

The effect of individuals' perceptions toward firms' environmental social responsibility activities on pro-environmental behavior

Süreyya ECE

Şırnak University

Department of Business Administration, Şırnak, Turkey

Azize Ergeneli

Hacettepe University

Department of Business Administration, Ankara, Turkey

Key Words

Pro-environmental Behavior, Ecocentric View, Firms' Environmental Social Responsibility Activities

Abstract

Today the effects of environmental problems are increasingly being felt. People have realized with time that the unconscious consumption have created environmental problems. The conscious consumers have begun to perform pro-environmental behaviors. It is thought that environmental social responsibility activities of companies have also been effective in this case.

The purpose of this study is to examine the effect of individuals' perceptions toward firms' environmental social responsibility activities on their ecocentric views and pro-environmental behaviors. In this context a survey conducted on 170 economic and administrative program students in Şırnak University in Turkey. The results showed that the individuals' perceptions toward firms' environmental social responsibility activities have mediating effect on relationships between ecocentric view and pro-environmental behavior. In other words the individuals perceive environmental problems through firms' environmental social responsibility activities so that they perform pro-environmental behaviors. Otherwise they even have an ecocentric view they don't perform pro-environmental behaviors.

1. Introduction

Environmental problems like air pollution, deforestation, destruction of vegetation have led companies' activities evaluated in terms of social responsibility and provided environmental ethic. In this context it is being attracted attention to increasingly growing environmental problems and organizations are expected to do required activities in this regard. In the society sensitivity to the environment occur through works of variety non-governmental organizations which engaged in environmentally friendly activities. The organizations created the image that respect the environment, obtain an advantage over its competitors (Biber, 2002). Because the firms through the environmental activities can maintain both their activities without harming the environment and reduce considerable costs thanks to recycling (Gökbunar, 1995).

"3-R" is mentioned to ensure sustainability. 3-R is explained as reducing, reusing and recycling. In this approach which is widely accepted in developed and developing countries, it is accepted that sources have a life cycle. It is been thought that the negative effects of firms' activities would decrease by implementing this approach (Özkaya, 2010).

2. Literature Review

2.1. Individuals' Perceptions toward Firms' Environmentally Social Responsibility Activities

The sensitive consumers to the environment are behaving sensitive to the firms' activities toward protect the environment. For example the firms in the USA operating about garbage,

chemical waste collection and destruction and air pollution are obtaining a considerable amount of profit from these activities. In the same way the construction firms providing funds for reforestation shows that the growing environmental problems cannot be ignored by the firms anyway (Gökbunar, 1995).

When people exposed to a particular environmental problems, they will act on that knowledge by lending support (Roberts, 1996). Environmental advertisement makes easier perception and awareness of environmental friendly products (Rahbar & Wahid, 2011). Realizing this situation the marketers have begun to redesign the promotion campaigns to give messages toward environment. Particularly production of energy and water saving products, use of recycled and self-solute materials, supports to the case to protect environment are among the main environmental messages which has been brought to the fore in the advertisements (Alnıaçık, 2009).

The most common example of promotion activities toward environment is to donate to environmental groups and environmental activities and to announce it to the public. Donating is the most effective way to improve the green image of the company or product (Ayyıldız & Genç, 2008). For instance it is probably attracting attention to consumers that a firms' declaration about spending a certain amount of its income derived from sales to preserve rain forests (Polonsky, Bailey, Baker, Basche, Jepson, & Neath, 1998). In a study made by Alnıaçık and his friends, it was determined that consumers considers the firms which are fulfilling its responsibility to the society and engaging in activities to protect the environment (Alnıaçık, Develi, Giray, & Alnıaçık, 2011).

In a study conducted in Adana city in Turkey, active environmentalist consumers stated that they have a tendency to follow environmental issues in media (Nakıboğlu, 2007). According to Karaca (2013), individuals can be attracted attention to the environmental problems by keeping environmental issues on the agenda (Karaca, 2013). In other study it was determined that implementation of programs related to environmental activities and the continuity of these programs increased the individuals' environmental awareness (Gelibolu & Madran, 2013). The results of the study conducted with the firms operating in Finland, Germany, Sweden and UK showed that environmentally marketing functions like green advertising reflected environmental values (Karna, Hansen, & Juslin, 2003).

In other study was made in China, the participants emphasized that environmental advertising claims in printed media are attract more attention. They stated that the environmental ads in printed media lead them to buy environmentally friendly products (Chan, 2004). Davis (1994) found that the companies which contributing direct monetary support for environmental groups and environmentally related projects have the biggest effect on consumers' intentions in positive way (Davis, 1994).

A study conducted in Malaysia showed that a majority of the participants believed that the environmental advertisement informing them about environmentally friendly products. However there was no significant relationship between environmental advertisement and pro-environmental buying behavior (Rahbar & Wahid, 2011).

2.2. Ecocentric View and Anthropocentric View

Ecocentric view can be defined as a person is aware of his/her responsibility toward nature and recognizes the ecology crisis as the one of thinking and behavior (Hage & Rauckienė, 2004). Anthropocentric notion mean that nature exists primarily for human use (Dunlap, 2008). Recently majority of consumers have become to realize that their purchasing behaviors had effect on environmental problems. They asserted that today's ecologic problems are severe and considering environmental problems when making purchase is important for the nature.

Increasing number of consumers who are willing to pay more for environmentally friendly products show that the growth of ecologically favorable consumer behaviors. On the other side the consumers who don't consider ecologic issues unwilling to pay more for environmentally friendly products. They don't think that being ecologically friendly is important (Laroche, Bergeron, & Forleo, 2001). According to Schultz (2000), individuals' concern for environmental problems can be based on the relevance of environmental damage to self, people or all living things (Schultz, 2000).

Consumers who thinking people must live in balance with nature choose products that create less negative effects on nature. These consumers also make efforts to recycle, limit their use of products made from scarce resources and therefore attempt to make ecologically decisions about the products they buy (Roberts & Bacon, 1997).

In a study it was found that socially conscious consumers feels strongly that they can do something about pollution and tries to consider the social impact of their purchases (Webster, 1975). Important finding of the other research is that the consumers who consider environmental problems refused to buy products from companies accused for being polluters (Laroche, Bergeron, & Forleo, 2001). Minton and Rose (1997) found in their study that attitude toward environment had strong effect on consumer purchase behaviors. In other words environmentally concern attitudes affect behaviors like product choice and recycling (Minton & Rose, 1997).

2.3. Pro-Environmental Behavior

Pro-environmental behavior simply mean behavior that consciously seeks to minimize the negative impact of one's actions on the nature for example minimizes resource and energy consumption, reduce waste production (Kollmuss & Agyeman, 2002).

Increasing sensitivity to environment all over the world in recent years is reflected in consumers' buying behaviors. Consumers give messages about their attitudes toward products and firms with their environmentalist purchasing behaviors (Nakıboğlu, 2007).

Because of global warming and climate change the firms are under pressure of both government and environmentalist groups about saving energy and water, reduction of waste and emission (especially greenhouse gas) occurred after production. The result of environmentalism movements emerging at various countries especially in Western countries, business has started the production of products that don't harm the environment. Eco-friendly consumers are ready to pay higher prices to these products. This case is an intensity of experienced sensitivity to the environmental issues (Gökbunar, 1995).

Increase of peoples' environmental awareness caused changes in life style and consumption habits in way to cause less damage to the environment. Depending on consumers' sensitivity to these issues, the business with social responsibility try to make production methods and process more environmentally friendly and place messages describing their sensitivity to environmental in promotion works primarily advertisements (Özkaya, 2010). At these advertisements the firms uses various terms and claims about their products are environmentally friendly, reusable, biodegradable, energy saved etc. (Alnaçık, 2009). The ads made on these subjects are called "green advertisement". The green advertisement is defined as appealing consumers' demands and needs who emphasizing on the environment with their messages. The target group of the green ads is green consumers (Özkaya, 2010).

In a study conducted in Adana city in Turkey, it was determined that the active environmentalist consumers pay attention chemical contents of products and ensure that they can be recycled. It was also determined that the consumers preferred eco-friendly products like recycled, glass packing and made from paper. Another result of this study is that the consumers

show a special effort to buy the products made by environmentally friendly firms (Nakiboğlu, 2007).

According to Kollmuss and Agyeman (2002), refusing to acknowledge the problem will prevent a person from pro-environmental behavior (Kollmuss & Agyeman, 2002). The results of the study made by Kilbourne and Pickett (2008) showed that the individuals who believing existence of environmental problems are more sensitive toward the environment (Kilbourne & Pickett, 2008).

According to these theoretical studies and research findings following hypotheses are offered:

H1: Individuals' ecocentric view is positively related to their pro-environmental behaviors

H2: Individuals' ecocentric view is positively related to their perception toward firms' environmentally social responsibility activities

H3: Individuals' perception toward firms' environmentally social responsibility activities are positively related to their pro-environmental behaviors

H4: Individuals' perception toward firms' environmentally social responsibility activities are mediate between their ecocentric view and pro-environmental behaviors

3. Aim of the Study

This study aims to investigate the effect of individuals' perceptions toward firms' environmental social responsibility activities on their ecocentric views and pro-environmental behaviors. It is also aimed to examine the relationships between ecocentric view, pro-environmental behavior and individuals' perceptions toward firms' environmental social responsibility activities.

4. Research Method and Sample

Simple regression analysis used to test the hypotheses H1, H2 and H3. To find the mediation effect of individuals' perceptions toward firms' environmental social responsibility activities on their ecocentric views and pro-environmental behaviors (H4) hierarchical multiple regression analysis was used. In this context a survey conducted on 170 economic and administrative program students in Şırnak University in Turkey. Our research model is shown below:

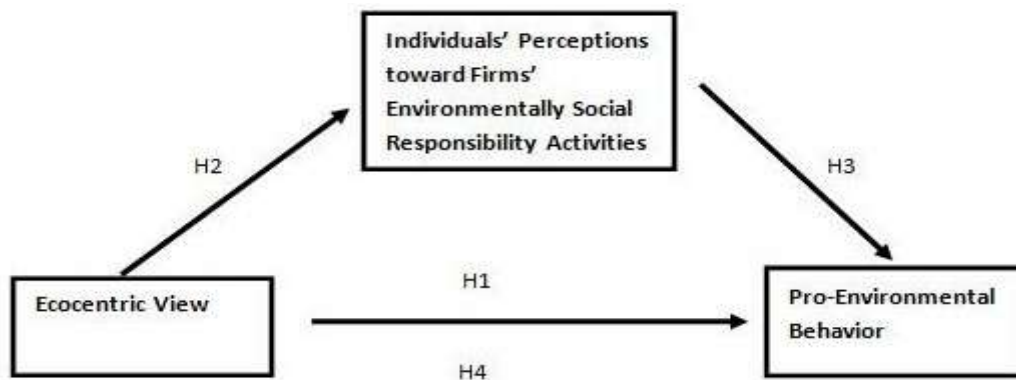


Figure 1: Research model

5. Measures

Individuals' ecocentric view and anthropocentric view was measured with the scale called New Environmental Paradigm developed by Dunlap et.al (2000). Although it has been developed as one-dimensional scale, according to Dunlap and his friends it can be break into two or more dimensions depend on the basis of the study (Dunlap, Liere, Mertig, & Jones, 2000).

On the basis of this study the scale was used as two dimensional: agreement with 8 odd numbered items indicated ecocentric view; agreement with 7 even numbered items indicated anthropocentric view. Individuals' pro-environmental behavior was measured with the scale developed by Roberts (1996). To measure individuals' perception toward firms' environmentally social responsibility activities, a scale with 8 items was developed. This scale include items like "I watch with interest advertisements about environmentally social responsibility projects on TV" , "I follow closely the firms which investing the projects that encouraging sustainable energy sources such as wind and sun" and "The projects carried out by big/famous firms attracts attention of the society to the environment". All three scale are Likert type scales and they evaluates the responses ranging from 1(strongly disagree) and 5(strongly agree).

6. Findings

The average age of the participants was determined as 23; 33 % of the participants were female and 67% of the participants were male. Mean, standard deviation and correlation between variables are as follows:

Variables	Mean	SD	1	2	3	4
1.Ecocentric View	3,94	0,58	(.60)			
2. Anthropocentric View	2,99	0,69	-0,016	(.60)		
3.Individuals' Perceptions toward Firms' Environmentally Social Responsibility Activities	3,51	0,59	0,479**	0,066	(.64)	
4.Pro-Environmental Behavior	3,52	0,58	0,275**	0,074	0,44**	(.85)

N=170; **p<0,01

Table 1: Mean, standard deviation and correlation coefficients

Anthropocentric view didn't correlate with the other variables. But the other three variables correlated with each others in significance level.

To test hypotheses H1, H2 and H3 linear regression analysis were conducted. The results of the analysis are as follows:

Variables	B	SE	β	t	p	Hypothesis
IV=Ecocentric view DV= Pro-environmental behavior	0,276	0,074	0,275	3,713	0,000	H1= supported
IV=Ecocentric view DV= Individuals' perceptions toward firms' environmentally social responsibility activities	0,49	0,069	0,479	7,081	0,000	H2= supported
IV= Individuals' perceptions toward firms' environmentally social responsibility activities DV= Pro-environmental behavior	0,431	0,068	0,44	6,357	0,000	H3= supported

Table 2: Results of the regression analysis

The results of the regression analysis show that there is a positive relationship between ecocentric view and pro-environmental behavior. Ecocentric view is also positive related to individuals' perceptions toward firms' environmentally social responsibility activities. Individuals' perceptions toward firms' environmentally social responsibility activities have positive effect on their pro-environmental behavior.

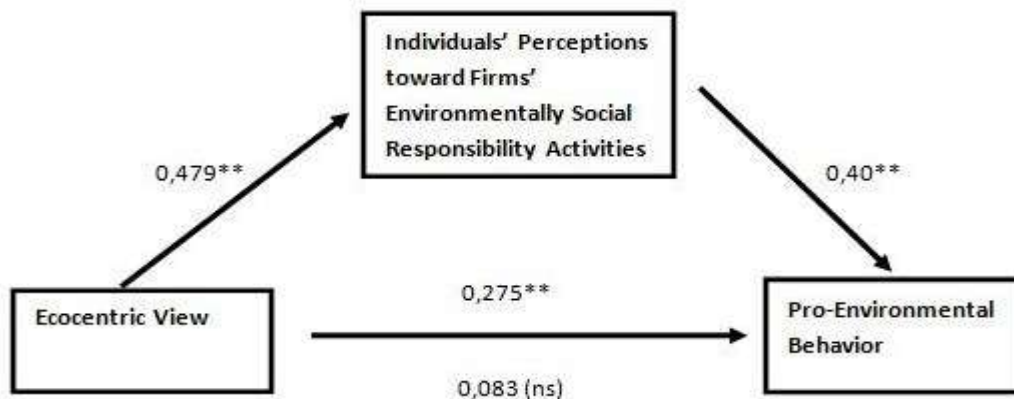
Hierarchical regression analysis was used to test hypothesis H4. The sum of these analyses is shown at the Table 3:

	R	R ²	R ² Change	Beta
Analysis One:				
Ecocentric view & Pro-environmental behavior	0,275	0,076		0,275**
Analysis Two:				
Ecocentric view & Individuals' perceptions toward firms' environmentally social responsibility activities	0,479	0,23		0,479**
Analysis Three:				
<i>Step 1:</i>				
Individuals' perceptions toward firms' environmentally social responsibility activities & Pro-environmental behavior	0,44	0,194		0,40**
<i>Step 2:</i>				
Ecocentric view & Pro-environmental behavior	0,446	0,199	0,005	0,083

**p<0,01

Table 3: The results of mediation analysis

Three conditions of mediation analysis are satisfied. In the analysis three, step 2 shows that the significant relationship between ecocentric view and pro-environmental behavior is no longer significant under controlling mediated variable. In other words individuals' perceptions toward firms' environmentally social responsibility activities fully mediated the effect of ecocentric view on pro-environmental behavior. So hypothesis H4 is also supported. According to these results the research model can be shown as follows:

**Figure 2: The research model after analysis**

7. Conclusion

There many things to do to stop environmental degradation based on peoples' behavior. The one of them is changing peoples' buying behavior. People should realize the effect of their purchasing on environment and so that they perform pro-environmental behavior. The aim of this study is research on the variables which effecting pro-environmental behaviors. The results of the study show that individuals' ecocentric view has a positive effect on pro-environmental behavior and individuals' perceptions toward firms' environmental social responsibility activities. People having ecocentric view are more likely consider environment when purchasing. They are also concerning about firms which making effort to protect environment. People having high perception toward firms' activities about environment perform more pro-environmental behaviors.

The more important finding is the mediating effect of individuals' perceptions toward firms' environmental social responsibility activities on their pro-environmental behaviors. An individual who has no perceptions toward firms' environmental social responsibility activities, don't perform pro-environmental behavior even if he/she has ecocentric view.

This study suggests that firms should make efforts about environment because of those kinds of efforts affect individuals' buying behaviors. In other words unless those efforts ecocentric view lost its effect on pro-environmental behavior so people don't perform pro-environmental behaviors. To these findings firms have an opportunity to shape individuals' buying decisions. Firms should organizing environmental social responsibility activities like supporting environmentally projects, using renewable energy resources in their production and announce these activities through visual and printed media tools to attract individuals' attention to the environment. Individuals having ecocentric view consider these activities and as a result would perform pro-environmental behaviors.

This study has several limitations. These are that the sample was small, the participants were consisting of only students and the study conducted only Şırnak University in Turkey. Future research can be conducted on different cities, different samples and different countries.

References

- Alnaçık, Ü. (2009). Tüketicilerin Çevreye Duyarlılığı ve Reklamlardaki Çevreci İddialar. *Kocaeli Üniversitesi Sosyal Bilimler Enstitüsü Dergisi* , 48-79.
- Alnaçık, Ü., Develi, E. İ., Giray, C., & Alnaçık, E. (2011). Küresel Firmaların Yerel Sosyal Sorumluluk Faaliyetleri Marka Değeri ve Marka Tercihini Nasıl Etkilemektedir? *Öneri* , 83-91.
- Ayyıldız, H., & Genç, K. Y. (2008). Çevreye Duyarlı Pazarlama: Üniversite Öğrencilerinin Çevreye Duyarlı Pazarlama Uygulamaları ile İlgili Tutum ve Davranışları üzerinde bir Araştırma. *Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi* , 505-527.
- Biber, A. (2002). Bir Halkla İlişkiler Politikası Olarak Sosyal Sorumluluk. *İletişim* , 131-152.
- Chan, R. Y. (2004). Consumer Responses to Environmental Advertising in China. *Marketing Intelligence & Planning* , 427 - 437.
- Davis, J. J. (1994). Consumer Response to Corporate Environmental Advertising. *Journal of Consumer Marketing* , 25 - 37.
- Dunlap, R. E. (2008). The New Environmental Paradigm Scale: From Marginality to Worldwide Use. *The Journal of Environmental Education* , 3-18.
- Gelibolu, L., & Madran, C. (2013). Çevresel Sorunlara Davranışsal Çözümler Geliştirilmesinde Sosyal Pazarlamanın Kullanılması. *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi* , 339-357.
- Gökbunar, A. R. (1995). İşlemelerin Çevrenin Korunmasında Sosyal Sorumluluğu. *Ekoloji* , 4-6.

- Hage, R., & Rauckienė, A. (2004). Ecocentric Worldview Paradigm: The Reconstruction of Consciousness. *Journal of Baltic Science Education* , 60-68.
- Karaca, Ş. (2013). Tüketicilerin Yeşil Ürünler İlişkin Tutumlarının İncelenmesine Yönelik Bir Araştırma. *Ege Akademik Bakış* , 99-101.
- Karna, J., Hansen, E., & Juslin, H. (2003). Social Responsibility in Environmental Marketing Planning. *European Journal of Marketing* , 848-871.
- Kilbourne, W., & Pickett, G. (2008). How Materialism Affects Environmental Beliefs, Concern and Environmentally Responsible Behavior. *Journal of Business Research* , 885-893.
- Kollmuss, A., & Agyeman, J. (2002). Mind the Gap: Why do People Act Environmentally and what are the Barriers to Pro-environmental Behavior. *Environmental Education Research* , 239-260.
- Laroche, M., Bergeron, J., & Forleo, G. B. (2001). Targeting Consumers who are Willing to Pay more for Environmentally Friendly Products. *Journal of Consumer Marketing* , 503-520.
- Minton, A. P., & Rose, R. L. (1997). The Effects of Environmental Concern on Environmentally Friendly Consumer Behavior: An Exploratory Study. *Journal of Business Research* , 37-48.
- Nakıboğlu, B. (2007). Tüketimin Çevreci Boyutu: Çevreci Tutum ve Davranışlara göre Pazar Bölümlemesi. *Ç.Ü. Sosyal Bilimler Enstitüsü Dergisi* , 423-438.
- Özkaya, B. (2010). İşletmelerin Sosyal Sorumluluk Anlayışının Uzantısı Olarak Yeşil Pazarlama Bağlamında Yeşil Reklamlar. *Öneri* , 247-258.
- Polonsky, M. J., Bailey, J., Baker, H., Basche, C., Jepson, C., & Neath, L. (1998). Communicating Environmental Information: Are Marketing Claims on Packaging Misleading? *Journal of Business Ethics* , 281-294.
- Rahbar, E., & Wahid, N. A. (2011). Investigation of Green Marketing Tools' Effect on Consumers' Purchase Behavior. *Business Strategy Series* , 73 - 83.
- Roberts, J. A. (1996). Green Consumers in the 1990s: Profile and Implications for Advertising. *Journal of Business Research* , 217-231.
- Roberts, J. A., & Bacon, D. R. (1997). Exploring the Subtle Relationships between Environmental Concern and Ecologically Conscious Consumer Behavior. *Journal of Business Research* , 79-89.
- Schultz, P. W. (2000). Empathizing With Nature: The Effects of Perspective Taking on Concern for Environmental Issues. *Journal of Social Issues* , 391-406.
- Webster, F. E. (1975). Determining the Characteristics of the Socially Conscious Consumer. *Journal of Consumer Research* , 188-196.