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## THE ROLE OF ENVIRONMENTAL CONCERN AND PERCEIVED CONSUMER EFFECTIVENESS IN THE PREFERENCE OF GREEN PRODUCTS: AN EXAMINATION OF MOTHERS WITH BABIES<sup>1</sup>

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### ABSTRACT

Environmental concern and environmental awareness have been one of the topics receiving much interest throughout the world in recent years. The increase in the environmental concerns and attitudes of people also drawn the attention of businesses, and a new market was created under the name of eco-friendly products and environmental marketing by the businesses that attempted turn this crisis into an opportunity. In parallel with the rest of the world, environmental marketing has become one of the areas with increasing interest from the businesses due to the green product preferences of the consumers in Turkey. The aim of this study is to reveal the effect of the levels of environmental concern and perceived consumer effectiveness of mothers with babies in the age of 0-36 months on green product purchasing behaviour. The study demonstrated that environmental concern has a significant effect on green product purchasing behaviour and perceived consumer effectiveness, and perceived consumer effectiveness has a significant effect on green product purchasing behaviour ( $p < 0.01$ ). In addition, it was determined that perceived consumer effectiveness has an intervention role in the relationship between environmental concern and green product purchasing behaviour.

**Keywords:** Environmental concern, perceived consumer effectiveness, green marketing,

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## INTRODUCTION

A gradual increase in environmental contamination due to problems and environmental disaster experienced have caused an increase in the concerns about the future of the environment and also in the number of consumers sharing these concerns. Businesses and consumers have started to pay an increasing interest in environmental issues and are undertaking some initiatives to prevent environmental pollution. Environmental precautions and attempts are considered to be very important in decreasing the negative effects of peoples and institutions on the environment and to encourage sustainable development (Apaydın and Szczepaniak, 2017: 93).

The year based population have experienced a significant increase in Turkey. It has increased in terms of consumption and urbanization. In addition, similar results have also resulted to a significant increase in environmental pollution bringing about environmental problems. In recent years, in parallel with the world, environmental awareness and environmental marketing activities have also increased in Turkey. The increasing shift in demand towards the environmental products in the shopping choices of consumers and the strategies of businesses to protect natural balance in their commercials, product packages, production strategies, and in other several areas are among the environmental activities.

This study aims to explain the effect of the levels of environmental concern and perceived consumer effectiveness of mothers with babies in the age of 0-36 months on the green product purchasing behaviour and the effect of perceived consumer effectiveness on the level of environmental concern. In addition, the study aims to explain whether the perceived consumer effectiveness has an intervention role in the relationship between environmental concern and green product purchasing behaviour.

## ENVIRONMENTAL CONCERN

The environmental awareness that is developed after consumers see the negative effects on nature turned gradually to a major concern (Biner, 2014: 77). These concerns of people about the future of the environment and possible negative effects of environmental pollution on the world we live in were included in the literature as environmental concerns. Environmental concern is the wish of the people to recognize environmental problems and also to promote the struggle to solve these problems or voluntarily helping to solve (Dunlap and Jones, 2002:485 Some definitions of environmental concern in previous studies are as follows. The environmental concern shows the extent to which individuals are concerned about the issues related to the environment conservation and the future of the environment as well as its impact on themselves and their health (Apaydın and Szczepaniak, 2017: 98). According to Ay and Ecevit (2005), environmental concern is a variable that tries to identify consumers' current and future concerns about the environment. When individuals are concerned about the environment, they give importance to environmental issues and tackling environmental problems. According to Lee et al. (2014), environmental concern shows the general attitudes of consumers towards the environment and the extent to which they are concerned about environmental threats.

According to Bamberg (2003: 1), people use this term to refer to the whole range of environmentally related perceptions, emotions, knowledge, attitudes, values and behaviors. According to Dagher et al. (2015: 187), environmental concern is an important feature that can represent an individual's concerns about the environment, what he likes or dislikes.

In several previous studies in this area (Kim and Choi, 2005; Yeniçeri, 2008; Tanrıku, 2015; Biner, 2014; Lee et al., 2014; Roberts and Bacon, 1997; Albayrak et al., 2013; Balderjahn, 1988; Hartmann and Apaolza-Ibanez, 2012), it was shown that there is a significant relationship between environmental concern and green product purchasing behaviour; and that the consumers with strong environmental concern can consume products that reflect their environmental concerns.

In the study by Eles and Sihombing (2017) on the relation between environmental knowledge, environmental concern, subjective norms, price concerns, attitudes and green product purchasing behaviour, a positive relation was found between the environmental concern and attitudes, and between attitudes and green product purchasing behaviour.

In the study by Khaola et al. (2014) environmental concern is strongly related to attitude towards green products and weakly related to green purchase intentions respectively. When environmental concern and attitude towards green products are entered simultaneously to predict green purchase intentions, the influence of environmental concern becomes insignificant.

In the study by Mostafa (2007), the effect of three cognitive and attitudinal factors on gender differences in green buying behavior was investigated. In this study was found that women appeared to be less aware of environmental issues compared with men. However, men showed more environmental concern and more positive outlook towards green purchase compared with women.

The findings of the study by Aman et al. (2012), signify that environmental knowledge and environmental concern significantly influenced green purchase intention among consumers. Also, attitude is found to have a partial mediation effect on the relationship between environmental concern and green purchase intention.

In the study by Straughan and Robertson (1999) on the factors affecting the behaviour of consumers with ecological awareness, it was found, in contrast to the other studies, that the variable of environmental concern, despite being an important element, has no complementary role on environmental purchasing behaviour. The individual efforts of a person in the fight against environmental pollution may work, thus resulting in a more effective parameter than environmental concern. Likewise, in the study by Mainieri et al. (1997), environmental concern has not predict any of the environmentally conscious green-buying behaviors.

### PERCEIVED CONSUMER EFFECTIVENESS (PCE)

The definition of perceived consumer effectiveness which was first introduced by Kinnear, Taylor, and Ahmed (1974) is defined to be the measurement of belief of an individual on the results of the actions of a person (Bikari et al., 2017: 146). In our society and the environment, although the consumer intends to purchase behaviour, it is seen that this intention alone does not affect the whole society and it is seen as an obstacle in the field of marketing in terms of environmental sensitivity (Paylan and Varinli, 2015: 154). The idea of a person whether his/her individual efforts would contribute to the environment was included in the literature as the perceived consumer effectiveness (PCE). In the literature, the following studies have been conducted in this field to be sensitive to the environment, the relationship between the purchasing behaviour and perceived consumer activity is revealed: (Ghvanidze et al., 2016; Kabadayı et al., 2015; Tanrıku, 2015; Lee et al., 2014; Zhao et al., 2014; Kang et al., 2013; Cho et al., 2013; Vicente-Monila et al., 2013; Yahya et al., 2013; Wesley et al., 2012; Kim, 2011; Ay and Ecevit, 2005; Gilg et al., 2005; Straughan and Roberts, 1999; Berger and Corbin, 1992; Ellen et al., 1991 ).

In the study by Ellen et al., (1991: 102-114); the aim of his studies; to reveal that perceived consumer effectiveness and environmental concern are different and the relationship between consumer attitudes to government regulations and perceived consumer effectiveness. According to community belief; that environmental concern does not make sense individually unless it spreads to the whole society. The study was conducted with an 8-item scale with 387 participants via telephone questionnaire. It was concluded that the participants prefer recycled products when they make purchases. There was no difference between demographic characteristics such as age and education. It has been concluded that policies such as the separation of garbage by the state and encouraging the writing of packaging information will change the consumer effectiveness. It has been found that perceived consumer effectiveness is consciously influencing consumers' green consumption behaviors.

In the study by Gilg et al., (2005: 481-504); in terms of green spending and sustainable lifestyles, researchers stressed that even those with minimal environmental inclination have relatively high scores for PCE. Work; environmentalist; mature, high income level and age is defined as large. It has been concluded that green consumption is reduced to environmental impact, free of chemicals, organic products oriented, buying local foods, choosing recycled packaging, saving energy, using own shopping bags. It is emphasized that sustainable lifestyle can be different behaviors. It is said that the focus on sustainability rather than green with the support of the state can be extended to larger groups.

Ay and Ecevit (2005: 251-259); reported in their study that Roberts (1996) reported that the behaviours of people against environmental problems affect their attitudes. Roberts (1996) found a positive relationship between perceived consumer activity and environmental conscious consumer behaviour in study. Ay and Ecevit found in (2005) studies that this relationship varies according to demographic and psychographic characteristics. Perceived consumer activity accounts for 8.5% of environmental conscious consumer

behaviour. As the income, age and educational characteristics increase, environmental awareness and perceived consumer efficiency also change positively; but it does not affect gender. According to psychography; Individuals who share similar opinions about the environment, speak, defend their rights and are sensitive to social and political issues attach importance to green consumption.

In the study by Kim (2011: 71-83); the effects of green purchasing behavior, environmental concerns, perceived consumer activity, collectivism, self-enhancement, self-experimentation were investigated. The study was applied to 261 undergraduate students and analyzed using multiple regression, structural equation model. It was concluded that collectivism led to green buying. If perceived consumer effectiveness is high, environmental concerns increase and green buying behavior increases. It has been concluded that cultural and personal values affect collectivism and change consumer buying behavior. The consumer behaves ecologically if he or she has high anxiety.

In the study by Wesley et al., (2012: 36-42); perceived consumer activity and motivation in South Korea between the role of purchasing behavior is examined. With the rise of the economy and globalization, the expectations of consumers in the Globe also increased. In this study, it is investigated whether consumption is made with social responsibility awareness. A model was established with perceived consumer effectiveness, motivational attitude, purchasing behavior, environmental attitude and social responsibility awareness. 363 university students in Seoul and CheongJu were surveyed. It has been concluded that consumers with personal motivation behave in socially responsible purchasing behavior, perceived consumer effectiveness is higher than those with social responsibility awareness rather than personal motivation, Group consciousness is in the forefront with the presence of Collectivism in Chore, and social responsibility awareness develops. It was found that the motivational attitude affects the environmental attitude and leads to green purchasing. It was observed that this environmental awareness increased especially as the age advanced and family unity was established.

In the study by Kang et al. (2013: 442-450); sustainability of young individuals is researched how environmental consumption behaviors affect attitudes towards textile and apparel sector, which is especially harmful to the environment. According to the research, having detailed information about the product increases the perceived degree of consumer effectiveness. This supports previous studies. If consumers believe that their individual efforts will affect the results, their behavior will develop accordingly. In the study, it was mentioned that it may affect this perception in cultural values, but one of its variables was not examined because it is not culture.

Yahya et al. (2013: 95); studied the correlation between perceived consumer efficiency and environmental problems and ecologically conscious consumer behaviour. A significant relationship was found between conscious consumer behaviour and ecological consciousness. It has been concluded that the activities of governments also affect the environmental consciousness of consumers.

In another study Lee et al., (2014: 2100-2104); in the city center of Seoul and South Korea, 416 people aged between 19-49 were surveyed on green product buying behaviors of environmentally conscious consumers. It was observed that environmental anxiety level affects perceived consumer effectiveness. It was concluded that individuals who think about the welfare of society have more anxiety level and aim to make a difference. It is said that it is important to instill environmental awareness in young people. A positive effect was found between good citizenship behavior and PCE and activist behavior. It was observed that educated individuals increased their responsibility awareness and anxiety levels. When a comparison is made between an activist group and those who are not; The relationship between environmental anxiety and perceived consumer activity of the non-group was observed, but good citizenship behavior and green purchasing level increased in the activist group. As it is supported in other studies, individuals think that if perceived consumer activity becomes a group activity, individuals can do something. They do not think they will have an individual effect.

In the study by Tanrikulu (2015: 127-133); it was concluded that environmental concerns and perceived consumer effectiveness had mediating effects on collectivist values. A total of 378 people aged 20 and over were interviewed in Adana. It has been found that individuals with collectivist value observe the interests of the society and their degree of anxiety increases and that their individual behaviors may affect the majority. It was revealed that individuals advocating collectivist views act for the environment and show green buying behavior. It is said that individuals' collectivism degree, anxiety levels and green purchasing intention should be taken into consideration when selecting target market and market segmentation and determining strategies. It is stated that giving environmental messages to individuals will positively affect purchasing. It was stated that the results could not be generalized because the study was conducted in a province.

In the study by Kabadayı et al. (2015:173); Young Turkish consumers' of green buying; investigated the effect of consumers on delinquency and perceived consumer activity. After all; a positive correlation was found between consumer's green intention to perceive consumer effectiveness; this supports other studies.

In the study by Ghvanidze et al. (2016: 316); the role of consumer efficiency in the expended of food products and the perceived consumer efficiency in food products is examined. It is concluded that perceived consumer effectiveness is effective in the country. Age, education level, economic situation, environmental concerns of the state and making the world livable for future generations have a positive effect on green purchasing behaviour in food production. For example, there is a positive relationship between perceived consumer activity and environmental awareness of those with age 44 and above, those with high economic status and those with high education levels

In the study by Currás Pérez et al. (2018: 733-747); it was applied to 661 people from Inditex and Danone consumers. According to the results of the research Social responsibility; affect utilitarian, emotional and social value; environmental responsibility only affects emotional value; and economic responsibility affects utilitarian and emotional value.

## METHOD

### The Aim of the Study

This study aims to explain the effect of the levels of environmental concern and perceived consumer effectiveness of mothers with babies in the age of 0-36 months on the green product purchasing behaviour and the effect of perceived consumer effectiveness on the level of environmental concern. In addition, the study aims to explain whether the perceived consumer effectiveness has an intervention role in the relationship between environmental concern and green product purchasing behaviour. Environmental pollution is one of the most important factors that threaten the future of the world. This study is important for preventing environmental pollution and increasing environmental awareness. Increasing environmental awareness will enable consumers to buy more green products. This study also has a guiding feature in explaining the factors affecting green consumption to enterprises. In this way, businesses can better understand what to pay attention to the production and marketing of green products.

The target mass of our study is the mothers with babies in the age of 0-36 months which is approximately four million according to the 2017 data of the Turkey Statistics Institute (TUIK, 2017). If Turkey to have environmental product purchase behavior across the four million families, it will make a positive contribution to the reduction of environmental pollution???

### Sample

The main bulk of the research consists of the mothers with a baby in the age of 0-36 months, with the number of mothers reaching nearly to 4 million in Turkey. In the calculation of the sample size of the study, the formula used for cases with a population size of more than 10,000 was used (Özdamar, 2003:118). Accordingly, the sample size was calculated to be 384. A survey form was applied to 400 mothers who were determined from social media by applying the convenience sampling method. Upon the removal of the incomplete and erroneous surveys after controls, 386 survey forms convenient for analysis were taken into consideration.

### Model and Hypothesis of the Study

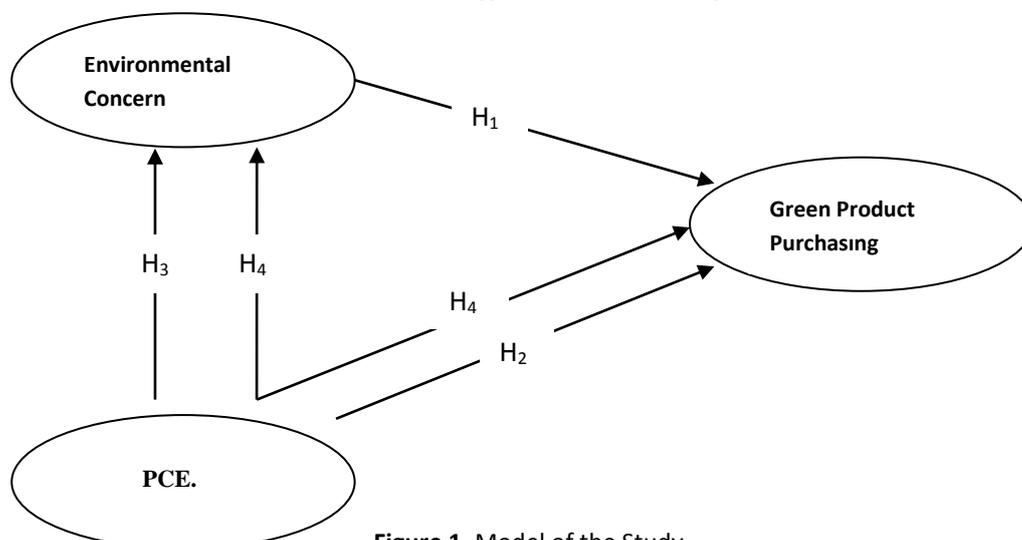


Figure 1. Model of the Study

Tanner and Kast (2003: 891) found a significant correlation between positive attitudes of consumers towards saving the environment and green procurement behaviour. In their study in Turkey, Yılmaz et al. (2009: 9) observed that students with environmental awareness did not reflect their awareness on their green procurement decisions. Kayabaşı and Bozkurt (2017: 66), on the other hand, found that environmental concerns influenced green procurement behaviour. Conversely, Yam-Tang and Chan (1998) showed that environmental concerns of consumers from Hong Kong did not have an effect on their green procurement behaviour. Even though the relevant literature reveals a significant relationship between environmental concerns and green procurement behaviour, there have also been contradictory findings on this issue. Based on these findings, the first hypothesis is as follows:

H1: Environmental concern has a significant effect on green product purchasing behaviour.

According to the findings of Roberts (1996: 226), perceived consumer activity is a strong predictor of green procurement behaviour. Saritaş (2018: 63) showed that green procurement behaviour had a significant positive effect on perceived consumer activity. Webb et al.'s (2008: 97) findings suggest the key positive role of perceived consumer activity in green procurement behaviour. Considering the findings of previous studies, the second hypothesis of the present study is as follows:

H2: Perceived consumer effectiveness has a significant effect on green product purchasing behaviour.

Previous studies did not take into consideration the effects of perceived consumer activity on environmental concerns. However, this study supposes that when consumers make individual purchases of environmentally friendly products, their belief that such purchases may be beneficial in environmental savings could also become stronger, increasing their sensitivity towards and concern about environmental pollution. Therefore, the third hypothesis of the present study is as follows.

H3: Perceived consumer effectiveness has a significant effect on environmental concern.

Saritaş (2018:63) examined the role of environmental concerns in the relationship between green procurement behaviour and perceived consumer activity and found that environmental concerns played a partial mediatory role in this relationship. According to the findings of Gil and Jacob (2018:313), green satisfaction and green trust mediated the relationship with green perceived quality and green procurement intention, respectively. The same study revealed that the relationship between green perceived quality and green procurement intention mediated green trust. Sharma and Sharma (2016: 8) suggested that perceived consumer activity played a mediating role in the relationship between morality and green procurement intention. The present study supposes that perceived consumer activity mediates individuals' intensity of environmental concern as well as the frequency of making green procurements. The final hypothesis of this study, therefore, is as follows.

H4: Perceived consumer effectiveness has an intervention effect on the relationship between environmental concern and green product purchasing behaviour.

### The Method Used in the Data Collection Stage

The questionnaire consists of 22 items. Among them, the environmental concern statements (5) and green product purchasing items (5) were taken from the study of Kim and Choi (2005: 595), while the items of perceived consumer effectiveness (4) were taken from the study of Straughan and Roberts (1999: 573). In addition, there were 8 items for determining demographic qualities.

### Data Analysis

The data analysis was conducted by using the Statistical Package for Social Sciences (SPSS) 21.0 package program. The Cronbach Alpha coefficient was calculated to define the reliability of the scale which was used for the cases including three or more statements for each value.

### FINDINGS (RESULTS)

The scale is reliable according to Cronbach Alpha Value Range given by Alpar (2011:815) in Table 1 below.

**Table 1.** Cronbach Alpha Values of Scales

VARIABLE	EXPRESSION NUMBER	Cronbach's Alpha Score
ENVIRONMENTAL CONCERN	5	0.785
PERCEIVED CONSUMER EFFECTIVENESS	4	0.813
GREEN PRODUCT PURCHASING	5	0.842

The Cronbach's Alpha Score reliability coefficient of the environmental concern scale was measured to be 0.785, perceived consumer effectiveness scale was measured to be 0.813, and green product purchasing scale was measured to be 0.842.

The 34.2% of the participants were in the age group of 29-33; 62.2% of participants had an education of two-year degree-bachelor degree; 38.3% had a monthly income of more than \$1400; 56.5% had a baby in the age of 25-36 months; 93% are married; 52.1% stated that they do shopping occasionally for their babies (2-5 times a month); 68.9% were employed; and 56.7% had only one baby.

The explanatory statistics for 3 separate scales used in the survey were given separately for both the scale and for each statement. The highest average ( $4.20 \pm 0.49$ ) belongs to the environmental concern scale and the lowest average ( $3.75 \pm 0.69$ ) belongs to the green product purchasing behaviour. The general average of the survey was found to be  $3.67 \pm 0.41$ . An important part of the participants gave the answers "agree" and "neither agree or disagree." According to the findings of the environmental concern scale, the majority of the participants of the survey provided the answer "strongly agree." The average value of the statement that people have to live in adaptation to the nature to survive was measured to be 4.47.

According to the findings of the perceived consumer effectiveness, a majority of the participants gave the answer "agree." The average value of the statement "Every consumer may create a positive effect on the society by purchasing the products of the companies with social responsibility" was measured to be 4.04.

According to the findings of the green product purchasing behaviour scale, the majority of the participants of the survey gave the answer "agree." The average value of the statement "When shopping for my baby, I avoid purchasing a product that has detrimental effects on the environment" was measured to be 4.16.

### Exploratory Factor Analysis

In order to test the effect of the variables of environmental concern and perceived consumer effectiveness on the green product preferences of the participants of the survey, a total of three (3) scales were used: environmental concern, perceived consumer effectiveness, and green product purchasing behaviour. Each scale was aggregated under one factor within itself. For the fit of the variables to the factor analysis, KMO and Barlett's test was applied with the relevant values given in Table 2. As shown in table 2, KMO value of "Environmental Concern" was found to be 0.738 ( $P < 0.01$ ) and "Perceived Consumer Effectiveness" was 0.595 ( $P < 0.01$ ) and "Green Product Purchasing" was determined as 0.819 ( $P < 0.01$ ). KMO values and Bartlett's test P values indicate that the data of the study is suitable for Exploratory Factor Analysis.

**Table 2.** KMO and Barlett's Test Values of the Scales

Scales	KMO	Barlett's Test p-value
Environmental Concern	0.738	0.000
Perceived Consumer Effectiveness	0.595	0.000
Green Product Purchasing	0.819	0.000

### Confirmatory Factor Analysis

In order to test the validity of the used scales, confirmatory factor analysis was conducted with the SPSS AMOS program. After the analysis, it was found that the produced fit statistics were not within acceptable limits and, therefore, the modifications suggested by the program were applied. In the modifications, error covariance was defined between the PCE4 and PCE3 items in the perceived consumer effectiveness factor and between the GP1 and GP2 items in the scale for green product purchasing behaviour intention.

### Testing the Structural Model

The measurement model obtained after the confirmatory factor analysis provided the acceptable goodness of fit statistics. Therefore, the structural equation model was created to test the hypotheses of the study. The model and goodness of fit values of the study are as shown in Figure 2 below:

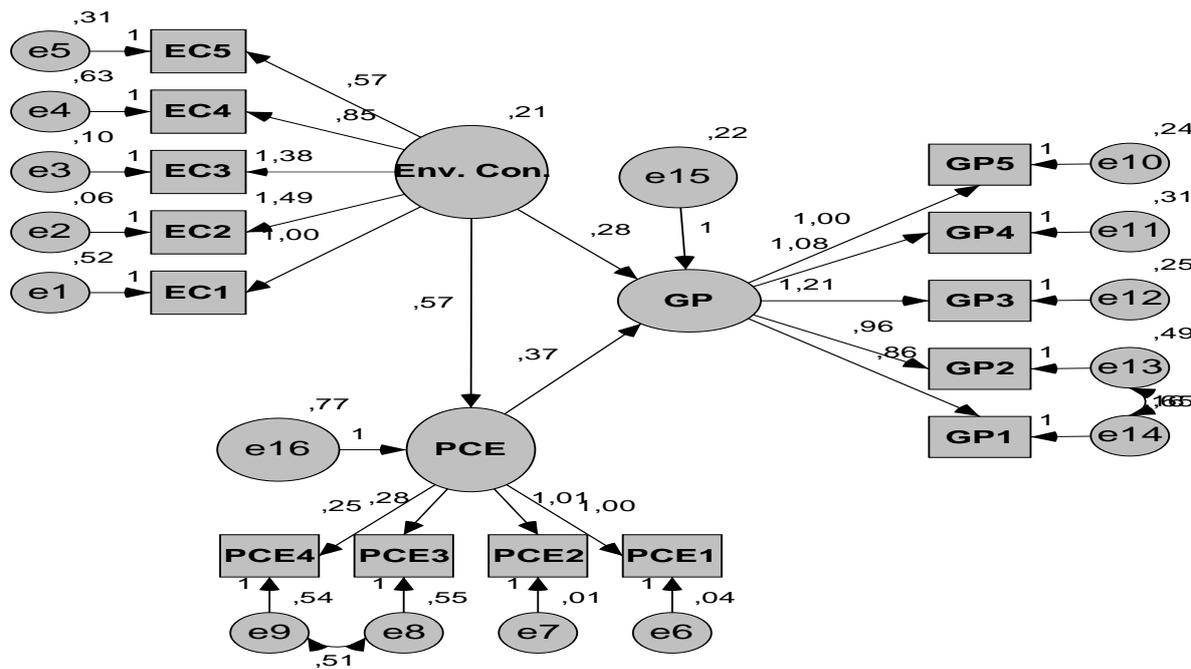


Figure 2. Structural Equation Model related to the Study Model

The fit values of the Structural Equation Model given in Figure 2 are shown in Table 3. According to the values in Table 3, it is understood that the fit values are within acceptable limits and the model is structurally fit.

Table 3. Structural Equation Model Fit Values

Measurement	Observed	Expected	Acceptable
$\chi^2$	275.345		
$\chi^2/DF$	3.824	$\leq 3$	$\leq 4-5$
GFI	0.908	$\geq 0.90$	0.89-0.85
AGFI	0.865	$\geq 0.90$	0.89-0.85
NFI	0.933	$\geq 0.95$	0.94-0.90
CFI	0.949	$\geq 0.97$	$\geq 0.95$
RMSEA	0.086	$\leq 0.05$	0.06-0.08

After determining that the model is structurally fit, the structural model was tested in the SPSS AMOS program to control whether there were significant relationships as expected and the resulting p values are shown in Table 4.

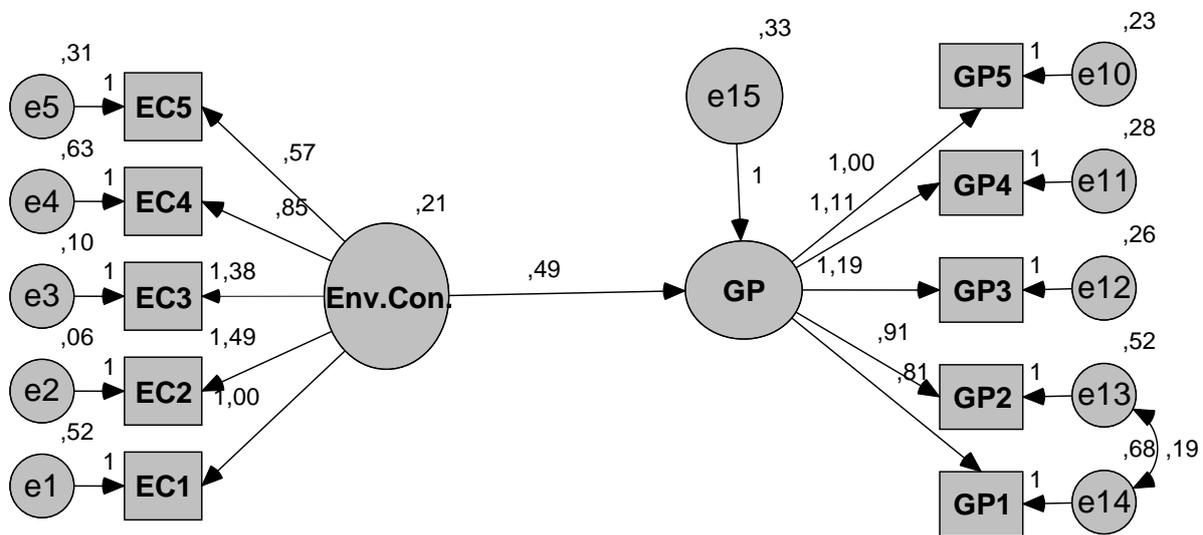
Table 4. Hypothesis Test Results of the Structural Model

Structural Relations	Estimate	Std. Error	t Value	p Value	Hypothesis Test
H <sub>1</sub> : Env.Con. → PCE	0.568	0.112	5.057	***	Accepted
H <sub>2</sub> : Env.Con. → Purchasing	0.278	0.069	4.022	***	Accepted
H <sub>3</sub> : PCE → Purchasing	0.372	0.035	10.712	***	Accepted

According to these results, the H1 hypothesis was accepted, and it was found that the environmental concern has a significant and positive effect on the perceived consumer effectiveness ( $p < 0.01$ ). In addition, it was found that environmental concern has a significant and positive effect on the green product purchasing behaviour and the H2 hypothesis is accepted ( $p < 0.01$ ). Finally, H3 hypothesis was accepted; so the perceived consumer effectiveness has a significant and positive effect on the green product purchasing behaviour ( $p < 0.01$ ).

**The Intervention Effect with the Structural Equation Model**

The intervention effect was analyzed with the three-stage method of Baron and Kenny (1986). In the first stage, the relation between the independent variable (environmental concern) and the dependent variable (purchasing intention) needs to be significant. Figure 3 and Table 5 show the model and goodness of fit statistics of this stage respectively.



**Figure 3.** The First Model Created for the Intervention Effect

**Table 5.** The Goodness of Fit Values of the First Model Created for the Intervention Effect

Measurement	Observed	Expected	Acceptable
Chi <sup>2</sup>	114.045		
Chi <sup>2</sup> /DF	3.456	≤3	≤4-5
GFI	0.942	≥0.90	0.89-0.85
AGFI	0.903	≥0.90	0.89-0.85
CFI	0.951	≥0.97	≥0.95
RMSEA	0.080	≤0.05	0.06-0.08

As seen in Table 5, the goodness of fit statistics of the model is within the required value range. According to the result of the model in Figure 3, it is seen that the environmental concern has a significant effect on the

green product purchasing behaviour ( $p < 0.01$ ) and the standardized path coefficient was 0,495. Thus, the first stage was tested and the second and third stages may be started. Figure 4 includes the structural equation model created to test these stages.

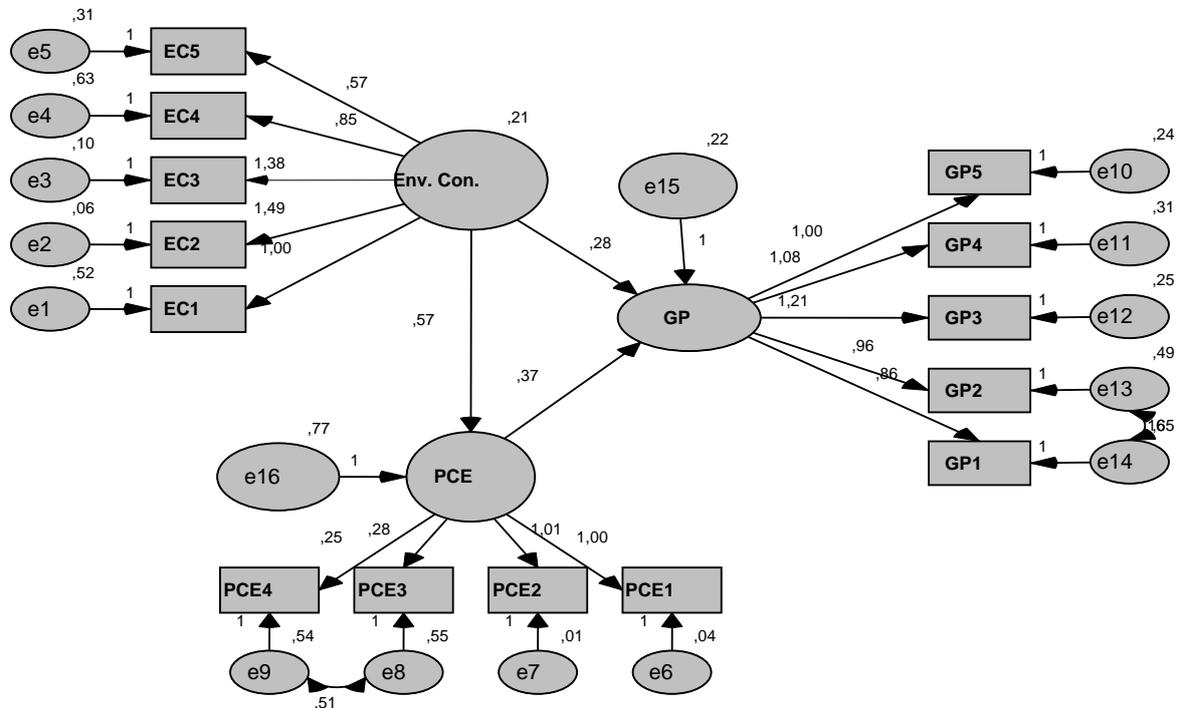


Figure 4. The Second Model Created for the Intervention Test

Table 6. The Goodness of Fit Values of the Second Model Created for the Intervention Effect

Measurement	Observed	Expected	Acceptable
Chi <sup>2</sup>	275.345		
Chi <sup>2</sup> /DF	3.824	≤3	≤4-5
GFI	0.908	≥0.90	0.89-0.85
AGFI	0.865	≥0.90	0.89-0.85
NFI	0.933	≥0.95	0.94-0.90
CFI	0.949	≥0.97	≥0.95
RMSEA	0.086	≤0.05	0.06-0.08

From the goodness of fit statistics of the model, we can see that the model is within the good fit values. In measuring the intervention effect, Baron and Kenny's model (1986) was used where there should be a significant relationship between the independent variable (environmental concern) and the intermediary variable (PCE). Figure 4 implies that there was a significant relationship between these variables. This means that the second stage was completed.

In the third and final stage, the relationship between the intermediary variable (PCE) and the dependent variable (purchasing intention) should be significant. A significant relationship was found between these variables in this study. In order to talk about any intervention effect after completing these three stages, the relationship between environmental concern and the purchasing intention should be insignificant or there should be a decrease in this relation.

From the first intervention model, there was a significant relationship between environmental concern and purchasing intention. However, when we have the intermediary variable in the second intervention model, there was no significant relationship ( $P=0.278>0.05$ ) between the environmental concern and purchasing intention. Therefore, a full intervention role is seen between the perceived consumer effectiveness, environmental concern and purchasing intention. There is a full intervention effect. H4 hypothesis was accepted.

### **CONCLUSION and DISCUSSION**

In recent years, environmental concern and awareness on environmental pollution have substantially increased by the environmental pollution and its effects on human health, which have become an important problem throughout the world as well as in Turkey. Several steps were taken by various organizations for the fight against environmental pollution. Green product/environmental product policies of the marketing companies have been one of the applications for solving environmental problems.

It was seen that the environmental concern of the participants of this study has a significant and positive effect on the level of perceived consumer effectiveness. It is thought that the individual environmental behaviours of a person would contribute to the protection of the environment as environmental concern increases. In addition, in parallel with the previous studies (Ghvanidze et al.,2016; Kabadayı et al.(2015); Tanrikulu,2015; Lee et al. 2014; Zhao et al., 2014; Kang et al. 2013; Cho et al. 2013; Vicente-Monila et al., 2013; Yahya et al.,2013; Wesley et al.,2012; Kim,2011; Ay and Ecevit, 2005; Gilg et al., 2005; Straughan and Roberts, 1999; Berger and Corbin,1992; Ellen et al. 1991), it was seen that the perceived consumer effectiveness has a significant and positive effect on the green product purchasing behaviour. It is also seen that the green product purchasing behaviour increases as the levels of perceived consumer effectiveness increase. This can be the case if the person believes that he/she may contribute to the protection of the environment by a green product that he/she purchases. The frequency of environmental behaviour of a person will increase as his/her belief, and his/her environmental behaviours will become useful. According to another result of the study, the level of environmental concern of the person has a positive and significant effect on the green product purchasing behaviour which is a parallel finding with the previous studies (Kim and Choi, 2005; Yeniçeri, 2008; Tanrikulu, 2015; Biner, 2014; Lee et al., 2014; Roberts and Bacon, 1997; Datta, 2011). It is expected that an individual would take actions parallel to his/her ideas and feelings. Individuals with a high level of environmental concern would prefer environmental friendly products more frequently than others. In addition, perceived consumer effectiveness has an intermediary role in the relationship between environmental concern and green product

purchasing behaviour. The relation between environmental concern and green product purchasing behaviour increases in parallel with the increase of perceived consumer effectiveness.

Consequently, the fact that the study was applied only to mothers with a baby in the age of 0-36 months is one of the limitations of the study. In addition, another limitation of the study is that the data of the survey was collected in a period of 2 months between December 2017 and January 2018.

## RECOMMENDATIONS

With the increasing interest in green products and increase of environmentally sensitive people, businesses may gain a place in the market by expanding their environmental product range. In this sense, the present study is a guide for businesses. In addition, it also provides guidance to the consumers regarding the fact that their individual green product purchasing behaviours plays an important role in the conserve of the environment when this type of behaviour is common in the society.

Future studies may include research on parents with babies older than 36 months or with babies from different age groups, thus enabling comparison between age groups.

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