraj and Martinez (2007) point out that this group of consumers is characterized by their self-fulfillment feeling. They are people who always try to improve themselves and take actions that suppose a new challenge for them. They are also characterized by having an

ecological lifestyle, that they are selecting and recycling products and taking part in events to protect the environment (Fraj and Martinez 2007).

3.4 CONCLUSION OF THE LITERATURE

There are numerous researches and studies that investigate and explain attitudes of consumers towards green products and green consumer behavior. The objectives of these studies are more or less the same that all of them aimed to find out the criteria behind green consumer behavior and develop segmentation strategies by using these criteria.

Starting from the very first studies about this issue, demographics have been used to explain green attitudes and segment green consumers. Usually, green consumers are described as women with higher education and higher income level. Yet, in many studies demographics have been found as non-significant to explain environmentally conscious behavior.

On the other hand, a psychographic criterion highlights the reason of the green purchase. Various researchers have found a positive significant relationship between green behavior and environmental concern. In addition, positive effect of perceived consumer effectiveness on environmentally conscious consumer behavior has been proved in a number of studies. Last but not least, values and lifestyles are indispensable criteria to form a green consumer segment. Studies reveal that, green consumers value ecological matters with an enterprising spirit and self-fulfillment. Also, social-altruistic and biospheric values are strong determinants of environmental attitudes according to the researches.

4. METHODOLOGY OF THE RESEARCH

4.1 AIM OF THE RESEARCH

The main aim of the study presented here is to provide an insight into the attitudes of young professionals living in Istanbul towards environmentally friendly products.

More specifically, our goal is,

a) to provide a clear picture of green consumer in a manner that will assist in the development of segmentation.

b) to determine the extent to which psychographic and demographic criteria are related to environmentally conscious consumer behavior.

4.2 METHODOLOGY OF THE RESEARCH

In this phase of the study, model and hypothesis of the research as well as sample and research method are presented. In addition, limitations of the research are cited in this phase.

4.2.1 Model and Hypotheses of the Research

Correlation between psychographic and demographic criteria and environmentally conscious consumer behavior (ECCB) will be investigated by the study. As for the psychographic criteria environmental concern (EC) and perceived consumer effectiveness (PCE) are taken into consideration since a significant positive correlation has been found

between these variables and ECCB in the literature. Apart from psychographic criteria, gender, marital status, and field of education as demographics and income as socio-economic criteria are added to model.

Consistent with the objectives of the research, the model of the research attempts to determine the relationship between ECCB and EC and PCE. Meanwhile, by adding demographic and socio-economic characteristics stated above to the model, we are aiming to construct the most significant model which explains the drivers of ECCB (Figure 4.1).
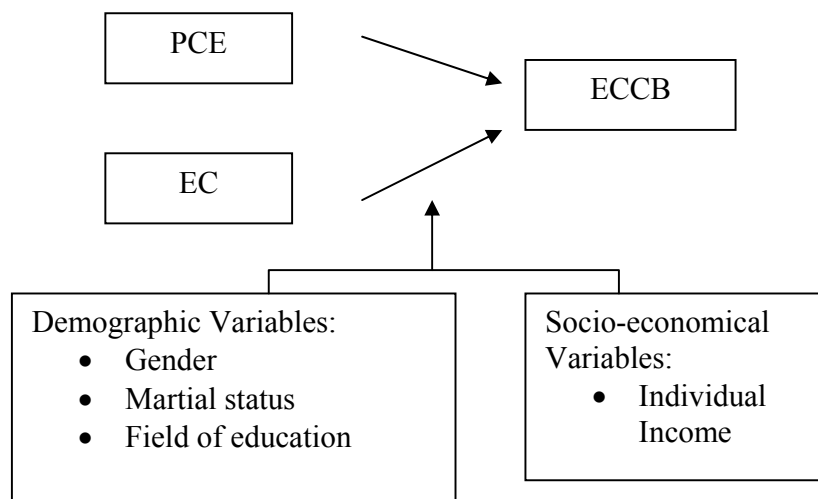
Figure 4.1: Model of the research

Based on a review of the existing literature, we developed the following research hypotheses:

H1: There is a positive relationship between PCE and ECCB.

H2: There is a positive relationship between EC and ECCB.

H3: Difference in gender has not an effect on the relationship between PCE and CE with ECCB.

H4: Difference in marital status has not an effect on the relationship between PCE and CB with ECCB.

H5: Difference in education has not an effect on the relationship between PCE and CE with ECCB.

H6: Difference in individual income has not an effect on the relationship between PCE and CE with ECCB.

4.2.2 Research Method and Sample

A survey has been conducted with the use of a primary data. The questionnaire was shared via web and social networks between 15.03.2010 and 11.04.2010.

The survey was administrated to young working professionals who live in Istanbul in 2010. 300 young professionals aged between 25 and 35 were chosen by convenience sampling. The questionnaire was put on the web and young professionals in the social network were asked to fill in the questionnaire.

The questionnaire comprised 39 questions; 18 of them aimed to measure environmentally conscious behavior, 4 of them intended to evaluate perceived consumer effectiveness, and 10 of them weighted environmental concern. The individual items were in a five point Likert type scale, anchored by "Strongly Agree" (1) and "Strongly Disagree" (5). Finally, 7 questions out of 39 were about demographic and socio-economic characteristics of the respondents. Each item of EC, PCE and ECCB is given by Table 4.7, Table 4.8, and Table 4.9 at pages 34 and 35. The full version of the questionnaire could be found at Appendix.

The scale of the research is developed by utilizing the questionnaire model of Straughan and Roberts (1999). According to the survey model of Straughan and Roberts (1999), ECCB is the dependent variable that "measures the extent to which individual respondents purchases goods and services believed to have a more positive (or less negative) impact on the environment" (Straughan and Roberts 1999). As for the independent measures, EC and PCE were investigated as psychographic variables where four demographic and socio-economic variables (education, marital status, gender and individual income) were used as moderators.

4.2.3 Limitations of the Research

Although we were able to reach to indispensible consumer based studies about green consumer behavior and attitudes, it was impossible to reach all of the studies in the literature. What matters most is the lack of research regarding attitudes of young professionals towards green products. This fact could be considered as one of the limitation of our study and also an addition to the literature.

The most important constraint of the study is the biased answers of respondents about green consumer behavior. It is possible to talk about a tendency towards environmentally friendly behavior in answers rather than real consuming patterns. In other words, consumers replied our questions as what it should be instead of what it is as actual consumption behavior was not observed.

Other limitation of the study is that, sample used in the study does not reflect the general population on several variables (e.g. income and education). Generalizing the results of the study is limited by this lack of correspondence. Besides, our population was limited to

social network of the participants and there were a time limit to collect data that it was collected mostly by snow-ball effect.

4.3 ANALYSIS AND RESULTS

In this phase of the study, demographic and psychographic characteristics of the respondents, reliability test of the scale, correlation and regression analysis and results of the hypotheses have been presented. The analyses were carried out with the help of 300 questionnaires which are all valid.

4.3.1 Demographic Structure of the Sample

Frequencies, means and other statistics of respondents' demographic characteristics could be found at tables below:

Table 4.1: Mean of age of the sample

N	Valid	300
	Missing	0
Mean		28,6167

Mean of age of the respondents is approximately 29, which is consistent with our target audience for this research (Table 4.1).

As it could be seen by Table 4.2, 60 per cent of the respondents are women and men comprised 40 per cent of the sample. It is possible to allege that there was an equal distribution of gender in the sample of the study.

Table 4.2: Distribution of gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Woman	181	60,3	60,3	60,3
	Man	119	39,7	39,7	100
	Total	300	100	100	

Table 4.3: Distribution of education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High School	5	1,7	1,7	1,7
	University	137	45,7	45,7	47,3
	Master	151	50,3	50,3	97,7
	PhD	7	2,3	2,3	100
	Total	300	100	100	

Statistics of educational status is mentioned at Table 4.3 and Table 4.4. According to the tables, 46 per cent of our respondents are university graduates and 50 per cent of the sample has master's degree. Only 1.7 per cent of the participants are high school graduates. As a consequence, educational profile of our sample is quite high. Apart from this, 55 per cent of them had a social sciences background; meanwhile 22 per cent of the respondents had engineering education.

Table 4.4: Field of education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Other	71	23,7	23,7	23,7
	Social Sciences	164	54,7	54,7	78,3
	Engineering	65	21,7	21,7	100
	Total	300	100	100	

Distribution of monthly individual income of the respondents is shown at Table 4.5. According to the distribution of monthly individual income, consumers with 1501TL to 2500TL individual income is the biggest part of the sample with 40.3 per cent proportion. Consumers with 2501TL to 3500TL follows that their proportion is 20.7 per cent. Only 4 per cent of the respondents have 7500TL or more individual income that they could be considered as minority in our sample in terms of income. Mean of monthly individual income was 2640TL (Figure 4.2).

Table 4.5: Distribution of monthly individual income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Up to 1500 TL	49	16,3	16,3	16,3
	1501-2500 TL	121	40,3	40,3	56,7
	2501-3500 TL	62	20,7	20,7	77,3
	3501-5000 TL	37	12,3	12,3	89,7
	5001-7500 TL	19	6,3	6,3	96
	7501 TL and more	12	4	4	100
	Total	300	100	100	
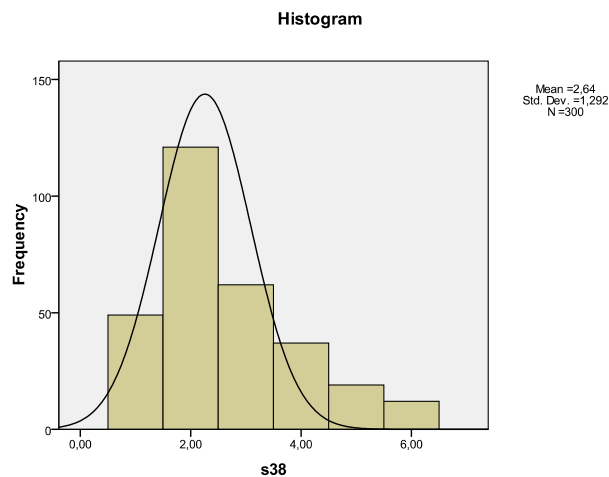
Figure 4.2: Histogram of income

Finally, as it could be seen at Table 4.6, 71 per cent of the respondents are single and 29 per cent of them are married.

Table 4.6: Distribution of marital status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	87	29	29	29
	Single	213	71	71	100
	Total	300	100	100	

4.3.2 Descriptive Statistics of Psychographic Variables

Questions about EC and PCE and descriptive statistics of the responses are given at Table 4.7 and 4.8. The means of EC questions show that respondents of the research are highly conscious about environment and their PCE item is average.

Table 4.7: Descriptive statistics of EC

Nr of Question	Question	Mean	Std. Deviation
Q2	The earth is like a spaceship with only limited room and resources.	1,627	1,145
Q6	Humans need not adapt to the natural environment because they can remake it to suit their needs (reverse coded).	4,233	1,261
Q10	Mankind is severely abusing the environment.	1,167	0,606
Q14	Humans have the right to modify the natural environment to suit their needs (reverse coded).	4,040	1,253
Q17	Plants and animals exist primarily to be used by humans (reverse coded).	3,950	1,376
Q21	We are approaching the limit of the number of people the earth can support.	2,093	1,226

Q23	To maintain a healthy economy, we will have to develop a steady-state economy where industrial growth is controlled.	1,533	0,905
Q25	When humans interfere with nature, it often produces disastrous consequences.	1,440	0,834
Q29	Humans must live in harmony with nature in order to survive.	1,267	0,646
Q32	Mankind was created to rule over the rest of nature (reverse coded).	4,040	1,266

Table 4.8: Descriptive statistics of PCE

Nr of Question	Question	Mean	Std. Deviation
Q4	Each consumer's behavior can have a positive effect on society by purchasing products sold by socially responsible companies.	1,557	0,964
Q11	It is worthless for the individual consumer to do anything about pollution.	2,940	1,514
Q16	When I buy products, I try to consider how my use of them will affect the environment and other consumers.	2,800	1,008
Q22	Since one person cannot have any effect upon pollution and natural resource problems, it doesn't make any difference what I do.	4,157	1,221

4.3.3 Environmentally Conscious Consumer Behavior

Table 4.9, which comprises questions about ECCB and mean and standard deviation of the responses, reveals that most of the consumers who participated to our research usually behave ecologically conscious. Consumers are concerned about especially electricity consumption that most of them stated that they make an effort to lower their electricity consumption and they have purchased light bulbs that saved energy despite their higher prices. In addition, it is possible to cite that recycling is the less considered issue about environmental attitude based on mean of the Q 13, Q15 and Q19.

Table 4.9: Descriptive statistics of ECCB

Nr of Question	Question	Mean	Std. Deviation
Q1	To save energy, I drive my car as little as possible.	2,730	1,491
Q3	I try to buy energy efficient household appliances.	2,187	0,998
Q5	I will not buy products which have excessive packaging.	2,180	1,299
Q7	I use less polluting detergents for my laundry.	2,773	1,089
Q8	I have convinced members of my family or friends not to buy some products which are harmful to the environment.	2,813	1,133
Q9	I have purchased products because they cause less pollution.	2,523	0,959
Q12	I have switched products for ecological reasons.	2,253	1,181
Q13	I use a recycling center or in some way recycle some of my household trash such as plastic and glass.	2,933	1,268
Q15	I buy paper towels, napkins, and toilet papers made from recycled paper.	2,760	1,061
Q18	I have purchased light bulbs that were more expensive but saved energy.	1,923	1,223
Q19	I try only to buy products that can be recycled.	3,027	0,939
Q20	I usually purchase the lowest priced product, regardless of its impact on society (reverse coded).	3,640	1,010
Q24	I normally make a conscious effort to limit my use of products that are made of or use scarce resources.	2,467	0,905
Q26	When I have a choice between two equal products, I always purchase the one which is less harmful to other people and the environment.	1,923	1,017
Q27	I make every effort in order to lower my electricity consumption.	1,900	0,952
Q28	I may quit using a product because of its negative effect on environment.	2,413	0,959
Q30	Whenever possible, I buy products packaged in reusable containers.	2,583	1,007
Q31	I will not buy a product if the company that sells it is ecologically irresponsible.	2,487	1,042

4.3.4 Reliability Analysis and Results

Reliability test should be considered as necessary, because reliability analysis investigates consistency of each question with each other and compatibility of the scale. Reliability constitutes the base of interpretation of the measurements and analyses (Kalaycı 2006). It is important to understand if the variable in the sample is distributed randomly or as it should be. One can understand whether it is or not by retesting it. If the scores of the one variable in two occasions are similar then it can be concluded that the measurements are reliable.

Cronbach's alpha should be calculated if five-point or more Likert type scale is used; as a consequence, reliability analysis is implemented by measuring Cronbach's alpha since environmentally conscious consumer behavior, environmental concern and perceived consumer effectiveness are measured by five-point Likert scale in our study. Reliability of the scale could be interpreted based on alpha coefficient as mentioned below (Kalaycı 2006):

If $0.00 \leq \alpha < 0.40$, then the scale is not reliable,
If $0.40 \leq \alpha < 0.60$, then the reliability of the scale is low,
If $0.60 \leq \alpha < 0.80$, then the scale is fairly reliable,
If $0.80 \leq \alpha < 1.00$, then the reliability of the scale is quite high.

Table 4.10: Reliability Statistics

Cronbach's Alpha	N of Items
0,782	32

According to the results of reliability analysis of our study, since Cronbach's alpha of all ECCB, EC and PCE items is 0,782 (Table 4.10), our study could be considered as fairly

reliable. In other words, if the questionnaire is applied to the same sample one more time, the responses would be mainly the same.

4.3.5 Normality Tests and Results

In statistics, many data analysis methods (t test, ANOVA, regression) depend on the assumption that data were sampled from a normal distribution. Normality tests are used to determine whether a set of expected frequencies conforms to a normal distribution. In other words, it is used to compute how likely an underlying random variable is to be normally distributed (Mason and Lind, 1996).

There are a couple of normality tests which measure whether a data set is normally distributed or not, such as Kolmogorow-Smirnov, Pearson's chi-square test, Lilliefors test for normality and Shapiro - Wilk normality tests. In these tests, the null hypothesis alleges that the data set is normally distributed, while the alternate hypothesis asserts that it does not fit normal distribution (Mason and Lind, 1996).

The Kolmogorov-Smirnov test compares the cumulative distribution of the data with the expected cumulative normal distribution, and bases its P value on the largest discrepancy. The test quantifies a distance between the empirical distribution function of the sample and the cumulative distribution function of the reference distribution, or between the empirical distribution functions of two samples (Mason and Lind 1996).

In order to define if our data set fits normal distribution or not, we carried out the Kolmogorov-Smirnov test. Our hypotheses are,
H0: The population is normally distributed.
H1: The population is not normally distributed.

"Asymp. Sig. (2-Tailed)" value for PCE and EC was smaller than 0.025 and for ECCB it was greater than 0.025 (Table 4.11). As a consequence, H0 for PCE and EC is rejected. We conclude that the distribution of EC and PCE do not follow the normal distribution. Subsequently, it was not possible to carry out parametric tests that we continued with non-parametric tests.

Table 4.11: One-sample Kolmogorov-Smirnov test

		ECCB	PCE	EC
N		300	300	300
Normal Parameters[a,b]	Mean	63,7633	12,5467	43,1367
	Std. Deviation	11,78233	2,22959	5,34289
Most Extreme Differences	Absolute	,079	,134	,099
	Positive	,040	,134	,099
	Negative	-,079	-,086	-,097
Kolmogorov-Smirnov Z		1,362	2,312	1,723
Asymp. Sig. (2-tailed)		,049	,000	,005
a. Test distribution is Normal.				
b. Calculated from data.				

4.3.6 Correlation Analysis and Results

Correlation analysis is carried out in order to define relationship between two variables. Correlation coefficient (Pearson or Spearman) is used to measure the direction and strength of the linear relationship between two quantitative variables. However, the coefficient does not give a hint about causal connection (Kalaycı 2006).

Pearson coefficient varies from -1 to +1:

    I.   If r= -1, then there is a strong negative linear relationship. In other words, while one of the variables increases, the other one decreases.

   II. If r= 0, then there is not any relationship between variables.

  III. If r=1, then there is a strong positive linear relationship between variables that when one of the variables increases, the other one increases, too.

If Pearson coefficient is close to -1 or 1, it is possible to consider a strong relationship. Vice versa, if the coefficient is close to 0, then the relationship between variables is weak (Table 4.12) (Kalaycı, 2006).

Table 4.12: Interpretation of Pearson coefficient

Pearson Coefficient (r)	Relationship
0,00 – 0,25	Very weak
0,26 – 0,49	Weak
0,50 – 0,69	Intermediate
0,70 – 0,89	Strong
0,90 – 1,00	Very strong

Source: Kalaycı, Şeref (2006), *SPSS Uygulamalı Çok Değişkenli İstatistik Teknikleri* (2.baskı), Asil Yayın Dağıtım.

Basic correlations of EC, PCE and each of the demographic variables with ECCB were examined as the first phase of the analysis. Since all the variables in correlation analysis should be continuous variables, scores of PCE, EC and ECCB items were calculated for each respondent. For normal coded items, answers were graded between 5 and 1 as "strongly agree"=5, "strongly disagree"=1. Vice versa, reverse coded items were graded from "strongly disagree"=5 to "strongly agree"=1.

Summary of correlation between each psychographic, demographic and socio-economic variable is shown at Table 4.13. As it could be seen at the Table 4.13, Pearson coefficient for the relationship between ECCB and PCE is 0.192 which is significant at the 0.01 level. As a matter of fact, it is possible to allege that there is a positive linear relationship between ECCB and PCE. However, the relationship is very weak. In addition, this positive correlation certifies the Hypothesis 1.

As for the relationship between ECCB and EC, the Pearson r of 0.385 reveals a weak but significant positive linear relationship between the two variables at the 0.01 significance level. In other words, when environmental concern of a consumer increases, ecologically conscious consumer behavior increases, too. Likewise Hypothesis 1, Hypothesis 2 is certified by this result.

On the other hand, correlation of gender, marital status, field of education and individual income is not significant at the 0.01 and 0.05 levels.

Table 4.13: Correlations of green consumer profile variables

		ECCB	PCE	EC	Gender	Marital Status	Field of Education	Individual Income
ECCB	Pearson Correlation	1	,192**	,385**	-0,005	-0,013	-0,045	-0,064
	Sig. (2-tailed)		0,001	0	0,93	0,824	0,439	0,265
	N	300	300	300	300	300	300	300
PCE	Pearson Correlation	,192**	1	-0,044	0,107	-0,015	0,018	-,118*
	Sig. (2-tailed)	0,001		0,451	0,064	0,8	0,751	0,04
	N	300	300	300	300	300	300	300
EC	Pearson Correlation	,385**	-0,044	1	-,189**	0,044	0,032	-0,074
	Sig. (2-tailed)	0	0,451		0,001	0,449	0,577	0,2
	N	300	300	300	300	300	300	300

Gender	Pearson Correlation	-0,005	0,107	-,189**	1	-0,112	,277**	,189**
	Sig. (2-tailed)	0,93	0,064	0,001		0,052	0	0,001
	N	300	300	300	300	300	300	300
Marital Status	Pearson Correlation	-0,013	-0,015	0,044	-0,112	1	0,003	-,298**
	Sig. (2-tailed)	0,824	0,8	0,449	0,052		0,961	0
	N	300	300	300	300	300	300	300
Field of Education	Pearson Correlation	-0,045	0,018	0,032	,277**	0,003	1	,122*
	Sig. (2-tailed)	0,439	0,751	0,577	0	0,961		0,034
	N	300	300	300	300	300	300	300
Individual Income	Pearson Correlation	-0,064	-,118*	-0,074	,189**	-,298**	,122*	1
	Sig. (2-tailed)	0,265	0,04	0,2	0,001	0	0,034	
	N	300	300	300	300	300	300	300
**. Correlation is significant at the 0.01 level (2-tailed).								
*. Correlation is significant at the 0.05 level (2-tailed).								

4.3.7 Regression Analysis and Results

Regression analysis includes any techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables. More specifically, regression analysis is carried out to understand how the typical value of the dependent variable changes when any one of the independent variables is varied, while the other independent variables are held fixed (Mason and Lind 1996).

When random variable X has a value, it is expected that random variable Y reacts to value of X. To be more explicit, value of X which is independent variable affects value of Y, dependent variable, and a change in one variable corresponds to a change in another variable (Mason and Lind, 1996).

Regression model is $Y = \beta_0 + \beta_1 X + \varepsilon$.

Regression models involve the following variables:

    a) β ; the unknown parameters; this may be a scalar or a vector of length k.

    b) X; the independent variables.

    c) Y; the dependent variable.

In the model, β_0 conveys estimated amount of dependent variable (Y) when X=0. β_1 represents how much Y changes when there is a change of one unit in X. If β_1 is positive, then when independent variable X increases, dependent variable Y increases, too. In direct contradiction, negative β_1 reveals that when X increases, Y decreases (Mason and Lind, 1996).

As the second phase of the analysis, step-wise regression is used to develop the most significant model in order to explain ecologically conscious consumer behavior and profile them. For the step-wise regression analysis, ECCB was modeled as the dependent variable with EC and PCE serving as predictor variables. Subsequently, each demographic and socio-economic variable entered the model as independent variables in order to see if any of them affects the relationship of ECCB with EC and PCE. As a result, five pre-specified models were examined.

Table 4.14 reveals coefficients of our five regression models. T-statistic for coefficients is used to test significance levels of five models before regression analysis. Based on t-statistic for coefficients, our test hypotheses are,

H0: The analyzed variable's coefficient is not statistically significant.

H1: The analyzed variable's coefficient is statistically significant.

Table 4.14: Coefficients of regression models

Coefficients[a,b]		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	PCE	1,433	0,223	0,282	6,418	0
	EC	1,058	0,065	0,71	16,167	0
2	PCE	1,3	0,238	0,255	5,452	0
	EC	1,037	0,067	0,695	15,538	0
	Gender	1,891	1,201	0,043	1,574	0,117
3	PCE	1,294	0,244	0,254	5,311	0
	EC	1,033	0,076	0,692	13,641	0
	Gender	1,887	1,204	0,043	1,568	0,118
	Marital Status	0,155	1,285	0,004	0,121	0,904
4	PCE	1,311	0,244	0,258	5,38	0
	EC	1,06	0,079	0,711	13,502	0
	Gender	2,465	1,283	0,056	1,922	0,056
	Marital Status	0,285	1,287	0,008	0,222	0,825
	Field of Education	-1,228	0,949	-0,04	-1,293	0,197
5	PCE	1,311	0,244	0,258	5,369	0
	EC	1,056	0,082	0,708	12,896	0
	Gender	2,409	1,323	0,055	1,82	0,07
	Marital Status	0,329	1,313	0,009	0,251	0,802
	Field of Education	-1,249	0,958	-0,04	-1,303	0,193
	Individual Income	0,087	0,489	0,004	0,178	0,859
a. Dependent Variable: ECCB						
b. Linear Regression through the Origin						

As for the first model, since t value (sig.) is smaller than significance level, 0.05, H0 is rejected that EC and PCE's coefficient is statistically significant at the 0.05 significance level. That is to say that perceived consumer effectiveness and environmental concern have a significant effect on ecologically conscious consumer behavior. The size and the direction of the effect are investigated by regression analysis.

On the other hand, apart from the effect of our psychographic variables PCE and EC, effect of all demographic and socio-economic variables (gender, marital status, field of education and individual income) on ECCB are seem statistically insignificant. T-values (sig.) of all demographic and socio-economic variables are greater than significance level, 0.05, H0 is accepted. As a consequence, all demographic and socio-economic variables' coefficient is not statistically significant at the 0.05 significance level.

Result for regression analysis of Model 1 is shown at Table 4.15. Our model is:

$$ECCB = \beta 0 + \beta 1\ PCE + \beta 2\ EC + \varepsilon.$$

$\beta 1$ in our model is 1.43 which means the effect of one unit change in PCE's value is 1.43 units of change in ECCB and the relationship is positive. $\beta 2$ in the model is 1.05 that if EC increases or decreases one unit, ECCB increases or decreases 1.05 units.

To sum up, based on the significance test results only model 1 is considered as significant. Stating it differently, gender, marital status, education and individual income have not an effect on the relationship between PCE and CE with ECCB. This fact verifies H3, H2, and H4. In addition, according to the regression analysis, PCE and EC have a positive effect on ECCB. Likewise correlation analysis, regression analysis verifies H1 and H2. Nevermore, predictor variables explain only 18 per cent of the dependent variable according to R-squared value. This result could be considered as a major constraint of the study.

Table 4.15: Regression analysis results for model 1

Dependent Variable: ECCB
Method: Least Squares
Date: 04/24/10   Time: 15:20
Sample: 300
Included observations: 300

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PCE	1.433241	0.223323	6.417785	0.0000
EC	1.058498	0.065471	16.16740	0.0000

R-squared	0.181285	Mean dependent var	63.76333
Adjusted R-squared	0.178538	S.D. dependent var	11.78233
S.E. of regression	10.67887	Akaike info criterion	7.581055
Sum squared resid	33983.39	Schwarz criterion	7.605747
Log likelihood	-1135.158	Durbin-Watson stat	2.050360

4.4 CONCLUSION OF THE RESEARCH

The objective of the study was to find out the determinants of attitudes towards green products and investigate significance level and direction of the relationship between psychographics and demographics. As a consequence, we aimed to provide a clear picture of green consumer and contribute to the development of marketing strategies aimed at that segment. EC and PCE were chosen as psychographic variables for explaining ECCB since a positive correlation has been found between these variables in various researches in literature.

In order to reach our objective, a survey has been conducted with the use of a primary data. The survey was administrated to 300 young working professionals living in Istanbul.

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According to the results of the correlation analysis, a positive linear relationship was found between ECCB and PCE as well as ECCB and EC. However, both relationships were found to be weak. On the other hand, correlation of demographics with ECCB was not significant.

According to the results of regression analysis, the model consisting only EC and PCE was the most appropriate model to explain ECCB and demographic and socio-economic variables did not have any contribution on explaining ecologically conscious behavior.

5. CONCLUSION AND DISCUSSION

It is clear that the interest to environmental issues has been rising and consumer behavior has been effected and being shaped by environmental concern. For the last three decades, environmental problems such as pollution and global warming have arisen because of unconscious usage of scarce resources, rapid industrialization, and excessive consumption and so on.

Environmental issues pique not only consumers' interest but also governments', non-governmental organizations', international non-profit organizations and businesses' interest and all of them have to make efforts to find solutions for ecological problems. Literature show that the market segment consists of ecologically conscious consumers is growing. There is no doubt that consumers have been using their power of purchase in favor of ecologically friendly products as a solution for environmental degradation which is very a prominent issue. Thence, understanding ecological consumer behavior became fundamental.

In this research, it is aimed to find out determinants of attitudes towards green products and investigate if there is a significant relationship between ecologically conscious consumer behavior and environmental concern, perceived consumer effectiveness, demographic and psychographic characteristics of consumers. Specifically, objective of the study presented here is to provide an insight into the attitudes of young professionals living in Istanbul towards environmentally friendly products. In order to reach our goal, a survey consisting of 39 questions was applied via web to 300 participants aged between 25 and 35.

Psychographic and demographic characteristics have long served as predictor variables in studies examining consumer behavior. To verify the relationships established between these variables and ecologically conscious behavior, we have applied our analyses in two phases.

As the firs phase of the study, correlation analysis was run in order to find out the direction and significance of the relationship between our dependent variable and predictor variables. The second phase of the analysis aimed to reach the most suitable model which best profile ecologically conscious consumer behavior by using step-wise regression analysis. Five models have been tested and some general insights have been gathered about the usefulness of the two commonly used types of green segmentation criteria: demographic and psychographic.

It is possible to sum up demographic and socio-economic profile of our sample below:

i. 60.3 per cent of the survey respondents were females and 39.7 per cent of the respondents were males.

ii. 29 per cent of all the respondents were married and 71 per cent of them were single.

iii. The mean of the age of survey participants was 28.6 that our sample could be considered as young.

iv. Education level results were proved that our sample consisted of educated individuals; 46 per cent of our respondents are university graduates and 50 per cent of the sample has master's degree. Only 1.7 per cent of the participants are high school graduates.

v. As for the field of education, 55 per cent of the respondents had a social sciences background; meanwhile 22 per cent of the respondents had engineering education.

vi. 16.3 per cent of the respondents had up to 1500TL individual income, consumers with 1501TL to 2500TL individual income is the biggest part of the sample with 40.3 per cent proportion, consumers with 2501TL to 3500TL income follows that their proportion is 20.7 per cent. 12.3 per cent of the respondents were at the 3501-5000TL and 6.3 per cent of them were at the 5001-7500TL individual income level. Only 4 per cent of the respondents have 7500TL or more individual income.

vii. Mean of monthly individual income was 2640TL.

The results of preliminary analysis of correlations indicated that the psychographic variables, environmental concern and perceived consumer effectiveness, were significantly correlated with ecologically conscious consumer behavior. The result is consistent with the work of Kim and Choi (2005), Straughan and Roberts (1999) and Laskova (2007). On the other hand, the findings suggest that there was not any statistically significant relationship between environmentally conscious consumer behavior and demographics such as gender, marital status, field of education and socio-economic variables like individual income. In other words, demographics and socio-economic variables are not suitable for explaining green consumer behavior.

According to the results of regression analysis, the regression model includes only the psychographic predictor variables were the most significant model explaining ecological consumer behavior. Demographic and socio-economic variables were used as moderators in other regression models that they added one by one to each model. Nevertheless, contribution of all the demographic and socio-economics to the model lack significance. In short, regression analyses indicates that the model consist of only environmental concern and perceived consumer effectiveness is the most appropriate model and demographic and socio-economic variables do not have any contribution on explaining ecologically conscious behavior.

Consequently, all the six hypotheses have been confirmed. So, findings have allowed us to prove that individuals, whose ecological concern and especially perceived consumer effectiveness value are high, show a higher environmental behavior. Moreover, it has been confirmed that psychographics appear to be more effective than demographics in explaining environmentally conscious behavior of young professionals living in Istanbul. Psychographics represent a better means for segmenting the population.

Firms could reach to their goals by being consumer centric that they should understand consumer needs and fulfil them. While number of ecologically concerned consumers is

increasing, interest in green products grows so a new consumer segment for firms have risen. It is important for the firms to know the profile of this new target audience and to define this segment of consumers. In the light of this study, it is possible to allege that marketing managers should segment their green target audience according to psycographisc rather than demographiscs.

Last of all, the research could be developed further by investigating the impact of other psychographic variables useful in environmental profile. Another issue for future research is examining cross-cultural similarities and differences with respect to environmentally conscious behavior. In addition, further researches could be conducted in other cities and could be applied to other group of consumers.

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APPENDIX

APPENDIX 1 - Questionnaire

		Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
1	To save energy, I drive my car as little as possible.					
2	The earth is like a spaceship with only limited room and resources.					
3	I try to buy energy efficient household appliances.					
4	Each consumer's behavior can have a positive effect on society by purchasing products sold by socially responsible companies.					
5	I will not buy products which have excessive packaging.					
6	Humans need not adapt to the natural environment because they can remake it to suit their needs (reverse coded).					
7	I use less polluting detergents for my laundry.					
8	I have convinced members of my family or friends not to buy some products which are harmful to the environment.					
9	I have purchased products because they cause less pollution.					
10	Mankind is severely abusing the environment.					
11	It is worthless for the individual consumer to do anything about pollution.					
12	I have switched products for ecological reasons.					
13	I use a recycling center or in some way recycle some of my household trash such as plastic and glass.					
14	Humans have the right to modify the natural environment to suit their needs (reverse coded).					
15	I buy paper towels, napkins, and toilet papers made from recycled paper.					
16	When I buy products, I try to consider how my use of them will affect the environment and other consumers.					
17	Plants and animals exist primarily to be used by humans (reverse coded).					
18	I have purchased light bulbs that were more expensive but saved energy.					
19	I try only to buy products that can be recycled.					

20	I usually purchase the lowest priced product, regardless of its impact on society.					
21	We are approaching the limit of the number of people the earth can support.					
22	Since one person cannot have any effect upon pollution and natural resource problems, it doesn't make any difference what I do.					
23	To maintain a healthy economy, we will have to develop a steady-state economy where industrial growth is controlled.					
24	I normally make a conscious effort to limit my use of products that are made of or use scarce resources.					
25	When humans interfere with nature, it often produces disastrous consequences.					
26	When I have a choice between two equal products, I always purchase the one which is less harmful to other people and the environment.					
27	I make every effort in order to lower my electricity consumption.					
28	I may quit to use a product because of its negative effect on environment.					
29	Humans must live in harmony with nature in order to survive.					
30	Whenever possible, I buy products packaged in reusable containers.					
31	I will not buy a product if the company that sells it is ecologically irresponsible.					
32	Mankind was created to rule over the rest of nature.					

32. Age : …...............

33. Gender : ( ) Female ( ) Male

34. Level of Education :

    ( ) Primary School ( ) High School

    ( ) University ( ) Master ( ) PhD

35. Field of Education :

    ( ) Social Sciences ( ) Engineering ( ) Other

36. Individual Income :

    ( ) Up to 1500TL ( ) 1501-2500TL

    ( ) 2501-3500TL ( ) 3501-5000TL

    ( ) 5001-7500TL ( ) More than 7500TL

37. Marital Status : ( ) Single ( ) Married

APPENDIX 2 - Anket Formu

		Tamamen Katılıyorum	Katılıyorum	Ne Katılıyorum Ne Katılmıyorum	Katılmıyorum	Tamamen Katılmıyorum
1	Enerji tasarrufu yapabilmek için arabamı mümkün olduğu kadar az kullanırım.					
2	Dünya, kısıtlı alan ve kaynağa sahip bir uzay gemisi gibidir.					
3	Enerji tasarruflu ev aletleri almaya özen gösteririm.					
4	Her bir tüketicinin, çevreye karşı sorumlu üreticilerin sattığı ürünleri satın alma yönündeki davranışının toplum üzerinde olumlu bir etkisi vardır.					
5	Gereksiz özellikleri olan (süslü) ürünleri satın almam.					
6	İnsanların doğal çevre ile uyumlu olmalarına gerek yoktur, çünkü çevreyi kendi ihtiyaçlarını karşılayacak şekilde değiştirebilirler.					
7	Çevreye zararı en az olan deterjanları kullanırım.					
8	Aile bireylerini ve arkadaşlarımı çevreye zarar verecek ürünleri satın almamaları için ikna etmeye çalışmaktayım.					
9	Daha az kirlenmeye neden olan ürünleri satın almaktayım.					
10	İnsanoğlu şiddetli bir şekilde doğayı suistimal etmektedir.					
11	Tüketicilerin çevre kirliliği konusunda aldıkları bireysel aksiyonların işe yaramadığını düşünmekteyim.					
12	Ekolojik sebeplerle ürün/marka değiştiririm.					
13	Cam, plastik gibi evsel atıkları diğer atıklardan ayırarak geri dönüşüm için biriktiririm.					
14	İnsanoğlunun, doğayı kendi ihtiyaçlarını karşılamak için değiştirmeye hakkı vardır.					
15	Geri dönüştürülmüş malzemelerden üretilen peçete, tuvalet kağıdı ve diğer kağıt ürünleri satın alırım.					
16	Bir ürünü satın alırken, o ürünün çevreyi ve insanları nasıl etkileyeceğini göz önünde bulundururum.					

17	Bitkiler ve hayvanlar insanlar tarafından kullanılmak için vardırlar.					
18	Daha pahalı olmasına rağmen, evimdeki ampulleri enerji tasarrufu sağlayan ampullerle değiştirdim.					
19	Yalnızca geri dönüştürülebilir ürünleri satın almaya çalışırım.					
20	Genellikle toplumdaki etkisine bakmaksızın en düşük fiyatlı ürünleri satın almaktayım.					
21	Dünyanın besleyebileceği maksimum insan sayısına ulaşmaktayız.					
22	Bir kişinin çevre kirliliği ve doğal kaynakların kıtlığı üzerinde tek başına etkisi olamayacağından, benim yaptıklarımın da çevre kirliliği ve doğal kaynakların kıtlığı üzerinde etkisi olmayacaktır.					
23	Sağlıklı bir ekonominin devamı için, endüstriyel büyümenin kontrol edildiği bir ekonomiye ihtiyaç vardır.					
24	Kıt kaynakların ya da bu kaynaklar ile üretilmiş ürünlerin kullanımı konusunda kendimi bilinçli olarak kısıtlarım.					
25	İnsanoğlunun doğa ile çatışmasının genellikle yıkıcı sonuçları olur.					
26	İki eşit ürün arasında seçim yapmam gerekirse çevreye en az zarar vereni satın alırım.					
27	Elektrik kullanımımı azaltma konusunda özel bir çaba gösteririm.					
28	Çevreye zararlı etkisinden dolayı bir ürünü almaktan vazgeçebilirim.					
29	İnsanoğlu hayatta kalabilmek için doğa ile uyum içinde yaşamalıdır.					
30	Tekrar kullanılabilir kaplar ile paketlenmiş ürünleri satın almaya çalışırım.					
31	Çevreye karşı sorumsuz davranan firmaların ürünlerini satın almam.					
32	İnsanoğlu, doğayı yönetmek için yaratılmıştır.					

32. Yaşınız : …................

33. Cinsiyetiniz : ( ) Kadın ( ) Erkek

34. Eğitim Durumunuz :

    ( ) İlköğretim   ( ) Lise

    ( ) Üniversite   ( ) Yüksek Lisans   ( ) Doktora

35. Eğitim Gördüğünüz Alan :

( ) Sosyal Bilimler   ( ) Mühendislik   ( ) Diğer

36. Kişisel Net Geliriniz   :

( ) 1500TL'ye kadar   ( ) 1501-2500TL

( ) 2501-3500TL   ( ) 3501-5000TL

( ) 5001-7500TL   ( ) 7500TL üzeri

37. Medeni Haliniz   :   ( ) Bekar   ( ) Evli