ABSTRACT

**Purpose** - The aim of this paper is to examine the impact of environmental values on green purchase behaviour through environmental attitude and green skepticism.

**Methodology** - The data have been collected through a survey on a sample consisting of 306 consumers. To analyse the data, Structural equation modelling (SEM) using AMOS 20.0 was applied.

**Findings** - The research results revealed that the environmental values namely; altruistic and biospheric values affect green purchase behaviour. However, there is no effect of environmental values on environmental attitude and green skepticism. The results also showed that there is no significant effect of green skepticism and environmental attitude on green purchase behaviour.

**Conclusion** - Based on the findings, environmental values have effects on green purchase behaviours but green skepticism has no effect on green purchase behaviour. Yet, because of limited participations, the results cannot be generalizable.

**Keywords**: Environmental attitude, biospheric and altruistic values, green skepticism, green purchase behaviour.

**JEL Codes**: M30, M31

1. INTRODUCTION

The environmental challenges we face today, including rising sea levels, increasing global temperature, deforestation, and the declining availability of natural resources, are the result of human consumption. It is therefore widely accepted that environmental problems are sprig up by some kinds of human behaviours. Thus, these environmental problems could be reduced by means of changing such behaviours (Groot et al. 2012; Nickson 2003; Gardner and Stern 2002), as environmental behaviour includes those behaviours which lead to change the structure of ecosystems (Groot et al. 2012; Stern 2000). There are many different kinds of environmental behaviours that are not only harmful like using car, but also pro-environmental like recycling for the environment. Hence, factors which affect environmental behaviours are important to improve environmental behaviours by means of pro-environmental behaviour (Groot et al. 2012).

The effects of values on behaviours at this point should not be overlooked. This is because values are often regarded when doing a research about environmental behaviour (Groot et al. 2012; Naess 1989; Dunlap, Grieeneeks and Rokeach 1983). It was highlighted that "values, such as respect, equality, and unity with nature, are desirable trans-situational goals that vary in importance and serve as guiding principles in the life of a person or other social entity" (Schwartz 1992). In addition, some research explained that “the common attribute is the environmental values of the consumer” (Gilg, Barr, & Ford, 2005; Garcia and Manon 2016). The decision of consumers to care about environmental issues is affected by environmental values namely altruistic values (Garcia and Manon 2016). Thus, marketing research has focused on green marketing in the recent past. As a result of these green initiatives, there has been many developments of green products in many different industries such as food, energy, automobiles and so on (Goh and Balaji, 2016). Since, “green product” or services are called
organic, eco-friendly or ecological and all green products are produced through eco-friendly process (Lee, 2011; Garcia and Manon 2016).

In spite rising in academic work on green marketing, consumers concern about misleading environmental information that are disseminated by firms in order to improve their sales and reputation (Goh and Balaji, 2016). A research revealed that 48 per cent of consumer do not trust the claims about the environmental issues (Eurobarometer, 2009), and consumers do not believe about environmental claims which made by the firms and this phenomenon is called “green skepticism” is led by skepticism.

Despite rising consumer skepticism towards green products, studies on this issue are insufficient and limited. Beyond that, it is necessary to understand the effects of consumer values on green purchase behaviours in order to understand consumer skepticism. Thus, this article aims to examine which environmental values are associated with environmental attitude, green skepticism and green purchase behaviour. This article will also try to examine the effects of environmental values and green skepticism on green purchase behaviour. In line with the scope of work, first we will discuss how values are associated with environmental behaviours. Then, we will discuss how green skepticism affects consumer behaviours in marketing context. After that, we will examine and discuss the results based on the proposed model.

2. LITERATURE REVIEW

2.1. Environmental Values

Researchers have revealed that environmental beliefs and behaviour are affected by three different value orientations, namely, “an egoistic (i.e., values focusing on maximizing individual outcomes), a social-altruistic (i.e., values reflecting concern for the welfare of others), and a biospheric value orientation (i.e., values emphasizing the environment and the biosphere)” (Groot and Steg, 2007; Stern, 2000; Stern & Dietz, 1994; Stern, Dietz, & Kalof, 1993; Stern et al., 1998). Thus, within the scope of the research these three environmental values will be discussed in this section. Beyond that, environmental attitude and green skepticism will also be discussed based on the proposed model of the research.

2.2. Egoistic, Altruistic, Biospheric Values

Based on the previous researches, egoistic, altruistic and biospheric values are related to pro-environmental behaviour. However, researches also explained that people act based on their egoistic values rather than their altruistic or biospheric values. Thus, it need to be explained the question; why people do not act based on their altruistic and biospheric values (Groot, and Steg, 2008). In related studies, on the one hand, it has been explained that “egoistic concern is negatively correlated with self-transcendence (transcending an individual’s selfish concerns and contributing to the well-being of others) and positively correlated with self-enhancement (enhancing an individual’s own personal interest)” (Swami V et al., 2010; Schultz et al., 2005; Schultz, 2001). Moreover, self-transcendence (ST) and self-enhancement (SE) are opposite poles in a circumplex value structure (Hansla, 2011; Schwartz, 1992). Moreover, self-enhancement (SE) is negatively related to the environmental concerns but, self-transcendence (ST) is positively related to environmental concerns (Hansla, 2011; Schwartz, 1992). On the other hand, biospheric concern showed opposite pattern of correlations however, altruistic concerns demonstrated mixed correlations (positive and negative) in terms of both; self-transcendence and self-enhancement (Swami V et al., 2010; Hansla, Gamble, Juliussen & Garvill, 2008; Nordlund & Garvill, 2002; 2003; Schultz & Zelezny, 1999).

It is thus, the egoistic values were not considered in this research and two dimensions of environmental values namely; altruistic and biospheric values will be examined in order to reply the question that why consumers act based on altruistic and biospheric values? Moreover, most of these researches done is relevant to the environment, but consumption has not been considered in these studies adequately and it has not been examined whether environmental concerns and environmental values are influential when people consume. It is thus, in this research, not only the impact of environmental values on the attitude of people towards the environment and green skepticism but also the relationship between environmental values and the consumption of environmentally sensitive products will be examined. This is because today’s people are faced with the following problems. One of them is the destruction of the environment as a result of over-consumption of environmentally harmful products and as mentioned the other is that the consumers think that the main purpose of the social responsibility projects of the companies is to sell more and that they are not related to the environment and they are skeptical (Goh and Balaji, 2016). Therefore, the following hypotheses were developed in the direction of the aim of this research;

H1a: Altruistic value is positively associated with environmental attitude.

H1b: Altruistic value is positively associated with green purchase behaviours.
H1c: Altruistic value is negatively associated with green skepticism behaviours.

H2a: Biospheric value is positively associated with environmental attitude.

H2b: Biospheric value is positively associated with green purchase behaviours.

H2c: Biospheric value is negatively associated with green skepticism behaviours.

2.3. Environmental Attitude

Attitude is explained and considered one of the most important factors that impacts on behaviour. Environmental attitude, in this sense, might be taken into considered positive or negative feeling toward environmental objects or issues (Chan 1996). Moreover, according to Kim (2011) environmental attitudes lead to a large variety of environmental behaviours. In spite of some weak relationships between environmental attitudes and environmental action, many researches supported that there is a link between (Kim, 2011; Lee and Holden 1999; Channel and Ebreo 1990; Hines, Hungerford, and Tomera 1987; Karp 1996; Milbrath 1984). Other researches, on the other hand, failed to support the link between environmental attitudes and environmental behaviours (Kim, 2011; Oskamp et al. 1991; Gill, Crosby, and Taylor 1986; Weigel 1985). It is might be claimed that environmental attitude is important but not sufficient for environmental action to take place (Kim, 2011). Because of these reasons, the environmental attitude should be examined in order to understand how environmental values affects environmental attitude and to determine whether there is a relationships between environmental attitudes and green purchase behaviours. Therefore, it is hypothesised that;

H3a: Environmental attitude is positively associated with green purchase behaviours.

2.4. Green Skepticism

“Skepticism is the overall tendency or inclination of an individual to distrust or doubt others” (Goh and Balaji, 2016; Obermiller and Spangenberg, 1998). It was also claimed that skepticism, which is not a kind of mood, appears under some certain circumstances (Albayrak et al., 2013). Skepticism has been examined in many disciplines like psychology, sociology and politics by previous researches (Goh and Balaji, 2016; Taber and Lodge, 2006; Rosen, 2004). Skepticism was also studied in business management in many different context like advertising, corporate social responsibility, organic products, cause-related marketing and environmental claims (Goh and Balaji, 2016; Vlachos et al., 2016; Skarmeas et al., 2014; Kim and Lee, 2009).

Green skepticism is defined as a situation that the tendency in order to be doubtful about the environmental claims or performance for a green products. It is thus skepticism is not considered as a stable costumers’ disbelief towards green products (Goh and Balaji, 2016). However, it is claimed that if costumer who are skeptical about the claims of a company, then the advertisements’ effects decrease. (Albayrak et al., 2013). Thus, it can be claimed that customers who are skeptical cannot believe the claims about the environmental issues such as global warming, rising sea levels, disappearance some of plant and animal species. For that reasons, it is important to examine the green skepticism in order to protect the not only the environment but also human life now and future. Even though there has been an increasing in research about skepticism in recent past (Goh and Balaji, 2016; Nyilasy et al., 2014; Matthes and Wonneberger, 2014; Raska and Shaw, 2012), it is not enough to understand the role of skepticism in green purchase behaviours (Goh and Balaji, 2016). Previous researches note that “Skepticism is a cognitive reaction that varies in accordance with the occasion and content of the communication” (Albayrak et al., 2013; Mohr et al., 1998). Thus, it is important point to examine the relationship between value and skepticism. This is because environmental values affect customers’ environmental attitude as mentioned. Thus, it is proposed that;

H3b: Green skepticism is negatively associated with green purchase behaviours.
3. DATA AND METHODOLOGY

3.1. Sample and Data Collection

The data were collected in the city of Bursa. The city was chosen because it is one of the biggest city in Turkey. It is thus people who live in Bursa have more opportunities in terms of education, job, than others but, they are witnessing some harmful applications at the same time because there are many factories doing business in Bursa. Simple random sampling (SRS) is a basic sampling method that every possible sample of size n (from a population of size N) has the same possibility to be chosen (Meng, 2013). Therefore, Simple Random Sampling (SRS) has been used in order to collect the data. In total, 306 respondents have participated in this survey. However, 3 of the questionnaires were eliminated because of most of data were missing and the remaining 303 were analysed. Of the respondents, 62.1% were female and 37.9% male. The age range of participants between 18 and 50+ years old and the average income range of participants between less than 3000 Turkish Liras to more than 9000 Turkish Liras for per month. While 69.2% of respondents were holding a university degree, 2.6% were holding primary degree. So, a majority of the respondents were well-educated.

Figure 1: The Proposed Model

3.2. Analyses

Environmental values scale was adopted from Groot et al. (2012), which uses to examine three dimensions namely; egoistic, altruistic and biospheric of environmental values. However, in this research 8 item-scale of environmental values were used in order to examine the altruistic and biospheric values except egoistic value. The green purchase scale is adopted from Kim (2011) and used 4 items. To measure environmental attitude, 14 items of Dunlap et al., (2000) were used. However, 2 items were deleted because of the low values of communalities and poor loadings. 5 items of Mohr et al. (1998) were also used to measure green skepticism. In total, 31 items were used in this research. The Likert-scale was used in order to measure all items. However, for environmental values [altruistic and biospheric] format ranged from “1=Not Important” to “5=Very Important” and for environmental attitude, green skepticism and green purchase behaviour format ranged “1=Strongly Disagree” to “5=Strongly Agree”.

4. FINDINGS AND DISCUSSIONS

In order to analyse the data for the objectives of this research, AMOS 20.0 pocket program was used. Confirmatory factor analysis (CFA) was performed firstly to examine the model fit. Moreover, to test the hypotheses of research, Structural equation model (SEM) performed. The result of CFA explained that $\chi^2 (df = 363) = 1.957$, $P < 0.001$, Goodness of fit statistic (GFI) = 0.864, Adjusted goodness of fit (AGFI) = .837, The Normed fit index (NFI) = .833, Comparative-fit-index (CFI) = 909.
and Root mean square error of approximation (RMSEA) = 0.056. According to Vinijcharoensri (2016) “The scores of baseline comparison fit indices ranged from between 0.812 and 0.905, which are close to and exceed 0.9 (recommended point).” Hence, it is implied that all measurement items are reliability and validity. After that the proposed model for the research was tested as shown below.

Figure 2: Assessment of Structural Model

![Structural Model Diagram]

Table 3: Summary of Hypotheses Test Results

| Hypothesis No. | Structural Path                      | Standardized Regression Weight (β) | Critical Ratio (C.R.) | Result            |
|----------------|-------------------------------------|------------------------------------|-----------------------|-------------------|
| H1a            | Altruistic value → Environmental attitude | .080                               | 1.153                 | Not Supported     |
| H1b            | Altruistic value → Green skepticism  | .024                               | .349                  | Not Supported     |
| H1c            | Altruistic value → Green purchase behaviour | .252**                            | 3.721**               | Supported         |
| H2a            | Biospheric value → Environmental attitude | .084                               | 1.238                 | Not Supported     |
| H2b            | Biospheric value → Green skepticism  | .040                               | .589                  | Not Supported     |
| H2c            | Biospheric value → Green purchase behaviour | -.132**                            | -2.061*               | Supported         |
| H3a            | Environmental attitude → Green purchase behaviour | .126                               | 1.699                 | Not Supported     |
| H3b            | Green skepticism → Green purchase behaviour | .032                               | .457                  | Not Supported     |

**p<0.001, * p<0.05, Supported=Significant and Not Supported = Not Significant.
5. CONCLUSION

Even though previous researches revealed that the influence of environmental values on green purchase behaviour was not significant (Tan et al., 2015), the results of this research explained that there is a significant relationship between environmental values and green purchase behaviour. In that point, this result explained that strong environmental values can influence consumer behaviour in terms of green purchase behaviour. The results also explained that there is no significant effect of environmental values on not only environmental attitude but also green skepticism. Moreover, the environmental attitude was positively and significantly associated with green purchase behaviours according to previous research (Tan et al., 2015). However, the results of this research showed that there is no significant effects between environmental attitude and green purchase behaviour.

The present study found out that there is no direct effects of green skepticism on green purchase intentions (Goh and Balaji, 2016; Matthes and Wonneberger, 2014) on the one hand. Morel and Pruyn (2003) point out that there is a direct effects of green skepticism on green purchase intentions on the other hand. However, previous researches have not examined the effects of green skepticism on green purchase behaviour. Thus, in this research, the effects of green skepticism on green purchase behaviour have been discussed rather than green purchase intentions. The result pointed out that there is no significant effects of green skepticism on green purchase behaviour. It is also showed that there is no relationships between environmental values and green skepticism. As a result of these findings it can be claimed that environmental values are important for consumers and consumers' behaviour can be affected by environmental values rather than green skepticism. It hence can be claimed that consumers can be more selfless than skeptics because environmental issues are crucial and they concern about the environment. Thus, environmental values have effects on consumer green purchase behaviour rather than green skepticism and consumers behave based on their environmental values.

Yet, research findings should be interpreted based on the limitations. Since, because of limited participation and limited time, the results cannot be generalizable. For the future research, consumers in developed countries have more educated and wealthier than consumers in developing countries. Thus, future research can build a research to explore how green skepticism and environmental values affect consumer decision making in terms of developed and developing countries. Quantitative method was used for this research and the data was obtained via questionnaire, future research can use qualitative method and face-to-face interview can be used to obtain data in order to understand what kinds of skepticism affect consumer decision making.

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