

# STUDY OF THE EFFECT OF CONSUMPTION VALUES ON THE ENVIRONMENTAL CONCERN IN TERMS OF PURCHASING BEHAVIOUR

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## ABSTRACT

*Social values, especially consumption values are of importance for environmental concerns. Again, values are important for the facts that environmentally friendly products are beneficial, such products are satisfactory or in ensuring their preferability. Environmental concern is one of the variables that play an important role in the purchase of environmentally friendly products. In this study, the effect of consumption values on the environmental concern was studied. As a result of the analysis applied to the collected data, functional values, conditional values and epistemic values were found to have an effect on environmental concern. In addition, it has been found that environmental concern has an effect on purchasing behaviour.*

**Keywords:** Consumption Values, Environmental Concern, Purchase Behavior

## INTRODUCTION

Today, concerns about environmental sustainability have affected not only the demands of consumers but also the activities of firms. Changes in lifestyle and consumption patterns after growth and urbanization have led to problems in the environment and sustainable living (Biswas and Roy, 2015). Consumers only demand environmentally friendly products and services when they are environmentally conscious (Anuwichanont et al., 2011). In other words, consumers are sensitive to green products in purchasing decisions if they are environmentally conscious (Kanchanapibul et al., 2014). Therefore, environmental awareness and sensitivity of individuals are important for the future of societies (Biel et al., 2005).

Value consists of all kinds of feelings, thoughts, behaviours, rules and assets that are adopted and maintained in a society. Values are the identity of a society. All indicators of the social habits of society are represented by this identity. Even if individuals exhibit different forms of behaviour, they have the value of society as a member (Kuzudişli, 2017). Marketers, on the other hand, must be sufficiently aware of the value dimensions that exist in the consumer's decision to adopt green products in order to meet increasing social demands (Hur et al., 2015: 398). Social values are one of the most effective ways of reducing the negative effects of consumption on the environment and of sustainability, especially in terms of perpetuating consumption values (Yadav and Pathak, 2017). The definition of consumption values includes various branches of science, including sociology, different branches of psychology, marketing and consumer behaviour. Any or all of the consumption values can affect consumer perception and selection behaviour for the product. That is because these values are at the core of selection behaviour. The product selection behaviour in the market is related to three important characteristics of consumption values: These are the product selection which is the common function of the values, the different contributions these values provide during the selection, and their independence from each other. There are five values that affect product selection within consumption behaviour. These are functional, social, emotional, epistemic, and conditional values. Some choices may be made only by the effect of one value and others may be made by mutual interaction of five values (Keleş, 2008).

Dietz et al. (2005) stated that values have significant influence on the environmental concern. Hart et al., (2011) stated in their study that environmentalist values have a direct effect on environmentalist concerns. Suki and Suki (2015) also suggested that social, epistemic and functional values are important in determining environmental concern. In addition, studies in the literature show that importance attached by customers can determine their purchasing behaviours (Goh and Balaji, 2016: 632). In consideration of

these conclusions, the effects of consumption values on consumers' concerns for environment were studied. Five dimensions of consumption values were also discussed in the study. Thus, it is thought that the contribution is to be made to the literature by determining which values are effective in creating environmental awareness and increasing the consumer's tendency towards this issue.

## **LITERATURE REVIEW AND THEORETICAL FRAMEWORK**

### **Consumption Values**

The value is an internal selection system that shapes all activities of the individual (Özgül, 2010: 120). In other words, it is the element that influences the aims or preferences that people desire to reach (Gutman, 1982: 60). Harcar stated that "anything useful and beneficial can be thought of as a value" (Harcar, 2005: 19). Sustainability searches of the environment frequently refer to values. The values are discussed in the literature by different disciplines. In philosophy; values are relatively stable principles that help us to make decisions when our choice are contradiction. In economy; value is used when there is dilemma in our social choices and thus guiding the best choice in a utilitarian ethical approach to social assessment of various alternatives (Dietz et al., 2005).

The consumption value is the degree to which the needs of the consumers are met as a result of their total evaluations. In other words, it is the benefit and satisfaction from a product after those given and benefits gained are compared. (Biswas and Roy, 2015: 333). Haws et al. (2014: 337) describe the value of environmentally friendly consumption as one's the tendency to protect the environment through consumption behaviours and purchasing. Lin and Huang (2012) distinguished consumption values by five groups. These values are functional, epistemic, conditional, emotional and social values.

Functional value is defined as the benefit from the functional benefit or physical performance of a product or service. This value includes the price, performance, purpose and qualities that are effective in the customer's decision to purchase the product (Kao and Tu, 2015: 120). This variable is divided into two groups: functional quality and price. Certain function, benefit, or physical feature of a selection provides value. Functional value is measured according to the qualities of preferences (Sheth, 1991: 160).

Emotional value can be defined as the performance of a selection to address and affect emotions or feelings. Consumers tend to products that appeal to their emotions. A product or service can cause different emotional reactions in individuals. Therefore, emotions affect consumers' behaviour in selecting products and services. It is suggested that the variables affecting emotional value are personality, consciousness and subconsciousness (Özhan, 2010: 146-147). A product or service is valued when it makes you feel special emotions constantly. Emotional value is measured according to the emotional form of a selection (Sheth, 1991: 160). These values may be positive as "loyalty, nostalgia, excitement" or may be negative such as "fear, anger and guilt" (Candan et al., 2013: 32).

Epistemic value is a variable which arises curiosity, brings innovation and difference, informs, and causes benefit perception. The epistemic value arises when customers get bored of current brand and get curious about different experiences or desire to obtain more information related to the selections (Keleş, 2008: 11). Consumers often choose products that shall satisfy their curiosity, offer innovations, or enhance their knowledge. For example, it may be a purchasing reason that a product is new or rare. Customers may also feel a purchase desire in order to gain useful information or skills. The consumer can buy a new cosmetic brand since he/she gets curious about it. Thus, the product provides epistemic value (Kao and Tu, 2015: 121).

Conditional value can be defined as the behaviour of consumers according to the conditions they face when making choices (Keleş, 2008: 11). This value is the benefit obtained by the consumer when making selection of product or service (Sheth, 1991: 160). The conditional value is focused on the time factor. In some cases, a product that can provide functional or social value may also have conditional value too (Kao ve Tu, 2015: 121).

Social value is the benefit obtained by being associated with one or more social groups. When choosing a product or service, establishment of a positive and negative relationship by a consumer with demographic, socio-economic, cultural, and ethnic groups explains social value. Social value is measured by choice (Sheth, 1991: 161). Tang and Forster (2007) explained social value by the individual's sense of belonging for any group and power of his/her social bond.

## **Environmental Concern**

Environmental concern is explained as the people's level of being aware of problems related to the environment. Again, the willingness to support or contribute to solving environmental problems is also defined as environmental concern (Dunlap and Jones: 2002). In other words, environmental concern is that the individual focuses on environmental problems and assesses the seriousness of these problems (Steg et al., 2011: 351). Consumers' environmental concerns about green products arise when they use products that adversely affect their health or the natural environment (Suki and Suki: 2015: 92). People who value the environment are more concerned about the environment. (Poortinga et al, 2004).

Zhao (2012) stated that it is important to learn the sources of the concern for environment. Suki and Suki (2015) concluded in their study that there is a relationship between environmental concern and social value, epistemic value, and functional value. Lee et al. (2014) have shown that altruistic (sacrifice) value has a positive effect on environmental concern. Hedlund (2001) reached the conclusion that universal values affect environmental concern. As a result, the values provide perspectives that shape our approach to environmental problems (Schultz et al., 2005). Stern and Dietz (1994) suggested that there is a relationship between environmental concern and values, based on the value basis theory for environmental attitude. Schultz (2000, 2001) stated that there is a relationship between the values that individuals possess and their concern about the environment. In addition, according to the studies carried out, values are at the basis of environmental concern and environmentalist viewpoint.

## **Purchase Behavior**

Today, consumers are more interested in purchasing environmentally-friendly products because they become aware of the danger on the environment. Therefore, producers also try to present environmentalist products to consumers (Chan, 1996). Increasing concern about the environment causes the individual to exhibit environmentalist behavior (Takács-Sánta, 2007) and gradually to purchase environmentally friendly products (Do Paço and Raposo, 2009: 365).

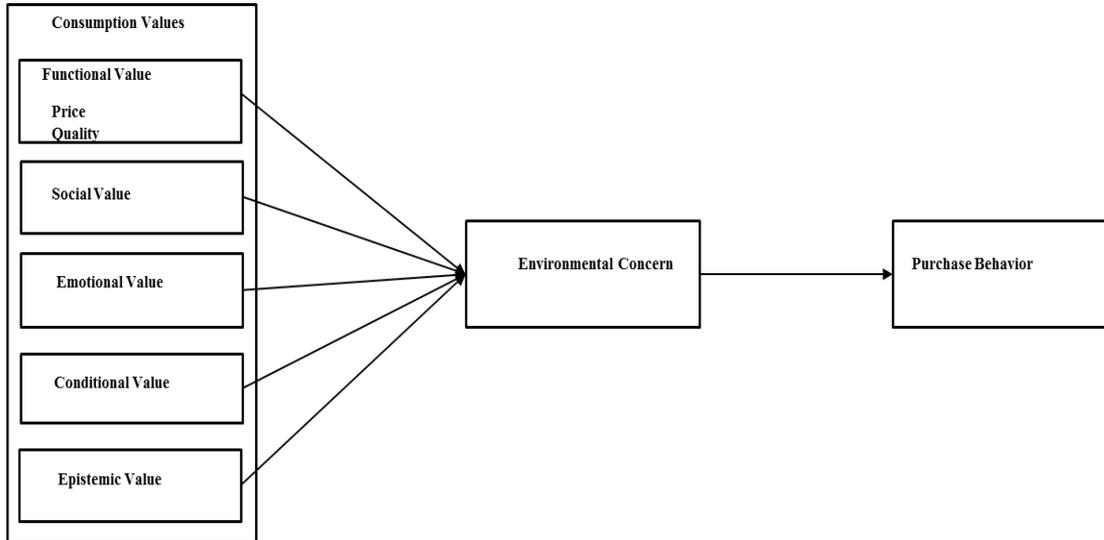
Studies in the literature also show that purchasing behaviours of consumers are changing due to their concerns for the environment (Mobrezi and Khoshtinat: 2016). Many studies have shown that environmental concerns are positively associated with the purchase of environmentally friendly products (Kim and Choi, 2005; Lee et al., 2014). Chan et al. (2014) stated in their study that environmental concerns cause ecological behaviours. In other words, people with high environmental concerns have more environmentalist behaviours than those with lower level of concern (Kim and Choi, 2005). Wahid et al. (2011) stated that the concern of environmental volunteers for the environment has an important influence on their purchasing green products.

## **METHODOLOGY**

### **Purpose, Scope and Limitations of the Study**

In the study, it was aimed to determine which of the consumption values which have importance in product selection decisions are influential on the environmental concern. As a secondary purpose, the role of environmental concern on purchasing behaviour was tried to be determined. The research has been conducted on the consumers with an age of 18 and over in Erzurum central district with a face-to-face survey method. The study was not adapted to any product or brand. For this reason, it can not be generalized for products and Turkey.

## Research Model and Hypotheses



**Figure 1. Research Model**

The hypotheses determined in line with the aim and model of the research are as follows:

**H1:** Consumption values have significant influence on environmental concern.

**H1a:** Functional value has significant influence on environmental concern. .

**H1b:** Social value has significant influence on environmental concern

**H1c:** Emotional value has significant influence on environmental concern.

**H1d:** Conditional value has significant influence on environmental concern.

**H1e:** Epistemic value has significant influence on environmental concern.

**H2:** Environmental concern has significant influence on purchase behavior.

## Data Collection Method and Process

Prior to the final application of the questionnaire, pilot scheme was carried out with 20 consumers representing the study sample. Participants were asked to evaluate the clarity of the scales included in the questionnaire and the final form was given to the questionnaire by eliminating the identified deficiencies. Then, data were collected from 390 consumers in the central county of Erzurum by face-to-face survey between 15 May and 01 July 2017 with convenience sampling method. After missing and incorrect questionnaires are removed, 360 surveys were included in the study.

Among the examples used in forming the surveys, expressions for consumption values were adopted from Suki and Suki (2015), expressions for environmental concerns from Chen and Tung (2014), and expressions for purchasing behaviours from Wei et al., (2017) and translated into Turkish. In the analysis of the data, SPSS 20.0 and AMOS 22 packaged statistical software programs were used and descriptive statistics, confirmatory factor analysis, and structural equation analysis were applied to the data.

## Analysis of the Data

The table below shows the demographic characteristics of the participants.

**Table1. Demographic Characteristic**

	Number	Percent		Number	Percent
<b>Gender</b>			<b>Occupation Status</b>		
Female	173	48,1	Unemployed	12	3,3
Male	187	51,9	Private Sector	59	16,4
<b>Age</b>			Student	98	27,2
18-25	116	32,2	Housewife	19	5,3
26-33	97	26,9	Retired	8	2,2
34-41	65	18,1	Civil Servant	123	34,2
42-49	47	13,1	Self-employed	17	4,7
50-57	14	3,9	Worker	24	6,7
58 and over	21	5,8	<b>Income</b>		
<b>Marital Status</b>			1000 TL and under	96	26,7
Single	210	58,3	1001-2000 TL	61	16,9
Married	150	41,7	2001-3000 TL	76	21,1
<b>Education</b>			30001-4000 TL	62	17,2
Primary School	26	7,2	40001-5000 TL	34	9,4
Secondary School	40	11,1	5001-6000 TL	14	3,9
High School	45	12,5	6001 TL and over	17	4,7
University	185	51,4			
Post Graduate	64	17,8			
<b>Total</b>	<b>360</b>	<b>100,0</b>	<b>Total</b>	<b>360</b>	<b>100,0</b>

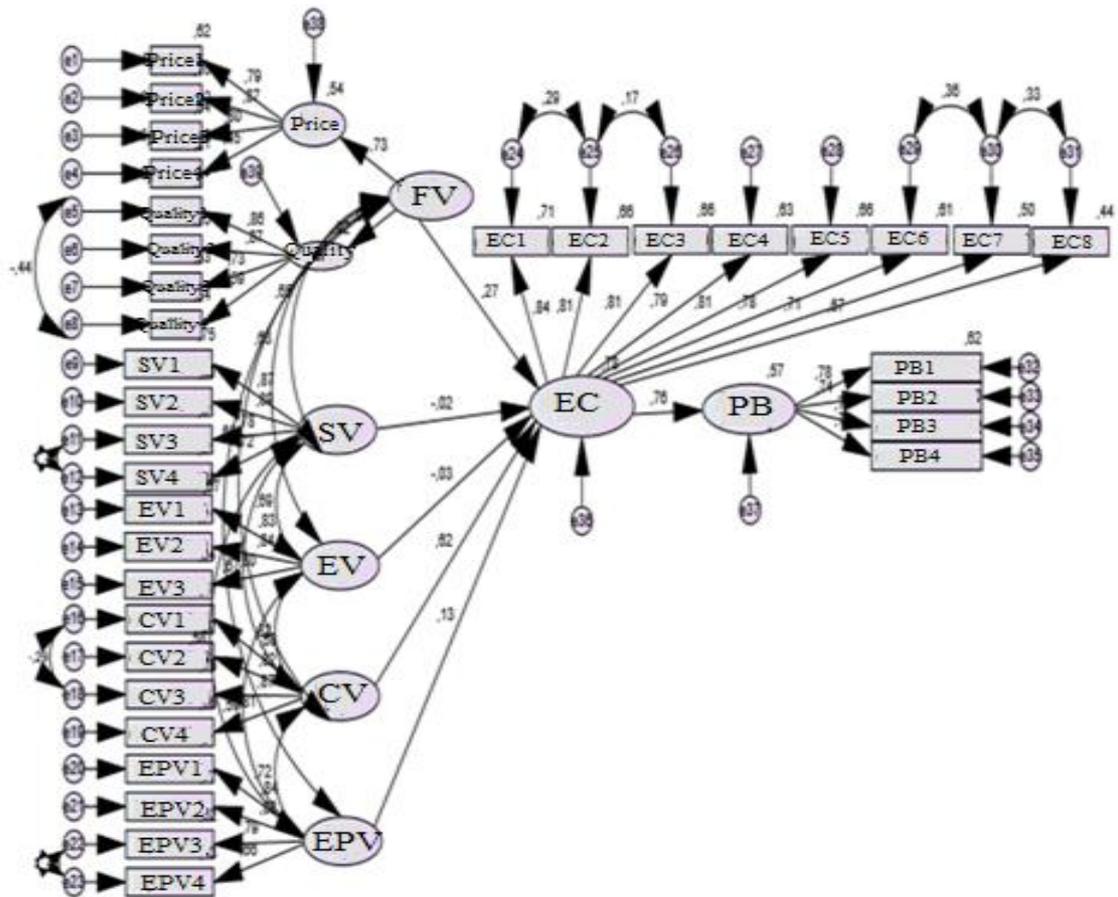
According to the demographic characteristics of the sample, it was seen that the participants were mostly male (51.9%) and single (58.3%) in 18-25 (32.2%) age group with monthly incomes of 1000 TL and less (26.7%). When their education status is examined, the highest rate is 49.4%, which are the university. When the occupational status of the respondents is examined, it is seen that 34.2% of them are the civil servants and 27.2% of them are students. Since the total rate of housewives, students, and unemployed is 35.8%, the ratio of those with income of 1,000 TL or less was high.

Confirmatory factor analysis was conducted to test the fitness of the scales used in the research. The model fit values recommended by Çokluk et al. (2010) were based on the evaluation of whether or not the model fit values obtained as the result of the analysis are acceptable.

**Table 2. Model Fit Values**

	Cronbach Alpha ( $\alpha$ )	X <sup>2</sup> /sd	RMSEA	SRMR	GFI	NFI	NNFI	CFI
Consumption Value	0,94	2.93	0.07	0.07	0.87	0.90	0,91	0.93
Environmental Concern	0.93	4.77	0.10	0.03	0.95	0.96	0.95	0.97
Purchase Behavior	0.83	4.55	0.10	0.02	0.99	0.98	0.96	0.99

The structural model obtained in structural equation analysis performed as a whole to test the proposed research model after confirmatory factor analysis is as shown below.



**Figure 2. Structural Model**

**Key:** FV: Functional Value, SV: Social Value, EV: Emotional value, CV: Conditional Value, EPV: Epistemic Value, EC: Environmental Concern, PB: Purchase Behavior

**Table 3. Results of the Research Models**

			B (SH)	$\beta$	t	R <sup>2</sup>	
H1a	Functional Value	→	Environmental Concern	0,46 (0,11)	0,27	4,17**	0,78
H1b	Social Value	→	Environmental Concern	-0,03 (0,06)	-0,02	-0,43	
H1c	Emotional Value	→	Environmental Concern	-0,04 (0,09)	-0,03	-0,38	
H1d	Conditional Value	→	Environmental Concern	0,915 (0,11)	0,62	6,34**	
H1e	Epistemic Value	→	Environmental Concern	0,16 (0,08)	0,13	2,09*	
H2	Environmental Concern	→	Purchase Behavior	0,63 (0,05)	0,76	12,78**	0,57
<i>X<sup>2</sup>/sd</i>	<i>RMSEA</i>	<i>SRMR</i>	<i>GFI</i>	<i>NFI</i>	<i>NNFI</i>	<i>CFI</i>	
2,60	0,06	0,07	0,82	0,86	0,90	0,91	

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

As can be seen in Figure 2 and Table 2, the path coefficients and model fit values for the variables are within acceptable limits and are significant. In this context, it is understood that functional value (H1a),

conditional value (H1d), epistemic value (H1e) have significant effects on environmental concern. It has also been found that environmental concerns (H2) have a significant effect on purchasing behaviour. In addition, the social value (H1b) and emotional value (H1c) variables have no significant effect on environmental concern. In summary, H1a, H1d, H1e, and H2 hypotheses have been accepted, while H1b and H1c hypothesis has been rejected.

## CONCLUSION

When the effect of consumption values on environmental concern was investigated and associated with purchasing behaviour, the following conclusions were obtained:

When the consumption value dimensions, which are most effective on environmental concern, are examined in terms of t values, it is seen that the most effective dimension is the conditional value. One of the important variables in this dimension is the preferences of the consumers by evaluating the conditions they meet. If supported, consumers can be directed environmentalist products. Promotions for the market in this regard are of importance. Another important variable included in the conditional value is the extent to which environmentally-friendly products are accessible. If consumers can easily find these green products and reach them, they will be able to get the opportunity to recognize these products and buy them. In the consideration of these results, companies need to create the perception that the products are valuable and that they are worth paying and should make them easily accessible. For this reason, companies can broaden their sales network by expanding the internet shops that consumers from every segment can reach or by getting the opinions of consumers.

The second dimension which is effective on environmental concern is functional value. In the functional value dimension, the price and quality etc. of the product are included. The fact that the price of the product is economical and it is worth paying shows that the product has a functional value for consumer.

The fact that the prices of environmentally friendly products are affordable and that money is not being wasted shall encourage consumers to buy green products. If companies come up with a set of values in the long run for the consumers who are looking for performance from environmental products, they shall have provided important justifications for environmentalist thinking and behaviour. In this context, companies can share production processes of environmentally friendly products with consumers. They can be effective using promotional efforts in various and effective environments for this sharing. In addition, companies may place labels with the information that the product is environmentally friendly. They can contribute to making consumers think about how important the environment is with such cognitive strategies.

The last one which is influential on environmental concern is the epistemic value. As consumers learn about green products, they will be increasingly concerned about the environment. Individuals who acquire new knowledge will better understand the importance of environmental problems. For this reason, companies should give more information about the contribution of green products to the environment. They should also create curiosity and awareness through programs for the environment. Consumers' interest should be drawn to environmentalist products through information programs. For example, contests or draws can be arranged to create a sense of curiosity. The winners can be taken to places where natural beauty is protected. Thus, companies can display an environmentalist image by providing different experiences.

Study results show that social value and emotional value have no significant effect on environmental concern. It shows that the pressure of the society or what other people think does not have an effect on environmental concern. Consumers are interested in environment not to get approval from the community but since they become aware of the seriousness of the situation. In this case, companies should move towards consumers with more realistic approaches, avoiding exaggeration and acting according to the existing situation. Functional benefits are more important for the sample than emotions. Consumers who do not feel emotional for the case should be told for the necessity of these products logically.

Environmental concern has a considerable influence on purchasing behaviour. Environmental issues are also an important factor in the consumer's purchase of these products. The thoughts that harmful consequences shall be faced if not live in harmony with environment must be told to people by using a effective and constructive language. Companies must provide guide for consumers to buy green products and to make efforts. They should take an environmental stance by participating in social responsibility projects.

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