

RELIGIOSITY, ECONOMIC STATUS, ENVIRONMENTAL CONCERN, AND PERCEIVED BEHAVIORAL EFFECTIVENESS AS PREDICTORS OF BUYING ENVIRONMENTALLY FRIENDLY PRODUCTS: A QUANTITATIVE STUDY OF TURKISH MUSLIMS

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Abstract

The aim of the present study was to examine the roles of religiosity, economic status, environmental concern, perceived behavioral effectiveness, and environmental dominance in purchasing environmentally friendly products. The study also examined the role of gender in relation to religiosity, environmental concern, environmental dominance, and the inclination to buy green products.

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This study was conducted among Turkish Muslims. The sample included 618 respondents who ranged in age from 18 to 84 years, with a mean age of 28 years ($SD=10.1$). An online questionnaire technique was used through Google Drive. The following scales were applied: a Personal Information Form, Environmental Orientation of Possessions Scale, Questions about Environmental Awareness, Religiosity Scale, and Purification of Environmental Products. The findings indicated that religiosity, economic status, environmental concern, and perceived behavioral effectiveness had positive effects on the purchase of environmentally friendly products. In addition, the research findings demonstrate that gender influences individuals' religiosity, environmental concerns, stance in relation to nature, and perceived behavioral effectiveness in buying green products. The consequences of these findings and recommendations for forthcoming research are discussed.

Keywords: Religiosity, environmental concern, perceived behavioral effectiveness, environmental dominance, buying environmentally friendly products

Introduction

Environmental issues that have evolved into global crises are crucial issues today. Pollution, the depletion of natural sources, climate change, and the extinction of animal and plant species are common, and each of these issues that cause ecocide is visible and perceptible to people worldwide. Particularly in the last two decades, interest in the ecological crisis has been increasing due to environmental protests and strikes on the streets and on social media across the globe as well as the deadly COVID-19 pandemic. In parallel with these developments, human beings are considered the culprits for these issues, and humans' relationship with the environment has been the subject of extensive academic interest. In an attempt to protect the environment, various proactive strategies and precautions have been developed. Some of these solutions focus on production and consumption activities. Numerous damaging factors that cause pollution, resource depletion, climate change, and the extinction of animal and plant species have emerged through production and consumption activities.¹ To mitigate the adverse effects of

¹ Michael Jay Polonsky - Philip J. Rosenberger III, "Reevaluating Green Marketing: A Strategic Approach", *Business Horizons* 44/5 (September - October 2001), 21-30.

manufacturing and consumption and minimize negative consequences, environmentally friendly products are being produced. In contrast to other products, these products do not pollute the environment or deplete natural resources and are recyclable. Research on green marketing has demonstrated that demand for these products is increasing steadily.² However, because research has tended to investigate the sociodemographic characteristics of customers, the factors that motivate them to purchase these products have not yet been identified. Although the influence of factors such as gender, education level, age, and marital status on environmentally friendly purchasing behavior is undeniable, it is impossible to completely explain this behavior.³ Thus, additional research is needed that focuses on psychological, social, and cultural variables. The main aim of the current study was to explore the relationships among religiosity, economic status, environmental concern, perceived behavioral effectiveness, and environmentally friendly purchases. This study also aimed to contribute data to the gap in the literature by considering a Muslim sample.

1. Religion and Buying Environmentally Friendly Products

Religions throughout history have advised their adherents to respect and preserve the natural environment. For instance, in Islam, human beings are held accountable for protecting all living or nonliving things as vicegerents of God on earth.⁴ The earth is sacred because of the creation of God, and people should care for it;⁵

² Johanna Moisander, "Motivational Complexity of Green Consumerism", *International Journal of Consumer Studies* 31/4 (July 2007), 404-409; Mustafa Yücel - Ümit Serkan Ekmekçiler, "Çevre Dostu Ürün Kavramına Bütünsel Yaklaşım: Temiz Üretim Sistemi, Eko-Etiket, Yeşil Pazarlama", *Elektronik Sosyal Bilimler Dergisi* 7/26 (2008), 320-333.

³ James A. Roberts, "Green Consumers in the 1990s: Profile and Implications for Advertising", *Journal of Business Research* 36/3 (July 1996), 217-231; Li Ling-Yee, "Effect of Collectivist Orientation and Ecological Attitude on Actual Environmental Commitment: The Moderating Role of Consumer Demographics and Product Involvement", *Journal of International Consumer Marketing* 9/4 (July 1997), 31-53; Tina Mainieri et al., "Green Buying: The Influence of Environmental Concern on Consumer Behavior", *The Journal of Social Psychology* 137/2 (April 1997), 189-204.

⁴ Fāṭir 35/39.

⁵ Al-An'ām 6/38.

otherwise, they will be punished by God.⁶ From this point of view, environmental problems stem from incorrect human attitudes and negative actions toward nature. The Qurʾān states, “*Whatever affliction befalls you is because of what own hands have committed, and He pardons much,*”⁷ and it blames people for disrupting the environment.

With respect to Buddhism, nature and human beings are interrelated and interconnected. As the Buddha said, “This is because that is; this is not because that is not; this is born because that is born; this dies because that dies.” In Buddhism, the relationship between nature and human beings circles around this belief. Therefore, if a person desires a peaceful life (that is, if a person wants to reach “nirvana”), he or she must be in harmony with nature.⁸ In Hinduism, there is a similar approach toward nature. Based on the pantheistic faith of Hinduism, Hindus believe that Brahman pervades all created things in the universe. Everything is a part of the Creator, and the harmony of the cosmos remains with God’s help.⁹ In this sense, the universe both conceals and reveals the essence of being. It is incumbent on individuals to discover the truth by living in line with the cosmos.

With regard to the relationship between the Judeo-Christian faith and the environment, there is a conflict in the basic attitude of the Judeo-Christian tradition toward nature with regard to whether it promotes environmental stewardship or environmental mastery. Briefly, some researchers believe that God does not entrust human beings with full authority over nature. Moreover, both Judaism and Christianity give their followers responsibility for the preservation or protection of nature. Therefore, humans can neither spoil nature nor use it for their desires without reason.¹⁰ Researchers cite the verse, “The

⁶ Al-Rūm 30/41.

⁷ Al-Shu‘arā’ 26/30.

⁸ Martin Palmer - Victoria Finlay, *Faith in Conservation: New Approaches to Religions and the Environment* (Washington, DC: The World Bank, 2003), 77-82.

⁹ Palmer - Finlay, *Faith in Conservation*, 91-96.

¹⁰ David Vogel, “How Green Is Judaism? Exploring Jewish Environmental Ethics”, *Business Ethics Quarterly* 11/2 (2001), 349-363; Palmer - Finlay, *Faith in Conservation*, 83-86.

Lord God took the man and put him in the Garden of Eden to work it and take care of it.”¹¹

Lynn White’s contrary remarks on this matter have risen to prominence. He argued that the existing ecological crisis dates back to early times and is rooted in the book of Genesis. According to White, environmental difficulties arise from the Judeo-Christian tradition’s positioning of humans over nature. Specifically, he takes this passage (Gen. 1:27-28) as a reference for information on humans’ perception of the universe. White states that the Judeo-Christian tradition leads its followers to exhibit a dominant attitude toward the natural environment. In other words, Judeo-Christian religious belief gives rise to ecological issues rather than preventing harm to the environment.¹²

Based on this theoretical background, various empirical studies have been conducted to examine the degree to which individuals’ religious beliefs affect their environmental approaches and behaviors. One of these environmental behaviors is purchasing environmentally friendly products, which has become increasingly popular in recent years. Research on the relationship between buying environmentally friendly products and religious belief has mostly been conducted with Judeo-Christian samples with reference to White’s suggestion and has yielded conflicting results.¹³ For instance, Minton et al. investigated the impact of religiosity on sustainable behaviors such as buying green cleaning supplies, preferring recycled products, and consuming organic foods with samples consisting of both South Korean and US consumers. The findings indicated that highly religious individuals were more likely than others to purchase sustainable products. Moreover, research shows that the effect of consumers’ religion on participation in sustainable behaviors differs. Unlike Christians and atheists, Buddhist participants buy more sustainable products.¹⁴

¹¹ Gen. 2:15.

¹² Lynn White, Jr., “The Historical Roots of Our Ecological Crisis”, *Science* 155/3767 (March 1967), 1203-1207.

¹³ See Jared L. Peifer - Simranjit Khalsa - Elaine Howard Ecklund, “Political Conservatism, Religion, and Environmental Consumption in the United States”, *Environmental Politics* 25/4 (March 2016), 661-689; Johan Graafland, “Religiosity, Attitude, and the Demand for Socially Responsible Products”, *Journal of Business Ethics* 144/1 (August 2017), 121-138.

¹⁴ Elizabeth A. Minton - Lynn R. Kahle - Chung-Hyun Kim, “Religion and Motives for Sustainable Behaviors: A Cross-Cultural Comparison and Contrast”, *Journal of Business Research* 68/9 (September 2015), 1942-1943.

Similarly, Felix and Braunsberger's research on the link between religiosity, environmental attitudes, and green product purchases in Mexico yielded significantly positive results. The findings indicated that highly intrinsically religious-oriented individuals are more inclined to buy green products.¹⁵

An examination of research on Muslim samples reveals that as individuals' level of religion increases, their intention to buy eco-friendly products increases as well.¹⁶ Research conducted by Hassan in Malaysia studied the influence of Islamic values on green purchase intentions and produced significantly positive results. In other words, religious values directly affect both a natural environmental orientation and environmental concern. Thus, individuals who pray daily, include their faith in their lives, consider faith a source of inspiration and comfort, and include their faith in their decision-making are more environmentally concerned than others and tend to support environmental stewardship.¹⁷ Similar findings were obtained from Khan and Kirmani's research conducted in India with a Muslim sample. Their study suggested that religiosity has a positive impact on the purchase of environmentally friendly products.¹⁸ Islam and [Chandrasekaran](#) investigated the link between religiosity and ecologically conscious consumption behavior and collected data from 191 young Muslim males who lived in India. The findings showed that intrinsically religiously oriented individuals who internalized religious principles and values were more likely to participate in

¹⁵ Reto Felix - Karin Braunsberger, "I Believe Therefore I Care: The Relationship Between Religiosity, Environmental Attitudes, and Green Product Purchase in Mexico", *International Marketing Review* 33/1 (February 2016), 137-155.

¹⁶ See Siti Haslina Md Harizan - Wan Afezah Wan Abdul Rahman, "Spirituality of Green Purchase Behavior: Does Religious Segmentation Matter?", *Journal of Research in Marketing* 6/3 (December 2016), 473-484; Abdulvahap Baydaş - Uğur Berdibek, "Yeşil Ürün Satın Alma Davranışı ile Dini Değerlerin İlişkilendirilmesi: Bingöl İli Örneği", *Kabramanmaraş Sütçü İmam Üniversitesi Sosyal Bilimler Dergisi* 17/2 (2020), 922-943.

¹⁷ Siti Hasnah Hassan, "The Role of Islamic Values on Green Purchase Intention", *Journal of Islamic Marketing* 5/3 (September 2014), 391-392.

¹⁸ Mohammed Naved Khan - Mohd Danish Kirmani, "Role of Religiosity in Purchase of Green Products by Muslim Students: Empirical Evidences from India", *Journal of Islamic Marketing* 9/3 (September 2018), 504-526.

environmentally friendly purchase behavior than extrinsically religiously oriented individuals.¹⁹

2. Economic Status/Income and Buying Environmentally Friendly Products

Eco-friendly products have environmentally safe characteristics; they are non-polluting, recyclable, cruelty-free, energy safe, durable, and relatively healthy.²⁰ By virtue of these features, environmentally friendly products are preferred by consumers. However, these products are more costly than conventional products because of the inconvenience of manufacturing them. As a natural consequence, the purchasing power of the consumer is negatively affected.²¹ This means that ecologically friendly products are not the first option for consumers with low incomes, and there must be reasonable grounds to purchase them. In his renowned theory of the “hierarchy of needs”, Maslow indicates that individuals must primarily satisfy their fundamental needs for survival. After these needs are fulfilled, they can rise to the next stages. In other words, individuals cannot love, belong or engage in social problems until they fulfill their physiological needs.²² Therefore, individuals with high incomes are expected to be more likely to purchase environmentally friendly products than others are. The relevant literature on this subject has revealed mostly consistent results with this assumption.²³ For instance, Ling-Yee conducted a study in Hong Kong to investigate the effects of consumers’ collectivist orientation and ecological attitude on buying

¹⁹ Tajamul Islam - Uma Chandrasekaran, “Religiosity and Ecologically Conscious Consumption Behaviour”, *Asian Journal of Business Research* 5/2 (December 2015), 18-30.

²⁰ Moisanter, “Motivational Complexity of Green Consumerism”, 404-409.

²¹ Nihan Özgüven Tayfun - Burak Öçlü, “Çevreci Ürünlerin Tüketicilerin Satın Alma Kararlarındaki Yeri Üzerine Bir Uygulama”, *Niğde Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi* 9/3 (July 2016), 196.

²² A. H. Maslow, “A Theory of Human Motivation”, *Psychological Review* 50/4 (1943), 370-396.

²³ See Roberts, “Green Consumers in the 1990s”, 217-231; Canan Ay - Zümrüt Ecevit, “Çevre Bilinçli Tüketiciler”, *Akdeniz İ.İ.B.F. Dergisi* 10 (2005), 238-263; Collins Marfo Agyeman, “Consumers’ Buying Behavior Towards Green Products: An Exploratory Study”, *International Journal of Management Research and Business Strategy* 3/1 (January 2014), 188-197; Anastasios Pagiaslis - Athanasios Krystallis Krontalis, “Green Consumption Behavior Antecedents: Environmental Concern, Knowledge, and Beliefs”, *Psychology and Marketing* 31/5 (May 2014), 335-348.

healthy food. The findings showed that consumers with high incomes preferred healthier food and purchased more green products.²⁴ Similarly, a study conducted by Çabuk, Nakıboğlu, and Keleş in Turkey indicated that income was one of the significant determinants of green product purchases.²⁵ Tilikidou reported that consumers who earned an annual income of 25-30,000€ intended to buy more organic foods, drinks, and clothes, recycled paper, and eco-friendly detergents – in short, pro-environmental products. In other words, environmentally friendly products are preferred by high-income consumers, and consumers usually choose these products if they are not expensive.²⁶ Mainieri, Barnett, Valdero, Unipan, and Oskamp examined the impact of consumers' environmental concerns on their buying behavior with a sample consisting of 800 households in Los Angeles. Unlike other studies, their research found no significant relationship between income level and the purchase of environmentally friendly products.²⁷

3. Environmental Concerns and Buying Environmentally Friendly Products

Environmental concerns are defined as individuals' worries about the current destruction of the natural environment. Environmentally concerned people attach importance to climate change, water, air, and soil pollution, and the depletion of natural resources. These individuals feel guilty about these problems and wish to live in harmony with nature. On the other hand, individuals' levels of concern differ. Generally, people's level of concern ranges from highly concerned to less concerned about environmental problems. Highly concerned individuals are likely to behave with a more environmentally conscious attitude and prefer products whose purchase is not detrimental to nature.

²⁴ Ling-Yee, "Effect of Collectivist Orientation and Ecological Attitude on Actual Environmental Commitment", 31-53.

²⁵ Serap Çabuk - Burak Nakıboğlu - Ceyda Keleş, "Tüketicilerin Yeşil (Ürün) Satın Alma Davranışlarının Sosyo-Demografik Değişkenler Açısından İncelenmesi", *Ç.Ü. Sosyal Bilimler Enstitüsü Dergisi* 17/1 (May 2008), 85-102.

²⁶ Irene Tilikidou, "The Effects of Knowledge and Attitudes upon Greeks' Pro-Environmental Purchasing Behaviour", *Corporate Social Responsibility and Environmental Management* 14/3 (July 2007), 121-134.

²⁷ Mainieri et al., "Green Buying: The Influence of Environmental Concern on Consumer Behavior", 189-204.

Environmental concern is well studied in the literature. Regarding the relationship between environmental concern and green product purchases, the majority of studies have yielded significantly positive results.²⁸ For example, Agyeman conducted an exploratory study to test the effects of price, environmental concern, quality, brand name, convenience, durability, and packaging variables in the purchase of green products. The findings indicated that consumers' environmental concerns positively influenced their willingness to pay more for eco-friendly products.²⁹ Pagiaslis and Krontalis investigated the extent to which environmental concern, environmental knowledge, beliefs about biofuels, and behavioral intentions affected consumers' willingness to buy biofuels. Their research showed that as consumers' environmental concern increased, their environmental knowledge and behavioral intentions to buy biofuels increased as well.³⁰ Similarly, an examination conducted by Aytekin and Büyükahraz in Turkey revealed that environmental concern, interest, and sensitivity were determinants of eco-friendly purchasing.³¹

4. Perceived Behavior Effectiveness and Buying Environmentally Friendly Products

Perceived behavior effectiveness is one of the important determinants that have an impact on purchase behavior. This concept refers to individuals' beliefs about the extent to which their individual contributions to a specific goal make a difference. Environmental concern, knowledge, or consciousness generally fail to clarify eco-

²⁸ See James A. Roberts - Donald R. Bacon, "Exploring the Subtle Relationships Between Environmental Concern and Ecologically Conscious Consumer Behavior", *Journal of Business Research* 40/1 (September 1997), 79-89; Yeonshin Kim - Sejung Marina Choi, "Antecedents of Green Purchase Behavior: An Examination of Collectivism, Environmental Concern, and PCE", *NA - Advances in Consumer Research Volume 32*, ed. Geeta Menon and Akshay R. Rao (Duluth, MN : Association for Consumer Research, 2005), 592-599; Rambalak Yadav - Govind Swaroop Pathak, "Young Consumers' Intention Towards Buying Green Products in a Developing Nation: Extending the Theory of Planned Behavior", *Journal of Cleaner Production* 135/2 (June 2016), 732-739.

²⁹ Agyeman, "Consumers' Buying Behavior Towards Green Products", 188-197.

³⁰ Pagiaslis - Krontalis, "Green Consumption Behavior Antecedents", 335-348.

³¹ Mehmet Aytekin - Gül Büyükahraz, "The Impact of Between the Environmental Interest, Concern and Sensitivity Level and on Purchasing Behaviour of Environmentally Friendly Product", *International Journal of Business and Economic Development* 1/3 (November 2013), 37-45.

friendly purchase behavior. If consumers believe that their personal pro-environmental behaviors cannot prevent environmental problems, they are unlikely to turn their concerns into behaviors. Similarly, research on environmental behavior indicates that individuals are inclined to act in an ecological manner when they believe that their efforts have a purpose.³²

When reviewing the relevant literature, previous research mostly underlines the positive impact of perceived behavior effectiveness on environmentally friendly product purchase behavior.³³ For instance, Vermeir and Verbeke investigated the antecedents of sustainable food consumption. Their results demonstrated that consumers who believed that personal efforts made a difference intended to buy more sustainable products.³⁴ Similarly, Yadav and Pathak studied the attitudes of 326 young consumers in India toward buying green products and found that perceived behavioral control had a positive impact on the purchase of green products. As the level of perceived behavioral control increased, individuals exhibited more green consumption behavior.³⁵ Kabadayı et al. conducted related research on university students living in Turkey to examine the degree to which consumer guilt, self-monitoring, and perceived consumer effectiveness affected consumers' green consumption intention. The results showed that perceived consumer effectiveness was the most influential factor when purchasing green products. In other words, even though a consumer believes that she or he has a hand in the environmental predicaments and takes responsibility for these issues,

³² See Roberts, "Green Consumers in the 1990s"; Kim - Choi, "Antecedents of Green Purchase Behavior"; Iris Vermeir - Wim Verbeke, "Sustainable Food Consumption: Exploring the Consumer 'Attitude-Behavioral Intention' Gap", *Journal of Agricultural and Environmental Ethics* 19/2 (April 2006), 169-194.

³³ See Robert D. Straughan - James A. Roberts, "Environmental Segmentation Alternatives: A Look at Green Consumer Behavior in the New Millennium", *Journal of Consumer Marketing* 16/6 (December 1999), 558-575; John A. McCarty - L. J. Shrum, "The Influence of Individualism, Collectivism, and Locus of Control on Environmental Beliefs and Behavior", *Journal of Public Policy & Marketing* 20/1 (March 2001), 93-104; Kim - Choi, "Antecedents of Green Purchase Behavior", 592-599.

³⁴ Vermeir - Verbeke, "Sustainable Food Consumption", 184.

³⁵ Yadav - Pathak, "Young consumers' intention towards buying green products in a developing nation".

the consumer feels that he or she cannot partake in green consumption behavior because of low perceived consumer effectiveness.³⁶

Based on the literature, to explore whether religiosity, economic status, environmental concern, and perceived behavioral effectiveness have an impact on the purchase of eco-friendly products, the current study addresses the following hypotheses:

H₁: Females are more religious than males are.

H₂: Females are more environmentally concerned than males are.

H₃: Males have greater intention than females to adopt a dominion approach toward nature.

H₄: Females score higher than males in perceived behavior effectiveness.

H₅: Religiosity has a positive effect on the purchase of environmentally friendly products.

H₆: Individuals with high income prefer to purchase more green products.

H₇: Environmental concern is a predominant factor in the purchase of environmentally friendly products.

H₈: The environmental dominion approach has a negative impact on the purchase of environmentally friendly products.

H₉: Customers who consider environmental efforts to prevent harm to nature to be beneficial buy more environmentally friendly products.

Method

In this study, the survey method and questionnaire technique were adopted as research methods.

Sample

The Personal Information Form was used to determine the demographic characteristics of the participants. The form was composed of six items and asked the participants to indicate their gender, age, marital status, educational level, income state, and social environment. The sample of this study consisted of 618 people from different social environments (village, town, and city) in Turkey. A majority of the participants were female (59.7%), while 40.3% (N=249)

³⁶ Ebru Tümer Kabadayı et al., "Green Purchase Intention of Young Turkish Consumers: Effects of Consumer's Guilt, Self-Monitoring and Perceived Consumer Effectiveness", *Procedia - Social and Behavioral Sciences* 207 (July 2015), 172-173.

were male. The sample ranged in age from 18 to 84 years, and the mean age was 28 years. A total of 21.7% of the respondents were adolescents, 58.7% were young adults, 14.2% were adults, and 5.3% were in late adulthood. Of the participants, 74.3% (N=459) lived in an urban region, 18.4% (N=114) lived in towns, and 7.3% (N=45) lived in a rural region. The respondents were asked to report their educational level: 69.9% (n=432) were university graduates, 14.2% (n=22) were postgraduates, and 15.9% (n=98) had another educational level. The marital status of the participants was as follows: 66.3% (n=410) were single, 32.4% (n=200) were married, and 1.3% were other (widowed, engaged, or separated). The mean income of the individuals in the sample was 3048 TL.

Measures

Environmental Orientation of Possessions Scale

The Environmental Orientation of Possessions Scale was developed by Ayten³⁷ as a subscale of the Environmental Orientation Scale (EOS). The scale consists of six items (e.g., “Humans have mastery over nature”) on a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) to assess the basic approach of the participants toward the environment. Ayten (2010) found that the Kaiser–Mayer–Olkin parameter and Bartlett’s test [$KMO=.725$, $\chi^2= 402.60$; $p=.000$] were acceptable. The Cronbach’s alpha of the EOS in Ayten’s study was $\alpha=.85$; in the present study, the Cronbach’s alpha coefficient (α) was .637.

Questions about Environmental Awareness

Independent items were utilized by the researchers to evaluate the participants’ environmental knowledge and awareness. First, the item “It doesn’t matter what I do for environmental pollution and the depletion of natural resources” was used to measure the respondents’ environmental consciousness and level of moral responsibility for environmental issues. This was named “Perceived Behavioral Effectiveness”. Second, to evaluate the respondents’ worries about environmental problems, the item “I am anxious about environmental problems that we encounter” was utilized and was named

³⁷ Ali Ayten, “‘Sahip Olma’ mı, ‘Emanet Görme’ mi? -Çevre Bilinci ve Dindarlık İlişkisi Üzerine Bir Araştırma-”, *Dinbilimleri Akademik Araştırma Dergisi* 10/2 (April 2010), 212.

“Environmental Concern”. The respondents were asked to rate their level of agreement with each item on a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Religiosity Scale

The religiosity of the respondents was assessed by the *Brief Religiosity Scale* developed by Ayten.³⁸ The scale includes nine items that measure the degree to which participants believe in God, practice religious rituals (e.g., praying daily, reciting the Qurʾān, fasting during Ramadan) and integrate their religious teachings into their lives. The Kaiser–Meyer–Olkin test and Bartlett’s test showed the suitability of the data for factor analysis [KMO= 0.77, $\chi^2=258.387$; $p=,000$]. The measure consisted of two subscales labeled “religious faith and consequence” and “religious knowledge and ritual”. In this study, the Cronbach’s alphas were found to be comparable: 0.937 for the scale and 0.933 and 0.822 for the two subscales, respectively. The respondents were given 5 options, such as “*always*”, “*sometimes*”, or “*never*”. Confirmatory factor analysis showed that the model fit values were acceptable [CMIN/df = 4.6942, CFI = .978, NFI = .973, RMSEA = .080].

Purchasing of Environmentally Friendly Products

In this study, the *Purchasing of Environmentally Friendly Products Scale* developed by Straughan and Roberts³⁹ was used to measure the degree to which participants preferred to purchase environmentally friendly products. The scale was composed of eighteen items (e.g., “I purchase recycled paper towels”) on a 5-point Likert scale ranging from 1 (*none of the time*) to 5 (*most/all of the time*). For this scale, a Cronbach’s coefficient (α) of .637 was found.

Procedure

The data for the study were collected in October and November 2020 from people who lived in different social environments, such as villages, towns, and cities. The study was conducted online through Google Drive due to the COVID-19 pandemic. The questionnaire included the Personal Information Form, the Environmental Orientation of Possessions Scale, the Questions about Environmental

³⁸ Ali Ayten, “Kimlik ve Din: İngiltere’deki Türk Gençleri Üzerine Bir Araştırma”, *Çukurova Üniversitesi İlahiyat Fakültesi Dergisi* 12/2 (July-December 2012), 108.

³⁹ Straughan - Roberts, “Environmental Segmentation Alternatives”.

Awareness, the Religiosity Scale and the Purchase of Environmentally Friendly Products.

Results

Descriptive Statistics

Descriptive analyses were conducted to determine the descriptive statistics (number of participants, mean, standard deviation, range) of the study's central variables (environmental dominion, purchasing of environmentally friendly products (PEP), religiosity, environmental concern, and perceived behavioral effectiveness). Furthermore, an independent-sample *t* test was performed to determine whether differences existed between females and males in terms of the abovementioned variables.

| | Females (N=369) | | | Males (N=249) | | |
|---------------------------------------|-----------------|----------|-----------|---------------|----------|-----------|
| | Range | <i>M</i> | <i>SD</i> | Range | <i>M</i> | <i>SD</i> |
| 1. Environmental dominion | 1-5 | 1,98** | ,637 | 1-5 | 2.29** | ,712 |
| 2. PEP | 1-5 | 3.35 | ,656 | 1-5 | 3.35 | 0.687 |
| 3. Religiosity | 1-5 | 3.90** | 0.980 | 1-5 | 3.61** | 1.124 |
| 4. Environmental concerns | 1-5 | 4.45* | ,624 | 1-5 | 4.30* | ,779 |
| 5. Perceived behavioral effectiveness | 1-5 | 1.78** | ,905 | 1-5 | 2.17** | 1.25 |

* $p < .05$; ** $p < .001$; PEP: Purchasing of environmentally friendly products

Table 1. Means, standard deviations, and ranges for the key variables of the study

Table 1 shows the descriptive statistics of the aforementioned variables. The independent-sample test (*t* test) analysis indicated that males ($M=2.29$ and 2.17 , respectively) scored higher on the Environmental Dominion Scale and the Perceived Behavioral Effectiveness Scale than females ($M=1.98$ and 1.78 , respectively). The *t* test values were $t_{(618)} = -5.442$ and $t_{(618)} = -4.362$. However, females ($M=3.90$; 4.45) scored higher in religiosity and environmental concern than their counterparts ($M=3.61$; 4.30 , respectively). The *t* test values were $t_{(618)} = 3.346$ and $t_{(618)} = 2.537$. The findings of the analysis also revealed that the differences between the two groups were statistically significant ($p < .05$ and $p < .001$). However, there was no statistically

significant difference between females and males in terms of purchasing products. These findings supported research hypotheses H₁, H₂, H₃, and H₄, that females score higher than males in religiosity and environmental concern, while males score higher than females in perceived behavioral effectiveness and the environmental dominion approach.

Regression Analysis

To evaluate the effects of religiosity, economic status, perceived behavioral effectiveness, environmental concern, and environmental dominion on the purchase of environmentally friendly products, multiple regression analysis (with a stepwise method) was performed. Except for environmental dominion, all the independent variables were included within the designed model in four steps. As shown in the multiple regression analysis presented in Table II, only the “environmental concern” factor was entered into the model. In step 4, the four predictors of environmental concern, religiosity, economic status, and perceived behavioral effectiveness were entered simultaneously.

| | Step 1 β (p) | Step 2 β (p) | Step 3 β (p) | Step 4 β (p) |
|--|-----------------------|----------------------------|--|---|
| Environmental Concern | .215 (.000) | | | |
| Environmental Concern & Religiosity | | .240 (.000) .186 (.000) | | |
| Environmental Concern & Religiosity & Economic Status | | | .247(.000) .193 (.000) .135 (.000) | |
| Environmental Concern & Religiosity & Economic Status & Perceived Behavioral Effectiveness | | | | .234 (.000) .185 (.000) .138 (.000) -.124 (.001) |
| ΔR^2 | .045 | .077 | .094 | .108 |

Table 2. Multiple regression of scales for the purchase of environmentally friendly products as a dependent variable

The findings indicated that environmental concern, religiosity, economic status, and perceived behavioral effectiveness were significant predictors of purchasing environmentally friendly products. In step 1, environmental concern alone accounted for 4% of the variance in purchasing environmentally friendly products ($\Delta R^2=.045$; $F=29.768$; $p=.000$). In step 2, environmental concern and religiosity together accounted for 7% of the variance in purchasing environmentally friendly products ($\Delta R^2=.077$; $F=26.766$; $p=.000$). In step 3, environmental concern, religiosity and economic status together accounted for 9% of the variance in purchasing environmentally friendly products ($\Delta R^2=.094$; $F=22.271$; $p=.000$). Finally, in step 4, environmental concern, religiosity, economic status and perceived behavioral effectiveness together accounted for 10% of the variance in purchasing environmentally friendly products ($\Delta R^2=.108$; $F=19.580$; $p=.000$). With regard to the beta coefficients, positive correlations were found between environmental concern, religiosity, economic status and the purchase of environmentally friendly products (see step 4: $\beta=.234$; $t=6.042$; $p=.000$ for “environmental concern”; $\beta=.185$; $t=4.805$; $p=.000$ for “religiosity”; $\beta=.138$; $t=3.622$; $p=.000$ for “economic status”), and a negative correlation was found between perceived behavioral effectiveness and the purchase of environmentally friendly products (see step 4: $\beta=-1.24$; $t=-3.237$; $p=.001$ for “perceived behavioral effectiveness”). The findings indicate that the respondents’ inclination to purchase environmentally friendly products increased as “environmental concern”, “religiosity” and “economic status” increased. Conversely, the respondents’ inclination to purchase environmentally friendly products decreased as perceived behavioral effectiveness increased. The findings support H_5 , H_6 , H_7 , and H_9 , indicating that environmental concern, religiosity, economic status, and perceived behavioral effectiveness have an impact on PEP. However, the findings do not support H_8 , which suggested that the environmental dominion approach toward nature prevents individuals’ PEP.

Discussion and Conclusion

The main aim of this research was to determine whether religiosity, economic status, environmental concern, and perceived behavioral

effectiveness have an impact on the process of purchasing environmentally friendly products.

Several conclusions can be drawn with reference to the findings. First, gender is an influential factor on religiosity, the attitude toward nature, environmental concern, and perceived behavioral effectiveness in buying green products. In terms of the environmental dominion approach, the results show that men are more inclined to behave with a manipulative attitude toward nature and to damage it for their self-interest if necessary. Women avoid the environmental dominion perspective more than men do. Similarly, with regard to the relationship between religiosity and gender, women were found to be more religious than men. These findings indicate that women perform religious rituals such as praying, fasting, and reciting the Qur'ān more than men do. Religious belief also affects social aspects of women's lives more. In other words, women consider their religious faith in the process of making friends, participating in activities, deciding on clothes, and eating and drinking habits. This can be explained by the pressure of sociocultural values framed by religion on women's lives. Regarding environmental concerns, the present study revealed that women are exceedingly aware of environmental issues and worried about pollution, climate change, and resource depletion, whereas men tend to be more indifferent to these issues. Finally, gender shapes individuals' perceived behavioral effectiveness levels when buying eco-friendly products. Women are more willing to take responsibility for global environmental problems and to participate in pro-environmental behaviors. Furthermore, men believe that their personal pro-environmental activities do not have an effect on current types of ecocide. The findings regarding the dominion approach, religiosity, environmental concern, and perceived behavioral effectiveness are consistent with previous research.⁴⁰ Thus, we can

⁴⁰ Joachim Schahn - Erwin Holzer, "Studies of Individual Environmental Concern: The Role of Knowledge, Gender, and Background Variables", *Environment and Behavior* 22/6 (November 1990), 767-786; Asım Yapıcı, *Ruh Sağlığı ve Din: Psikososyal Uyum ve Dindarlık* (Adana: Karahan Kitabevi, 2007); Kaman Lee, "Gender Differences in Hong Kong Adolescent Consumers' Green Purchasing Behavior", *Journal of Consumer Marketing* 26/2 (March 2009), 87-96; Ümit Alnaçık, "Çevreci Yönelim, Çevre Dostu Davranış ve Demografik Özellikler: Üniversite Öğrencileri Üzerinde Bir Araştırma", *SÜ İİBF Sosyal Ekonomik Araştırmalar Dergisi* 10/20 (December 2010), 507-532; Elif Sönmez - Zekeriya Yerlikaya, "Ortaokul Öğrencilerinin Çevresel Bilgi Düzeyleri ve Çevreye Yönelik

depict women as more religious and environmentally concerned, less dominion-oriented toward nature, and as individuals who believe that their personal attempts to mitigate the damage of climatic change are effective. These results echo the culturally based social gender roles of women and men. With respect to the dominion approach to nature, environmental concern, and accountability, women's perceptions differ substantially from men's perceptions.

Second, in an attempt to answer the question "Do religiosity, economic situation, perceived behavioral effectiveness, environmental concern, and the environmental dominion approach lead individuals to purchase environmentally friendly products?", multiple regression analysis (a stepwise method) was employed. The results of the analysis demonstrated that, except for the environmental dominion approach, all variables positively influenced the preference for green products. Put differently, as individuals' concern about the global environmental crisis increases, their buying habits change in favor of protecting the environment. In addition, environmental concern is promoted by religiosity, high income, and a sense of responsibility and effectiveness for environmental issues, which also encourage customers to buy green products. It might be said that economic factors are significant⁴¹ but inadequate to account for environmentally friendly purchases overall. These findings are similar to those of other studies. As previous research has shown, this study finds that environmentally conscious consumption behavior requires psychological factors such as anxiety, approach, and attitude as well as sociocultural factors such as religiosity.⁴² Therefore, a high-income customer may not be interested in the current environmental disruption or consider exerting personal effort to reduce the destruction of nature to be sufficient. On the other hand, similar to the results of studies of Judeo-Christian samples,⁴³ the

Tutumları Üzerine Bir Alan Araştırması: Kastamonu İli Örneği", *Kastamonu Eğitim Dergisi* 25/3 (May 2017), 1239-1249.

⁴¹ Ling-Yee, "Effect of Collectivist Orientation and Ecological Attitude on Actual Environmental Commitment", 50; Çabuk - Nakıboğlu - Keleş, "Tüketicilerin Yeşil (Ürün) Satın Alma Davranışlarının Sosyo-Demografik Değişkenler Açısından İncelenmesi", 96.

⁴² Alnaçık, "Çevreci Yönelim, Çevre Dostu Davranış ve Demografik Özellikler: Üniversite Öğrencileri Üzerinde Bir Araştırma", 526-528.

⁴³ See Minton - Kahle - Kim, "Religion and Motives for Sustainable Behaviors", 1937-1944; Peifer - Khalsa - Ecklund, "Political Conservatism, Religion, and

current research revealed that Islam encourages its followers to act in a pro-environmental manner. Surprisingly, the results showed that a perception of environmental dominion does not motivate the purchase of green products. Hence, for people who feel apprehension about climate change, pollution, and other disruptions and believe that individual endeavors are essential and influential to prevent these issues, fulfilling religious rituals and integrating their faith into their life are likely to catalyze environmental purchasing behavior more than basic approaches to nature.

Limitations

This research has a number of limitations. **(a)** This model excluded the effects of other personal, psychological, and sociocultural elements that influence buying behavior for environmentally sensitive products. Therefore, further research is needed to examine other factors to elucidate green purchasing. **(b)** To ascertain whether environmental concern and accountability encourage customers to maintain an environmental attitude when buying environmentally conscious products, two independent questions were asked. It might be beneficial to use adapted scales that are relevant to both factors. **(c)** In this study, religiosity was found to be a positive significant variable. However, the questions of the degree to which religiosity affects individuals' environmental behavior or why religious people tend to perform more pro-environmental activities have not yet been answered. Open-ended investigations with Muslim samples are needed.

Conclusion

Gender is a significant variable for religiosity, attitudes toward nature, environmental concern, and accountability. Furthermore, religiosity, economic situation, perceived behavioral effectiveness, and environmental concern have a positive influence on the purchase of environmentally friendly products.

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