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RESEARCH ARTICLE

The Impact of Environmental Awareness on Green Product and Green Accommodation Purchasing Behavior: A Study on Domestic Tourists Visiting Antalya Province

Aysen Ercan İştin[1] (iD), Ahmet Özben[2] (iD)

[1](Assoc. Prof. Dr.), Şırnak University, School of Tourism and Hotel Management, Department of Gastronomy and Culinary Arts, Şırnak, Turkiye.
[2](Scince Expert) Şırnak University, Postgraduate Education Institute, Department of Ecotourism Guidance, Şırnak, Turkiye.

ABSTRACT

This study aims to determine whether environmental awareness significantly impacts green product and green accommodation purchasing behavior, and whether green product purchasing behavior significantly influences green accommodation purchasing behavior. Using quantitative research method, this study collected data from 454 people via a survey form. Domestic tourists who visit Antalya constitute the research population. The sample consists of domestic tourists who participate in the study and visit Antalya. The study employed a convenience sampling method, specifically a survey model. Result of the analysis revealed a low-to medium-level relationship between the dimensions of the research variables. Moreover, environmental awareness significantly impacts the purchasing behavior toward green products and green accommodations. Meanwhile, green product purchasing behavior significantly impacts green accommodation purchasing behavior.

Keywords: Environmental Awareness, Green Product, Green Product Purchasing Behavior, Green Accommodation, Green Accommodation Purchasing Behavior

Introduction

Tourists should be aware of environmental issues to promote the use of green products focused on environmental protection. The key to raising this awareness is environmental education. According to Djordjević (2002), environmental education primarily focuses on raising environmental awareness. Environmental education is a process that addresses the need to develop attitudes, value judgments, knowledge, and skills to maintain the current position of the natural environment and monitor the results of individuals who exhibit environmentally friendly behaviors (Ivanov & Webster, 2007:383).

Environmental knowledge gained through environmental education is an important factor that can strengthen a person's tendency to be environmentally friendly and reduce environmental damage (Kumar et al., 2022). Environmental awareness is a type of initiative and activity undertaken on behalf of humanity in order to protect the environment. Therefore, environmental awareness that can be created with environmental education is vital for Turkey and other countries in constructing a sustainable society (Uzmen, 2007:13). In this case, people should regard the natural environment in which they live as a trust, not an inheritance. For this reason, every living being bears some level of environmental responsibility (Hvenegaard, 1994:30).

Combining environmental awareness with philosophical awareness is possible by defining the boundaries of nature and the human being inhabiting it. It is necessary to develop an "ecological citizenship" model that does not deplete natural resources or harm natural or sustainable life and consumption (Goralnik et al., 2012:418). Ecological citizenship can motivate sustainable consumption (Seyfang, 2006). Consumer behavior is increasingly recognized as a form of public activism and civic expression. Therefore, environmentalists are encouraged to contribute by purchasing environmentally friendly or ethical products, a practice known as sustainable consumption (Seyfang, 2005).

In a human-centered world where only human needs are at the forefront, humans have become the masters of nature. Humans, who have advanced in technology to an important level, have failed to show the necessary respect for nature and have begun to use technology to concrete and eliminate natural life (Cheng et al., 2013:99). The rapid depletion of the world's natural resources

and the rapidly deteriorating environment are now undeniable realities (Rogayan Jr & Nebrida, 2019:106; Magdoff, 2013; Mittal & Gupta, 2006). This demonstrates that humans are creatures living in nature and must shape their lives being in harmony with nature. Nature, which is alive like humans, is part of an obligation that must coexist with humans for the world to exist (Lindberg, 1991:185). Therefore, one of the most noticeable issues in recent years has been the growing interest in environmental issues and their impact on general awareness (Rogayan Jr & Nebrida, 2019:106).

Related research has addressed a wide range of environmental issues in the hotel industry and daily environmental behavior, such as green marketing and concerns, consumer intention to participate, and willingness to pay for green consumption (Ting et al., 2019). The purpose of this study is to determine the impact of environmental awareness on green product and green accommodation purchasing behavior, as well as the impact of green product purchasing behavior on green accommodation purchasing behavior, by examining the relationship between the research variables. This will result in creating a consumer profile that demonstrates green product and green accommodation purchase behavior while being environmentally conscious. Thus, businesses/accommodation businesses are expected to contribute to developing appropriate marketing strategies by tailoring their products and services to the demands and needs of consumers and segmenting the market. This contribution will help green businesses improve their purchasing, production, and service behavior.

It is important to consider human opinions to raise environmental awareness about sustainability in nations and thus expand the use of green products. Thus, one can observe and understand the operation of sustainability from various perspectives. Understanding sustainability more deeply and taking appropriate precautions may also be possible. In this context, the study aims to reveal how tourists interpret environmental awareness and whether they can define sustainability-related values in environmental awareness and the use of green products in a destination, thereby contributing to the relevant literature. Furthermore, given the deficiencies of field and theoretical research, it is believed that research is vital in terms of adding new ones to the few studies in the literature on environmental awareness and the use of green products, as well as contributing to the functionality of ecotourism.

Literature Review

Environmental Awareness

The term "awareness" refers to the empirically acquired level of knowledge through one's perceptions (Ziadat, 2009:136). In other words, awareness includes, among other things, gathering information on current topics affecting nature locally and globally, exploring what actions could make a difference in your environment, and self-awareness of personal environmental philosophies (Schmidt, 2007:1). Environmentalism emphasizes humanity's need for ecological balance and the existence of growth constraints in human societies. It is associated with a broader ecocentric worldview that questions humanity's right to control the natural world (Sanchez & Lafuente, 2010:733). In this case, environmental awareness, which represents people's concerns and awareness of the environmental impact of their actions, is regarded as the first important step in developing environmental solutions (Ahmad et al., 2021).

Because of global warming, climate change, and various types of pollution, environmental awareness has become a topic that different segments are increasingly emphasizing. This has made people more sensitive to environmental issues (Carter et al. 2004:51). As a result of sensitivity toward environmental awareness, the concept of sustainable development has emerged, the importance of sustainability has been emphasized, and pressure has been put on growth to have the least negative impact on the environment and society (Al-Kumaim et al., 2021). In this context, we can say that environmental awareness is critical to any country's sustainable development (Ziadat, 2009; Lizuka, 2000; Atabek Yiğit & Balkan Kıyıcı, 2022).

In this regard, tourism, which has always had a complex and bilateral relationship, is also contingent upon the environment to attract tourist flow, and the environment is also dependent on tourism because it has negative impacts on the tourism ecosystem, with the risk of permanent damage. Therefore, a balance must be found between the tourism industry's economic profitability and the ecosystem's quality where tourism activities occur (Acampora et al., 2022). It is widely accepted that local citizens' environmental stewardship and pro-environmental behavior are positively related to regional prosperity (Si et al., 2022). Therefore, consistency between policies addressing economic development and the local environment is critical (Pachaur, 2008).

Green Products and Green Accommodation Purchasing Behavior

Green purchasing activity is defined as complex pro-social behavior toward green products resulting from an ethical decision-making process (Han, 2020). In broader terms, green or environmentally friendly purchasing behavior refers to the habit of purchasing environmentally friendly products that do not pollute the environment or consume natural resources and can be recycled or preserved (Md Harizan & Haron, 2012:378).

Since the 1970s, industry experts and stakeholders have worked to ensure sustainable tourism, including green practice activities, in response to consumers' environmental concerns and sustainability (Patwary et al., 2022). Green practices, which include daily actions for a wide range of environmental protection, such as energy conservation, recycling, waste reduction, and green mobility behavior (Dangelico et al., 2021), aim to increase product availability, reduce resource waste, and improve environmental outcomes (Umar et al., 2022).

With the rise of green-conscious consumers, green practices have become a vital component of a business' strategic plan, potentially providing a competitive advantage (Kuar et al., 2022). In fact, as green products have grown in popularity on the market (Chen & Chang, 2012), consumers have begun to look for more environmentally friendly alternatives to traditional purchases (Akehurst et al., 2012). This is because the environment has become more important.

Greening has become critical to the survival and prosperity of some businesses. Thus, these companies are attempting to outperform their competitors by becoming more environmentally conscious, understanding the marketing potential of green initiatives (Namkung & Jang, 2013). Therefore, businesses have had to integrate their environmental goals with long-term strategic management due to customer demands for green products produced using environmentally friendly raw materials and green production processes (Lin, 2013). They have also adopted green practices to avoid harming the environment (Yousaf, 2021). This has prompted hoteliers to adopt green practices in their accommodation management. Another factor contributing to this situation is consumers' increasing interest in environmental issues and sustainability (Merli et al., 2019).

With the trend of sustainable development and environmental protection in the tourism industry, the concept of green accommodation is continuing to develop (Patwary et al., 2022), and the demand for green accommodation is increasing (Demir et al., 2021). As a result, many hotels have begun implementing various innovative practices to increase the "greenness" of their operations in response to customers' growing environmental concerns and alleviate their environmental pressures (Abdou et al. 2020).

The term "green accommodation," which first appeared in Germany in the 1980s, includes expressions describing green accommodation like "ecological hotel," "eco-hotel," "eco-efficient hotel," and "environmentally friendly hotel." (Ting et al., 2019). Green hotels are environmentally friendly and less environmentally friendly properties that follow a variety of environmentally friendly practices. Their managers are eager to launch programs that save money, energy, and solid waste (Abdou et al., 2020, p. 5).

Transforming a hotel into a functional green hotel by implementing environmentally friendly practices such as environmentally friendly designs, reducing emissions, providing environmentally friendly products, and conserving water and energy necessitates collaboration between hotel management and consumer (Adetola et al., 2021). Because environmental values are strongly related to social and emotional values, green accommodation customers evaluate establishments based on emotional and social values and perceived values (Salem et al., 2022). Therefore, although a consumer aware of green accommodation understands that staying in such establishments is expensive, they do not hesitate to stay overnight in such accommodation, considering the cost of all types of environmentally friendly products and services. Consumers hold this attitude because they believe that reducing pollution will help make the environment safer for future generations (Demir et al., 2021).

Research Model and Hypotheses

Alkaya et al. (2016) conducted a study to determine the impact of environmental sensitivity on green purchasing behavior. The study concluded that personal and ecological sensitivity, both dimensions of environmental sensitivity, impact green product purchasing behavior. Meanwhile, Onurlubaş (2019) examined the impact of consumer social impact, environmental sensitivity, and environmental awareness on consumer purchasing behavior for green products. According to this study, social influence has a moderately significant impact on green product purchasing behavior. Furthermore, the study found that environmental awareness has a weak but significant impact on green product purchasing behavior.

Aracioglu and Tatlidil (2009) first examined consumer levels of environmental awareness and the impact of environmental awareness on purchasing behavior. Consumers who participated in the study were found to be generally environmentally conscious and aware of certain environmental protection and pollution prevention measures. As consumer awareness of environmental pollution and environmental protection increases, the impact of this increase is seen in consumer purchasing behavior.

Çatıcı and Öcel (2019) sought to assess the impact of people's environmental awareness on environmental behavior within the context of green marketing activities. They observed that environmental awareness affects environmental behavior. Thus, we propose the following hypothesis:

H1: Environmental awareness impacts green product purchasing behavior.

Regarding the intention to choose a green-star hotel, Oğuz and Yılmaz (2019) found a significant relationship between environmental sensitivity, environmental attitude, and environmental behavior. Sünnetçioğlu et al. (2019) investigated whether environmentally sensitive consumer behavior affects tourist purchasing behavior. Their study concluded that the behavior of environmentally conscious consumers has an impact on the intention to choose green hotels. Furthermore, it was stated that environmentally sensitive consumer behavior can predict the intention to stay in green hotels. Therefore, the research hypothesis that will be developed in this context is:

H2: Environmental awareness impacts green accommodation purchasing behavior.

Berk and Celep (2020) examined how the image of a green hotel in relation to green star accommodation businesses affects consumer purchasing behavior. Their study found that green marketing activities positively impact consumer purchasing behavior. Celiloğlu (2014) examined the impact of consumer attitudes toward green hotels on their intent to stay in these hotels. The study concluded that there was a positive and significant relationship between consumers' perceptions of green hotels and their intention to stay. Thus, the third hypothesis is as follows:

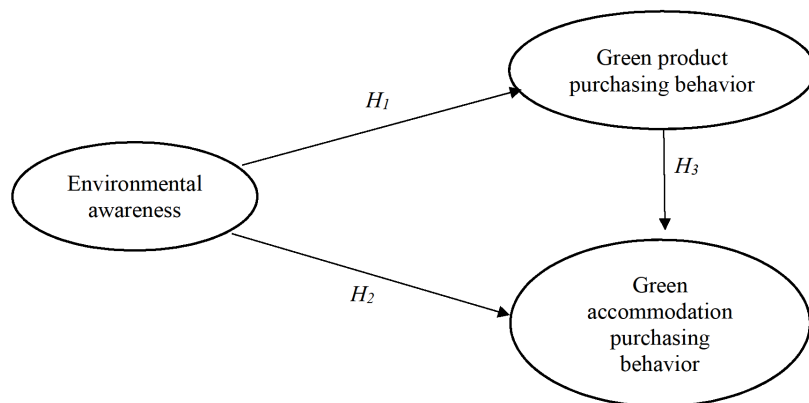*H3: Green product purchasing behavior impacts green accommodation purchasing behavior.*

Figure 1. Symbolic model of the research.

Method

The goal of this study is to determine whether environmental awareness has a significant impact on green product and green accommodation purchasing behavior, as well as whether green product purchasing behavior has a significant impact on green accommodation purchasing behavior, by establishing a link between the research variables. Approval was received from the Şırnak University Ethics Committee (No: 2021/31; dated 09/04/2021) regarding the ethical suitability of the statements of the scale used.

This study employed a quantitative research method. Furthermore, a screening model known as convenience sampling was used. The sampling method was chosen because it offers significant practical benefits in terms of cost savings and faster data collection, as well as because the entire population cannot participate in the study (Golzar et al., 2022). Domestic tourists who visit Antalya constitute the research population. The sample consists of domestic tourists who take part in the study and visit Antalya. Krejcie and Morgan (1970) estimated a sample size of 384 people at the 95% confidence level, with a sampling error of 5% when the variance is maximum. This sample size is optimal for representing the universe (Ural & Kılıç, 2006: 48). In this case, 454 questionnaires are sufficient representation. The survey collected data from 454 people who participated in the study between April 10, 2021, and June 22, 2022. The surveys were completed in person as well as via WhatsApp and Facebook.

Dikmenli and Konca (2016) developed the Environmental Awareness Scale. The green product purchasing scale is used by Çetinkaya and Özceylan (2017). Meanwhile, the green accommodation purchasing scale is based on Ceylan's (2017) master's thesis and includes 10 items from Lasso (2013), 8 items from Yıldız (2012), and 9 items from Cometa (2012). The researchers used 5-point Likert scales to determine how much participants agreed with the questions.

Descriptive statistics and reliability and validity (factor analysis) analyses were used in the investigation. Varimax Rotation was used in factor analysis. The Varimax method frequently yields good results. This is because the varimax method is eigenvalue-weighted, uses a non-orthogonal rotation to calculate scores, and prioritizes factor simplicity, making it ideal for object clustering

and discrimination (Forina et al., 1989). Cronbach's Alpha, the most widely used internal reliability index (Bayram, 2009: 194), and the item-whole correlation method used ensured that the item-whole correlation for the statements was greater than .20 (Büyüköztürk, 2018:183). The construct's validity was tested using exploratory factor analysis. The Kaiser–Meyer–Olkin (KMO) test (Çokluk et al., 2012:207) assessed sampling adequacy. Skewness and kurtosis analysis was performed to determine whether the data followed a normal distribution (Kalaycı, 2014: 6–7). The fact that the kurtosis and skewness values are between +1.5 and 1.5 indicates that the data follows a normal distribution (Tabachnick & Fidell, 2013).

The skewness and kurtosis values for the environmental awareness scale are .413 and .241, respectively. The skewness and kurtosis values for the green product purchasing scale are .114 and .100, respectively. The green accommodation purchasing scale has a skewness value of and a kurtosis value of 1.170. The fact that these values are within the range of +1.5 to 1.5 indicates that the data is normal. The Bartlett sphericity test was also used to determine whether the data showed a normal distribution (Çokluk et al., 2010:208). The results of this test are included in the factor analysis sections for each scale.

In the factor analysis of the scales, care was taken to ensure that the difference was greater than .100 in case the items overlapped (Bayram, 2009:205); additionally, care was taken to ensure that the factor loading of the items was greater than.40 (Büyüköztürk 201:134). When naming the factors, relevant literature and expressions with high weights under a factor were considered (Kalaycı, 2014:330); correlation and regression analyses were performed.

Findings and Discussion

The research findings cover demographic and occupational characteristics, reliability and factor analysis, correlation, and regression analysis.

Demographic and Occupational Characteristics

The findings for demographic characteristics are as follows. When demographic data were examined, 31.7% (n = 144) of the participants were female, whereas 68.3% (n = 310) were male. According to marital status, 53.3% (n = 242) of the participants were married, and 46.7% were single. In the type of program, 6.6% (n = 30) of the participants were in primary school, 9.5% (n = 43) in secondary school, 25.1% (n = 114) in high school, 25.8% (n = 117) in associate degree graduates, 22.2% (n = 101) in undergraduate, and 10.8% (n = 49) in postgraduate studies. According to age group, 18.5% of participants (n = 85) are between 18 and 24 years old, 27.5% (n = 125) are between 25 and 34 years old, 25.6% (n = 116) are between 35 and 44 years old, 14.1% (n = 64) are between 45 and 54 years old, 6.8% (n = 31) are between 55 and 64 years old, and 7.3% are 65 years or older.

When the participants' occupational characteristics were examined, 28.6% (n = 130) were public employees, 30.2% (n = 137) were private sector employees, 11.5% (n = 52) were employers, 7.9% (n = 36) were retired, and 21.8% (n = 99) were unemployed. Finally, according to their monthly income, 19.8% (n = 90) of the participants had no income. 10.4% (n = 47) have a monthly income less than the minimum wage, 36.8% (n = 167) have a monthly income between the minimum wage and 5000 TL, and 33% (n = 150) earn 5001 TL or more.

Reliability and Factor Analysis

Reliability and Factor Analysis of Environmental Awareness Scale

Before factor analysis, the Cronbach's alpha value for the environmental awareness scale was .748. As a result, excluding some items from the analysis was deemed appropriate because their item-total correlation value was less than .20. These elements include: "Even if it is beneficial for humanity, products that harm the environment should not be produced."(.162 < .20), "Before the price of a product I will buy, I look at its features and contents." (.181 < .20), "*I don't* see it as garbage without using both sides of the paper." (.185 < .20), "Because everyone has the right to live in a healthy and balanced environment, I must use resources impactively and efficiently" (*.060 < .20*).

In factor analysis, "If I know that a company is engaged in activities that harm the environment, I will not buy *the* products of *that company*.", "As a conscious consumer, I know my rights and use them.", "I buy more products from companies that are environmentally friendly and invest.", "I bag my garbage for recycling.", "I think advertisements direct my consumption preferences." and "I take care to live in peace with the environment." were not loaded on any factor. As a result, they were not considered in the factor analysis.

In the repeated factor analysis, the KMO sample adequacy value was .703, and the Bartlett's sphericity test value was 1408.906, which was significant at the 0.0001 level. According to this finding, the sample size is adequate for factor analysis (Çokluk et al.,

2012:207). The Bartlett test's significant chi-square values at the 0.0001 level show that the data follows a normal distribution (Çokluk et al., 2010:208). When Table 1 is examined, the Bartlett test results show that the data has a normal distribution, allowing multivariate statistical techniques to be used. Cronbach's alpha was determined following factor analysis, Cronbach Alpha value was calculated as .715 Factor analysis of the scale is included in Table 1.

Table 1. Results of the Factor Analysis for the Environmental Awareness Scale

	Communalities	Factor load	Eigenvalue	Explained Variance	Average	Alpha
Social Pressure			2.520	14.002	3.2992	.696
I cut down on my expenses to buy the expensive mobile phone my friend bought.	.446	.668				
When I shop, I pay attention to the image and awareness of the company, rather than to the product.	.424	.615				
I do not care about the problems I may encounter with low-value products.	.456	.599				
This fashion is essential to me.	.388	.593				
I am influenced by others when purchasing products.	.427	.558				
Although I am a conscious consumer with environmental awareness, I am easily persuaded by advertisements and promotions.	.324	.549				
I follow and buy new technological products.	.374	.511				
Awareness of Recycling and Saving			2.092	11.620	3.8568	.640
When buying a product, I prefer the recyclable one.	.588	.737				
I take the necessary precautions to avoid wasting electricity and water.	.505	.695				
I warn my friends not to choose products that harm the environment.	.398	.616				
I try to use cloth bags instead of shopping bags when I shop.	.477	.603				
Behavioral Awareness			1.883	10.460	3.8111	.592
I have no brand obsession with the products I use.	.587	.757				
I ensure that the products I consume are organic.	.526	.699				
Due to my environmental sensitivity, I buy environmentally friendly products.	.467	.575				
When buying a product, I prefer products with recyclable packaging.	.372	.493				
Product Use Awareness Focused on Environmental Protection			1.814	10.080	3.5286	.584
I do not use technological products that harm nature.	.623	.774				
I know that the damage I cause to the environment will be reflected in my budget.	.497	.702				
I avoid using volatile substances (perfume, deodorant, etc.) that damage the ozone layer.	.431	.616				

Principal Components Analysis with Varimax Rotation–Total variance explained: 46.162% KMO Sampling Adequacy: .703–Bartlett Test of Sphericity: 1408.906 s.d.: 153 p < 0.001 Overall mean: 3.5751–Cronbach's Alpha: .715

1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Completely Agree

Table 1 shows that the scale's factor analysis results are consistent with the stated presuppositions. Of the 28 items explaining environmental awareness, 18 items fall into four categories and account for 46.162% of the total variance.

Reliability and factor analysis of the Green Product Purchasing Scale

Before factor analysis, Cronbach's Alpha value for the entire green product purchasing scale was The calculated value is .835. We found no items on the scale with an item-total correlation value of <.20.

For example, "I do not believe that people in our country make enough efforts to protect the environment.", "I attach great importance to environmental friendliness when purchasing many products such as cosmetics, household goods, food, and cleaning products.", "The behavior of consumers who purchase the products of socially responsible businesses can have a positive impact on society as to environmental awareness." were *removed* from the analysis because they did not load on any factor. Additionally,

"Packaging should give confidence." and "Packaging should be easy to use." were grouped under two factors and were removed from the analysis due to a difference of <.100.

In repeated factor analysis, the KMO sample adequacy value was .757. The Bartlett sphericity test yields a value of 2476.997. The significant value at the 0.0001 level shows that the sample size is sufficient for factor analysis (Çokluk et al., 2012:207). Cronbach's alpha was .813 following factor analysis. Table 2 shows the results of the factor analysis.

Table 2. *Results of Factor Analysis for the Green Product Purchasing Scale*

	Communalities	Factor load	Eigenvalue	Explained Variance	Average	Alpha
Attitude toward solid waste			2.389	9.188	3.8837	.610
Businesses should encourage consumers to collect solid waste.	.472	.656				
Despite the warnings, we do nothing to protect the environment.	.380	.603				
Turkey faces serious solid waste problems.	.393	.538				
I prefer to buy recyclable products such as paper, plastic and glass.	.372	.510				
The packaging should protect the product.	.417	.493				
Attitude toward packaging			2.300	8.847	4.0057	.690
The packaging should be portable.	.594	.741				
Packaging should provide ease of storage.	.531	.670				
Packaging should be able to be used in different functions.	.520	.642				
The packaging must be recyclable.	.613	.571				
Packaging should not harm the environment.	.390	.471				
Responsibility for purchasing green products			2.079	7.997	3.6052	.599
I do not buy products from companies that do not respect the environment.	.565	.708				
I do not purchase products that I understand can harm the environment.	.554	.655				
When I have a choice between two equal products, I always choose the product that will cause less harm to other people and the environment.	.596	.550				
I am interested in organic, ecological, and natural products.	.512	.498				
Attitude toward the environment			1,894	7.285	3.5171	.640
I believe that I can protect the environment by purchasing environmentally friendly products.	.616	.727				
I consider myself an environmentalist.	.544	.694				
When purchasing a product, I consider how it will affect my environment and other consumers.	.459	.483				
When purchasing products, I always act with the awareness of purchasing products that will less pollute the environment.	.516	.450				
Purchasing behavior of products with lower energy consumption			1.751	6.734	3.8756	.639
The household goods I bought consume less electricity than the other brands.	.677	.794				
I choose light bulbs at home that consume less energy.	.623	.724				
Awareness of environmentally friendly products			1.726	6.638	3.5458	.558
I can understand whether many products are environmentally friendly based on information on their ingredients.	.529	.669				
Whenever possible, I try to buy products packaged in reusable containers.	.596	.597				
I can understand whether many products are environmentally friendly or not from the signs and symbols on them.	.466	.532				
Behavior of trying to consume less electricity			1.699	6.534	3.6982	.586
I try to use electrical appliances during hours when electricity consumption is low.	.745	.842				
I make a concerted effort to reduce the amount of electricity that I use.	.659	.737				
I like to use throwaway items and produce something else from them.	.501	.537				

Principal Component Analysis with Varimax Rotation–Total variance explained: 53.223% KMO Sampling Adequacy: .757 – Bartlett Test of Sphericity: 2476.997 sd.: 325 p < 0.001 Overall mean: 3.7468 – Cronbach's Alpha: .813

1 = *Strongly Disagree*, 2 = *Disagree*, 3 = *Undecided*, 4 = *Agree*, 5 = *Completely Agree*

Table 2 shows the results of the factor analysis for the scale based on the stated assumptions. 26 of 31 items explaining the purchase of green products are grouped into 7 factors, accounting for 53.223% of the total variance.

Reliability and Factor Analysis of the Green Accommodation Purchasing Scale

Prior to factor analysis, the Cronbach's Alpha value for the entire green accommodation purchasing scale was .782. The item correlation value for "If I were to choose between agreeing or not agreeing with the hotel's towel change restrictions, I would choose not to participate." in the scale is less than .186 < .20; because of the item correlation value of the item that is "If I were to choose between energy-saving (television, air conditioner, mini refrigerator, etc.) and nonenergy-saving electronic devices and light bulbs, I would choose the non-energy-saving ones." in the scale is less than -.012 < .20." The item "If I were to choose between disposable shampoo bottles and shampoo dispenser (pressure), I would choose disposable shampoo bottles." in the scale has a correlation value of less than .137 < .20, so it was removed from the analysis.

In the factor analysis, the items that are "Accommodation in a green-star hotel improves awareness of protecting the natural environment.", "The employees of the green-star hotel I accommodated in are knowledgeable about sustainability.", "I think those who stay in green-star hotels have a positive image.", "Accommodation in a green-star hotel is more expensive than non-green-star hotels.", "If I were to choose between water-saving shower heads and those that do not save water, I would choose water-saving shower heads." and "Many people think that accommodating in a green-star hotel is more beneficial." were removed from the analysis because they did not load on any factor. Additionally, the item "Accommodation in a green-star hotel allows me to participate in environmentally friendly practices." was grouped into two factors and removed from the analysis due to a difference of less than .100.

The KMO sample adequacy value was .717 as a result of repeated factor analysis. The Bartlett sphericity test value is 1,552.472. The value is significant at the 0.0001 level (Çokluk et al., 2012:207). Following factor analysis, the Cronbach alpha value was determined to be .748. Table 3 shows the results of the factor analysis.

Table 3. *Results of Factor Analysis for the Green Accommodation Purchasing Scale*

	Communalities	Factor load	Eigenvalue	Explained Variance	Average	Alpha
Sacrifice in the use of green products			2.330	13.705	3.6747	.672
Convenience and comfort can be sacrificed for lodging in a green-star hotel.	.513	.713				
I am willing to pay more for accommodation in Green-Star hotels.	.454	.644				
If I were to choose disposable shampoo bottles and dispensers (push button), I would choose disposable shampoo bottles.	.484	.638				
Those who stay at Green-Star hotels are people of social status.	.397	.525				
Those who stay in Green-Star hotels contribute to the environment and sustainability.	.428	.522				
I think the environmental warnings and visuals in the hotel lobby and open areas are sufficient.	.351	.521				
Service quality of Green-Star Hotels			2.132	12.541	3.6608	.624
A Green-Star hotel offers services worth the money.	.642	.772				
The service quality of the Green-Star hotel I stayed in was generally good.	.525	.690				
The fact that the hotel has a green-star label was important in my choice of hotel.	.438	.525				
I consider myself an environmentally conscious individual.	.301	.477				
Contribution of Green-Star Hotels to the use of healthy products			1.948	11.461	3.3612	.670
Having a room in a Green-Star hotel allows me to benefit from environmentally friendly and healthy products.	.715	.841				
Green-Star hotels allow me to consume fresh/healthy food.	.612	.701				
The environmental sensitivity of the employees of the Green-Star hotel that I stayed at is high.	.504	.675				
Sensitivity to the use of green products			1.894	11.141	3.6118	.595
If I had to choose between participating or not participating in hotel recycling practices, I would choose to participate.	.669	.793				
I would also recommend accommodating in a green-star hotel for the people around me.	.588	.683				
If I were to choose between traditional manual and automatic key cards (automatically closes when exited) key cards for the room, I would choose the automatic key card.	.384	.613				
Accommodation in a green-star hotel allows me to stay in a healthy and environmentally friendly room.	.302	.484				

Principal Component Analysis with Varimax Rotation–Total variance explained: 48.849% KMO Sampling Adequacy: .717 – Bartlett Test of Sphericity: 1552.472 s.d.: 136 p < 0.001 Overall Mean: 3.6013 – Cronbach's Alpha: .748

1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Completely Agree

The factor analysis results for the scale in Table 3 are based on the assumptions made. Of the 27 items explaining purchasing green accommodation, 17 items fall into four categories and account for 48.849% of the total variance.

Correlation Analysis

A correlation analysis was run to determine the relationship and direction of the research variables. Correlation is an analysis that determines the relationship between two or more variables (Sungur, 2016:115). In the analysis, the correlation coefficient ranges between -1 and +1. This value is indicated by r (Can, 2013:321).

Table 4. *Correlation Analysis*

		x̄	σ	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Environmental awareness	Social pressure	3.2992	.80222	1														
	Awareness of recycling and saving	3.8568	.79934	.098*	1													
	Behavioral awareness	3.8111	.77202	.136**	.303**	1												
	Product usage awareness focused on environmental protection	3.5286	.89697	.174**	.226**	.215**	1											
Green product purchasing behavior	Attitude toward solid waste	3.8837	.69882	-.056	.152**	.096*	.047	1										
	Attitude toward packaging	4.0057	.73899	-.132**	.194**	.145**	.019	.388**	1									
	Responsibility in purchasing green products	3.6052	.82244	-.044	.246**	.196**	.216**	.240**	.264**	1								
	Attitude toward the environment	3.5171	.80740	.055	.279**	.331**	.314**	.306**	.270**	.426**	1							
	Purchasing behavior of products with less energy consumption	3.8756	.96256	.014	.198**	.203**	.131**	.082	.185**	.146**	.275**	1						
	Awareness of environmentally friendly products	3.5448	.86794	.019	.271**	.288**	.140**	.309**	.221**	.258**	.324**	.279**	1					
	The behavior of trying to consume less electricity	3.6982	.89104	-.008	.263**	.203**	.109*	.151**	.130**	.188**	.231**	.273**	.234**	1				
Green accommodation purchasing behavior	Sacrifice regarding the use of green products	3.6747	.72918	.218**	.161**	.244**	.134**	.168**	.177**	.192**	.225**	.174**	.179**	.189**	1			
	Service quality of Green-Star hotels	3.6608	.83621	.013	.161**	.106*	.072	.329**	.275**	.291**	.208**	.158**	.216**	.130**	.321**	1		
	Contribution of green-star hotels to healthy product use	3.3612	.95814	-.120*	.101*	.059	-.019	.256**	.261**	.283**	.193**	.079	.258**	.080	.139**	.286**	1	
	Sensitivity to the use of green products	3.6118	.79303	-.070	.217**	.040	.109*	.353**	.293**	.257**	.340**	.220**	.253**	.148**	.210**	.278**	.225**	1

* Correlation is significant at the 0.05 level (2-tailed)   -   ** Correlation significant at 0.01 level (2-tailed)

	x̄	σ		
Environmental awareness	3.5751	.51368	1	
Green product purchasing behavior	3.7468	.48553	.280**	1
Green accommodation purchasing behavior	3.6013	.53556	.212**	.564**

* Correlation is significant at the 0.05 level (2-tailed)   -   ** Correlation significant at 0.01 level (2-tailed)

Values (r) ranging from 0 to 0.3 indicate a weak linear relationship, 0.3 to 0.7 indicate a moderate relationship, and 0.7 to 1.0 indicate a strong linear relationship (Ratner, 2009). In this case, the analysis in Table 4 shows a low- to medium-level correlation between the dimensions of the research variables. The correlation analysis of the total scales revealed that the variables had a positive linear low- and medium-level correlation.

Regression Analysis

The study subjected the variables to a simple linear regression analysis based on the overall scale total. Then, multiple regression analysis was conducted regarding the dimensions of the variables (Kalaycı 2014:199). Tables 5, 6, 7, 8, 9, and 10 present the analyses.

Table 5. *Impact of Environmental Awareness on Green Product Purchasing Behavior*

Dependent variable	Model (constant) and independent variable	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		Beta	Std. error	Beta		
Green product purchasing behavior	(Constant)	2.800	.154		18.163	.000
	Environmental awareness	.265	.043	.280	6.207	.000

R: .280 R^2: .079; Adjusted R^2: .077; For model F: 38.533; p = .000; Durbin–Watson: 1.402

According to the analysis in Table 5, it was found that environmental awareness had a significant impact on green product purchasing behavior (F = 38.533, p = .000). The R-value of .280 indicates a weakly positive relationship between the variables. In a simple linear regression analysis, R^2 represents the percentage of dependent variables explained by the independent variables

in the model. In this case, the independent variable (environmental awareness) can explain 7.9% of the variability in participants' purchase behavior for green products (Kalaycı, 2014:259). Thus, H_1 is accepted.

Table 6. *Impact of Environmental Awareness on Green Accommodation Purchasing Behavior*

Dependent variable	Model (Constant) and Independent variable	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		Beta	Std. error	Beta		
Green accommodation purchasing behavior	(Constant)	2.812	.173		16.246	.000
	Environmental awareness	.221	.048	.212	4.605	.000
R: .212; R²: .045; Adjusted R²: .043; For model F: 21.204; p = .000; Durbin-Watson: 1.703						

According to the analysis in Table 6, the impact of environmental awareness on green accommodation purchasing behavior is significant (F = 21.204, p = .000). According to R², it can be expressed that 4.5% of the variability in the participants' green accommodation purchasing behavior is explained by environmental awareness (Kalaycı, 2014:259). Therefore, H_2 is accepted.

Table 7. *Impact of Green Product Purchasing Behavior on Green Accommodation Purchasing Behavior*

Dependent variable	Model (Constant) and Independent variable	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		Beta	Std. error	Beta		
Green accommodation purchasing behavior	(Constant)	1.270	.162		7.847	.000
	Green product purchasing behavior	.622	.043	.564	14.523	.000
R: .564; R²: .318; Adjusted R²: .317; For model F: 210.917; p = .000; Durbin-Watson: 1.859						

Table 7 shows that the impact of green product purchasing behavior on green accommodation purchasing behavior is significant (F = 210.917, p = .000). The R2 of the dependent variable is .318, indicating that 31.8% of the variability in the participants' green accommodation purchasing behavior is explained by green product purchasing behavior (Kalaycı, 2014:259). H_3 is accepted in this case.

Table 8. *The Impact of Environmental Awareness on Green Product Purchasing Behavior (Multiple Regression Analysis)*

Dependent variable	Model (Constant) and Independent variable	Unstandardized Coefficients		Standardized Coefficients	ANOVA		R	R²	Adjusted R²	Tolerance	VIF
		Beta	Std. error	Beta	F	Sig.					
Attitude toward solid waste	Constant	3.396	.234								
	Social pressure	−.070	.041	−.081						.958	1.044
	Awareness of recycling and saving	.120	.043	.137	3.704	.006	.179	.032	.023	.880	1.137
	Behavioral awareness	.056	.045	.062						.878	1.139
	Product usage awareness focused on environmental protection	.013	.038	.017						.907	1.103
Attitude toward packaging	Constant	3.490	.242								
	Social pressure	−.149	.043	−.162						.958	1.044
	Awareness of recycling and saving	.165	.045	.178	8.787	.000	.269	.073	.064	.880	1.137
	Behavioral awareness	.112	.046	.117						.878	1.139
	Product usage awareness focused on environmental protection	−.015	.039	−.019						.907	1.103
Responsibility in purchasing green products	Constant	2.218	.264								
	Social pressure	−.110	.047	−.108						.958	1.044
	Awareness of recycling and saving	.188	.049	.183	13.776	.000	.331	.109	.101	.880	1.137
	Behavioral awareness	.126	.051	.119						.878	1.139
	Product usage awareness focused on environmental protection	.154	.043	.168						.907	1.103
Attitude toward the environment	Constant	1.326	.247								
	Social pressure	−.033	.004	−.033						.958	1.044
	Awareness of recycling and saving	.159	.046	.158	27.011	.000	.440	.194	.187	.880	1.137
	Behavioral awareness	.248	.047	.237						.878	1.139
	Product usage awareness focused on environmental protection	.210	.040	.233						.907	1.103
Purchasing behavior of products with less energy consumption	Constant	2.373	.316								
	Social pressure	−.040	.056	−.033						.958	1.044
	Awareness of recycling and saving	.167	.059	.139	8.057	.000	.259	.067	.059	.880	1.137
	Behavioral awareness	.187	.061	.150						.878	1.139
	Product usage awareness focused on environmental protection	.078	.051	.073						.907	1.103
Awareness of environmentally friendly products	Constant	1.728	.276								
	Social pressure	−.043	.049	−.040						.958	1.044
	Awareness of recycling and saving	.212	.051	.195	15.868	.000	.352	.124	.116	.880	1.137
	Behavioral awareness	.250	.053	.222						.878	1.139
	Product usage awareness focused on environmental protection	.053	.045	.055						.907	1.103
The behavior of trying to consume less electricity	Constant	2.225	.289								
	Social pressure	−.061	.051	-.055						.958	1.044
	Awareness of recycling and saving	.244	.054	.219	11.065	.000	.300	.090	.082	.880	1.137
	Behavioral awareness	.156	.055	.135						.878	1.139
	Product usage awareness focused on environmental protection	.039	.047	.040						.907	1.103

F statistics show that the entire model is significant. The R^2 value increases proportionally to the number of independent variables in the model. As a result, the multiple regression model should consider the fact that as the number of variables in the model increases, so does the coefficient of determination. In such cases, the adjusted coefficient of determination (Adjusted $R^2 \rightarrow \Delta R^2$) should be checked (Kalaycı, 2014:259; Hoş, 2020:311; Ağır & Baykan, 2004:362).

From this perspective, when the F statistics are examined, respectively, in Table 8, the first model (F = 3.704; p = .006) is significant overall. The second model (F = 8.787; p = 0.000) is statistically significant. The third model (F = 13.776; p = .000) is statistically significant overall. The fourth model (F = 27.011; p = .000) is statistically significant overall. The fifth model (F = 8.057; p = .000) is statistically significant overall. Furthermore, the sixth model (F = 15.868; p = .000) is significant overall. Finally, the seventh model (F = 11.065; p = .000) is significant overall.

Table 9. *Impact of Environmental Awareness on Green Accommodation Purchasing Behavior (Multiple Regression Analysis)*

Dependent variable	Model (Constant) and Independent variable	Unstandardized Coefficients		Standardized Coefficients	ANOVA		R	R^2	Adjusted R^2	Tolerance	VIF
		Beta	Std. error	Beta	F	Sig.					
Sacrifice regarding the use of green products	Constant	2.072	.235								
	Social pressure	.161	.042	.177						.958	1.044
	Awareness of recycling and saving	.070	.043	.076	12.815	.000	.320	.102	.094	.880	1.137
	Behavioral awareness	.176	.045	.187						.878	1.139
	Product usage awareness focused on environmental protection	.037	.038	.045						.907	1.103
Service quality of Green-Star hotels	Constant	2.807	.280								
	Social pressure	−.015	.049	−.014						.958	1.044
	Awareness of recycling and saving	.144	.052	.138	3.547	.007	.175	.031	.022	.880	1.137
	Behavioral awareness	.065	.054	.060						.878	1.139
	Product usage awareness focused on environmental protection	.029	.045	.031						.907	1.103
Contribution of green-star hotels to healthy product use	Constant	3.266	.321								
	Social pressure	−.156	.057	−.132						.958	1.044
	Awareness of recycling and saving	.126	.059	.105	3.482	.008	.173	.030	.021	.880	1.137
	Behavioral awareness	.065	.062	.052						.878	1.139
	Product usage awareness focused on environmental protection	−.033	.052	−.031						.907	1.103
Sensitivity to the use of green products	Constant	2.970	.261								
	Social pressure	−.101	.046	−.102						.958	1.044
	Awareness of recycling and saving	.216	.048	.217	7.468	.000	.250	.062	.054	.880	1.137
	Behavioral awareness	−.031	.050	−.030						.878	1.139
	Product usage awareness focused on environmental protection	.074	.042	.084						.907	1.103

When the F statistics are examined separately in the analysis in Table 9, the first model (F = 12.815; p = .000) is significant overall. The second model (F = 3.547; p = .007) is significant overall. The third model (F = 3.482; p = .008) is significant overall. Furthermore, the fourth model (F = 7.468; p = .000) is significant in all aspects.

Table 10. *Impact of Green Product Purchasing Behavior on Green Accommodation Purchasing Behavior (Multiple Regression Analysis)*

Dependent Variable	Model (constant) and independent variable	Unstandardized Coefficients		Standardized Coefficients	ANOVA		R	R^2	Adjusted R^2	Tolerance	VIF
		Beta	Std. error	Beta	F	Sig.					
Sacrifice in the use of green products	Constant	1.936	.262								
	Attitude toward solid waste	.059	.054	.056						.765	1.308
	Attitude toward packaging	.070	.050	.071						.795	1.257
	Responsibility for purchasing green products	.067	.045	.076						.777	1.287
	Attitude toward the environment	.086	.048	.095	7.055	.000	.316	.100	.086	.709	1.411
	Purchasing behavior of products with lower energy consumption	.058	.037	.077						.836	1.196
	Awareness of environmentally friendly products	.042	.043	.050						.787	1.270
	Behavior of trying to consume less electricity	.084	.039	.102						.875	1.143
Quality of Green-Star hotel service	Constant	.989	.287								
	Attitude toward solid waste	.260	.059	.217						.765	1.308
	Attitude toward packaging	.133	.054	.117						.795	1.257
	Responsibility for purchasing green products	.187	.049	.184						.777	1.287
	Attitude toward the environment	−.011	.053	-.010	14.049	.000	.425	.181	.168	.709	1.411
	Purchasing behavior of products with lower energy consumption	.065	.041	.075						.836	1.196
	Awareness of environmentally friendly products	.052	.047	.054						.787	1.270
	Behavior of trying to consume less electricity	.016	.043	.017						.875	1.143

Table 10. Continued

		B	Std. Error	Beta	F	p	R	R²	Adj. R²	Tolerance	VIF
Contribution of Green-Star Hotels to the Use of Healthy Products	Constant	.804	.333								
	Attitude toward solid waste	.156	.068	.114						.765	1.308
	Attitude toward packaging	.181	.063	.140						.795	1.257
	Responsibility for purchasing green products	.215	.058	.185						.777	1.287
	Attitude toward the environment	.003	.061	.002	11.673	.000	.394	.155	.142	.709	1.411
	Purchasing behavior of products with lower energy consumption	−.022	.047	−.022						.836	1.196
	Awareness of environmentally friendly products	.171	.054	.155						.787	1.270
	Behavior of trying to consume less electricity	−.022	.050	−.021						.875	1.143
Sensitivity to the use of green products	Constant	.808	.265								
	Attitude toward solid waste	.243	.054	.214						.765	1.308
	Attitude toward packaging	.121	.050	.113						.795	1.257
	Responsibility for purchasing green products	.072	.046	.075						.777	1.287
	Attitude toward the environment	.159	.049	.162	18.221	.000	.472	.222	.210	.709	1.411
	Purchasing behavior of products with lower energy consumption	.089	.038	.108						.836	1.196
	Awareness of environmentally friendly products	.054	.043	.059						.787	1.270
	Behavior of trying to consume less electricity	.006	.040	.006						.875	1.143

When the F statistics are examined using the analysis in Table 10, the first model (F = 7.055; p = .000) is significant overall. The second model (F = 14.049; p = 0.000) is statistically significant. The third model (F = 11.673; p = .000) is significant as a whole. Furthermore, the fourth model (F = 18.221; p = .000) is significant overall.

When the F statistics are examined using the analysis in Table 10, the first model (F = 7.055; p = .000) is significant overall. The second model (F = 14.049; p = 0.000) is statistically significant. The third model (F = 11.673; p = .000) is significant as a whole. Furthermore, the fourth model (F = 18.221; p = .000) is significant overall.

Tables 8, 9, and 10 show that the tolerance values exceed 0.10. Furthermore, a VIF value of <10 indicates no multicollinearity, tolerance, and VIF values support that the dimensions of purchasing behavior of green products have an impact on the dimensions of purchasing behavior of green accommodations.

Discussion and Conclusions

Due to the investigation's analysis, it was found that the dimensions of the research variables had a low- to medium-level relationship. Furthermore, it has been determined that environmental awareness significantly impacts purchasing green products and accommodation. Finally, it has been observed that green product purchasing behavior significantly impacts green accommodation purchasing behavior.

The research findings are consistent with the study by Alkaya et al. (2016), which sought to determine the impact of environmental sensitivity on green purchasing behavior. According to their study, ecological sensitivity and personal sensitivity are two dimensions of environmental sensitivity that impact green product purchasing behavior. Onurlubaş (2019) examined the impact of consumer social impact, environmental sensitivity, and environmental awareness on consumer purchasing behavior for green products. He found that social impact had a moderately significant impact on green product purchasing behavior, while environmental sensitivity and awareness had a minor impact. It is clear that the research results are consistent with the conclusion that it has a significant impact.

Furthermore, Nakitoğlu and Tatlıdil (2009) examine consumer environmental awareness levels and the impact of environmental awareness on purchasing behavior. They found that as consumer awareness of environmental pollution and protection grows, so does its impact on consumer purchasing behavior, which is consistent with the research results. Çatı and Öcel (2019) sought to assess the impact of people's environmental awareness on environmental behavior within the context of green marketing activities. The study results are consistent with the level of environmental awareness, which affects environmental behavior.

Oğuz and Yılmaz (2019) investigated the impact of environmental sensitivity, attitude, and behavior on selecting a green-star hotel. They found a strong link between environmental sensitivity, attitude, behavior, and intention to stay at a green-star hotel. This finding is consistent with the research results. Sünnetçioğlu et al. (2019) also wanted to know if environmentally conscious consumer behavior affects tourist purchasing behavior. They found that environmentally friendly consumer behavior impacts the intention to choose green hotels, which is consistent with the research findings. Furthermore, the statement that environmentally sensitive consumer behavior can be used to predict the intention to stay at a green hotel suggests that the results are comparable.

Berk and Celep (2020) examine how a green hotel image of hotels with green stars affects consumer purchasing behavior. They found that green marketing activities positively impact consumer purchasing behavior, which is consistent with the research

results. Celiloğlu (2014) also examined the impact of consumer attitudes toward green hotels on their intention to stay in these hotels. They found a positive significant relationship between consumer perceptions of green hotels and their intention to stay, which is consistent with the research result.

According to the study's regression analysis, environmental awareness significantly impacts green product and accommodation purchasing behavior. The same analysis revealed that green purchasing behavior significantly impacts green accommodation. Li et al. (2020) examined the impact of environmental awareness on green purchasing intention and its ultimate impact on brand evangelism when studies were aligned with the research results. According to the study, altruism and environmental awareness partially mediate the indirect relationship between environmental awareness and green purchasing intention.

Demir et al. (2021) examined the impact of consumer environmental awareness on their intention to visit green accommodation establishments in Northern Cyprus and the mediating role of consumer values. The research shows that environmental concerns directly and positively affect guests' intentions to visit green accommodation establishments. Furthermore, functional and emotional values were found to mediate the relationship between environmental concerns and guests' knowledge of their intentions to visit green accommodation establishments. Finally, the study suggests that the research will help managers understand the importance of raising green awareness among consumers and marketing it to customers.

Ahmed et al. (2021) investigated the effects of green trust, environmental quality awareness, green self-efficacy, and environmental attitude on green purchasing behavior and the mediating impact of environmental attitude. They found a positive impact of green trust, self-efficacy, and environmental attitude on green purchasing behavior. Furthermore, environmental attitudes were found to mediate the relationship between environmental quality awareness and green purchasing behavior and the relationship between green self-efficacy and green purchasing behavior. As a result, the findings of this study are similar to those of previous studies in the relevant literature.

In terms of academic contributions, this study found that the research variables are interconnected. Although some studies in the literature discuss research variables individually and in pairs, few local and international studies discuss these three variables together. To close this gap, researchers must examine the relationship between research variables and larger sample groups in ecotourism destinations with diverse cultural characteristics. Furthermore, because the data derived are limited to domestic tourists visiting Antalya, it is suggested that future research be conducted on local and foreign tourists visiting various destinations. This allows for comparing the research results to similar research results in the literature, resulting in a theoretical contribution to the literature. Furthermore, the study's variables are limited to the reliability and validity of the measurement tools used.

To carry out ecotourism activities in the region and ensure their sustainability, organizations involved in tourism in general, and ecotourism in particular, should conduct information and awareness campaigns. For example, environmental awareness should be raised among both local and foreign tourists and locals, and then encouraged to buy green products and stay in green accommodations. Ensuring and supporting the sustainability of ecotourism activities requires protecting the environment and other natural and cultural resources, as well as raising environmental awareness. To gain support for ecotourism activities from domestic tourists, as well as foreign tourists and locals, training programs on the benefits of ecotourism based on environmental protection should be organized in various languages. Furthermore, relevant organizations should organize environmental awareness-raising activities and organizations that bring people together to create environmental awareness and demonstrate that awareness through behavior.

ORCID IDs of the authors

Aysen Ercan İştin   0000-0002-7622-361X
Ahmet Özben   0000-0002-2240-7819

REFERENCES

Abdou, A. H., Hassan, T. H. & El Dief, M. M. (2020). A description of green hotel practices and their role in achieving sustainable development. *Sustainability, 12*(22), 9624. doi: https://doi.org/10.3390/su12229624

Acampora, A., Preziosi, M., Lucchetti, M.C. & Merli, R. (2022). The role of hotel environmental communication and guests' environmental concerns in determining guests' behavioral intentions. *Sustainability*, 14, 11638. doi: https://doi.org/10.3390/su141811638

Adetola, O.J., Aghazadeh, S. & Abdullahi, M. (2021). Perceived environmental concern knowledge, and intention to visit green hotels: Do perceived consumption values matter? *Pakistan Journal of Commerce and Social Sciences, 15*(2), 240-264. Erişim adresi: https://www.econstor.eu/handle/10419/237077

Ahmad, M., Ahmed, Z., Majeed, A. & Huang, B. (2021). An environmental impact assessment of economic complexity and energy consumption: does institutional quality make a difference? *Environmental Impact Assessment Review*, 89, 1-9. doi:https://doi.org/10.1016/j.eiar.2021.106603

Akehurst, G., Afonso, C. & Martins Gonçalves, H. (2012). Re-examining green purchase behavior and the green consumer profile: new evidence. *Management Decision, 50*(5), 972-988. doi:https://doi.org/10.1108/00251741211227726

Alkaya, A., Çoban, S., Tehci, A. & Ersoy, Y. (2016). Çevresel duyarlılığın yeşil ürün satın alma davranışına etkisi: Ordu Üniversitesi örneği. *Erciyes Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 47*, 121-134. Erişim adresi: https://dergipark.org.tr/tr/download/article-file/282808

Al-Kumaim, N.H., Shabbir, M.S., Alfarisi, S., Hassan, S.H., Alhazmi, A.K., Hishan, S.S., Al-Shami, S., Gazem, N.A., Mohammed, F. & Abu Al-Rejal, H.M. (2021). Fostering a clean and sustainable environment through green product purchasing behavior: insights from Malaysian consumers' perspective. *Sustainability, 13*, 12585. doi:https://doi.org/10.3390/ su132212585

Atabek Yiğit, E. & Balkan Kıyıcı, F. (2022). The environmental Awareness in the Context of Sustainable Development: A Scale Development Study. Sakarya University Journal of Education, 12(3), 646-665.

Bayram, N. (2009). *Sosyal Bilimlerde SPSS ile Veri Analizi.* İstanbul: Ezgi Kitapevi.

Büyüköztürk, Ş. (2018). *Sosyal Bilimler İçin Veri El Kitabı.* Ankara: Pegem Akademi.

Can, A. (2013). *SPSS ile Bilimsel Araştırma Sürecinde Nicel Veri Analizi*. Ankara: Pegem Akademi.

Carter, R.W., Whiley, D. & Knight, C. (2004). Improving environmental performance in the tourism accommodation sector. *Journal of Ecotourism, 3*(1), 46-68. doi:https://doi.org/10.1080/14724040408668149

Celiloğlu, F.K. (2014). *Yeşil pazarlamanın turizmde satınalma davranışlarına etkisinin incelenmesine yönelik organik oteller üzerine bir uygulama* (Yayınlanmamış Yüksek Lisans Tezi). Selçuk Üniversitesi Sosyal Bilimler Enstitüsü, Konya.

Ceylan, Y. (2017). *Yeşil yıldızlı konaklama işletmelerinde kalan turistlerin algılarına yönelik bir araştırma: Muğla ili örneği* (Yayınlanmamış Yüksek Lisans Tezi). Batman Üniversitesi Sosyal Bilimler Enstitüsü, Batman.

Chen, Y. & Chang, C. (2012). Enhance green purchase intentions: The roles of green perceived value, green perceived risk, and green trust. *Management Decision, 50*(3), 502–520. doi:https://doi.org/10.1108/00251741211216250.

Cheng, Y.M., Lou, S.J., Kuo, S.H. & Shih, R.C. (2013). Investigating elementary school students' technology acceptance by applying digital game-based learning to environmental education. *Australasian Journal of Educational Technology, 29*(1), 96-110. doi: https://doi.org/10.14742/ajet.65

Cometa, L. (2012). *Consumer beliefs about green hotels* (Yüksek Lisans Tezi, Kent State University, Ohio). Erişim adresi: https://etd.ohiolink.edu/acprod/odb_etd/ws/send_file/send?accession=kent1331918204&disposition=inline

Çetinkaya, C. & Özceylan, E. (2017). Üniversite öğrencilerinin yeşil satın alma tutumlarının incelenmesine yönelik bir araştırma: Gaziantep üniversitesi örneği. *Gaziantep Üniversitesi Sosyal Bilimler Dergisi, 16*(1), 289-302. doi: https://doi.org/10.21547/jss.273091

Çokluk, Ö., Şekercioğlu, G. & Büyüköztürk, Ş. (2010). *Sosyal Bilimler İçin Çok Değişkenli İstatistik*. Ankara: Pegem Akademi. Erişim adresi: https://dergipark.org.tr/tr/download/article-file/276933

Çokluk, Ö., Şekercioğlu, G. & Büyüköztürk, Ş. (2012). *Sosyal bilimler için çok değişkenli istatistik SPSS ve LISREL uygulamaları.* Ankara: Pegem Akademi.

Dangelico, R.M. Fabio, N. and Pompei, A. (2021). Which are the determinants of green purchase behaviour? A study of Italian consumers. *Business Strategy and the Environment, 2600-2620.* doi:https://doi.org/10.1002/bse.2766

Demir M., Rjoub, H. & Yesiltas, M. (2021). Environmental awareness and guests' intention to visit green hotels: The mediation role of consumption values. *PLoS ONE, 16*(5), e0248815. doi:https://doi.org/10.1371/journal.pone.0248815

Dikmenli, Y. & Konca, A.S. (2016). Validity and reliability study of environmental awareness scale. *Journal of Theory and Practice in Education, 12*(6), 1273-1289. Erişim adresi: https://dergipark.org.tr/tr/download/article-file/262346

Djordjević, J. (2002). New environmental ethics and environmental protection. *Teme, 26*(2), 235-244. Erişim adresi: http://scindeks-clanci.ceon.rs/data/pdf/0353-7919/2002/0353-79190202235D.pdf

Forina, M., Armanino, C., Lanteri, S. & Leardi, R. (1989). Methods of varimax rotation in factor analysis with applications in clinical and food chemistry. J. Chemom. 3, 115–125.

Golzar, J., Noor, S. & Tajik, O. (2022). Convenience Sampling. International Journal of Education and Language Studies, 1(2), 72–77. Doi: 10.22034/ijels.2022.162981.

Goralnik, L., Millenbah, K.F., Nelson, M.P. & Thorp, L. (2012). An environmental pedagogy of care: Emotion, relationships, and experience in higher education ethics learning. *Journal of Experiential Education, 35*(3), 412-428. doi: https://doi.org/10.1177/105382591203500303

Han, H. (2020). Theory of green purchase behavior (TGPB): A new theory for sustainable consumption of green hotel and green restaurant products. *Business Strategy the Environment, 29*, 2815–2828. doi: https://doi.org/10.1002/bse.2545

Hoş, S. (2020). Çoklu doğrusal regresyon analizi güvenilirliğinin jackknife tekniği ile sınanmasına yönelik bir araştırma. *Yönetim ve Ekonomi*

Araştırmaları Dergisi, 18(4), 304-316. doi: https://doi.org/10.11611/yead.634555

Hvenegaard, G.T. (1994). Ecotourism: A status report and conceptual framework. *Journal Of Tourism Studies, 5*(2), 24-35. Erişim adresi: https://search.informit.org/doi/abs/10.3316/ielapa.950706232

Kalaycı, Ş. (2014). *SPSS Uygulamalı Çok Değişkenli İstatistik Teknikleri.* Ankara: Asil Yayın Dağıtım.

Krejcie, R. V.& Morgan, D. W. (1970). Determining sample size for research activities. Educational and Psychological Measurement, 30, 607-610. doi.org/10.1177

Kuar, L., Ng, L.P., Choong, Y., Chen, I., Teoh, S. & Tee, C. (2002). Hotel's green practices adoption: Determinants and top managers' environmental commitment. Advances in Hospitality and Tourism Research (AHTR), 10(2), 157-187. doi: https://doi.org/10.30519/ahtr.937991

Kumar, S., Getirana, A., Libonati, R, Hain, C., Mahanama, S. & Andela, N. (2022). Changes in land use enhance the sensitivity of tropical ecosystems to fire-climate extremes. *Scientific Reports*, 12, 964 . doi: https://doi.org/10.1038/s41598-022-05130-0

Ivanov, S. & Webster, C. (2007). Measuring the impact of tourism on economic growth. *Tourism Economics, 1*3(3), 379-388. doi: https://doi.org/10.5367/000000000778149777

Li, W., Bhutto, T.A., Xuhui, W., Maitlo, Q., Zafar, A.U. & Bhutto, N.A. (2020). Unlocking employees' green creativity: the impacts of green transformational leadership, green intrinsic, and extrinsic motivation. *Journal of Cleaner Production, 255*, 120229. doi: https://doi.org/10.1016/j.jclepro.2020.120229

Lin, R.J. (2013). Using fuzzy DEMATEL to evaluate the green supply chain management practices. *Journal of Cleaner Production, 40*, 32–39. doi: https://doi.org/10.1016/j.jclepro.2011.06.010

Lindberg, K. (1991). *Policies For Maximising Nature Tourism's Ecological and Economic Benefits*. Washington: World Resources Institute.

Lizuka, M. (2000). Role of environmental awareness in achieving sustainable development. *Santiago de Chile, Comisión Económica para América Latina y el Caribe (CEPAL)*.

Magdoff, F. (2013). Global Resource Depletion: Is Population the Problem? Monthly Review, 64, 13.

Md Harizan, S. H. & Haron, M. S. (2012). Green product purchase behavior: relevance for Muslims. *Chinese Business Review, 11*(4), 377-382. Erişim adresi: https://www.davidpublisher.com/Public/uploads/Contribute/5514af8fbe476.pdf

Merli, R., Preziosi, M., Acampora, A. & Ali, F. (2019). Why should hotels go green? Insights from guests' experience in green hotels. *International Journal of Hospitality Management, 81*, 169–179. doi: https://doi.org/10.1016/j.ijhm.2019.04.022

Namkung Y. & Jang S. (2013). İmpacts of restaurant green practices on brand equity formation: Do green practices really matter? *International Journal of Hospitality Management, 33*(2), 85-95. doi: https://doi.org/10.1016/j.ijhm.2012.06.006

Oğuz, Y.E. & Yılmaz, V. (2019). Çevre bilincinin yeşil yıldızlı otel tercihine etkisi: ESOGÜ turizm fakültesi öğrencileri örneği. *Eskişehir Osmangazi Üniversitesi İİBF Dergisi, 14*(1), 51-66. doi: https://doi.org/10.17153/oguiibf.411968

Onurlubaş, E. (2019). The İmpacts of social impact, environmental awareness and environmental awareness on green product purchasing behavior. *Turkish Journal of Agriculture-Food Science and Technology, 7*(3), 447-457. doi: https://doi.org/10.24925/turjaf.v7i3.447-457.2403

Patwary, A. K., Rasoolimanesh, S. M., Rabiul, M. K., Aziz, R. C. and Hanafiah, M. H. (2022). Linking environmental knowledge, environmental responsibility, altruism, and intention toward green hotels through ecocentric and anthropocentric attitudes. *International Journal of Contemporary Hospitality Management, 34*(12), 4653-4673. Erişim adresi: https://www.emerald.com/insight/content/doi/10.1108/IJCHM-01-2022-0039/full/pdf?title=linking-environmental-knowledge-environmental-responsibility-altruism-and-intention-toward-green-hotels-through-ecocentric-and-anthropocentric-attitudes

Ratner, B. (2009). The correlation coeffi cient: Its values range between + 1 / - 1, or do they? Journal of Targeting, Measurement and Analysis for Marketing, 17(2), 139-142.

Rogayan, D. & Nebrida, E. E. E. D. (2019). Environmental awareness and practices of science students: Input for ecological management plan. *International Electronic Journal of Environmental Education, 9*(2), 106-119. Erişim adresi: https://files.eric.ed.gov/fulltext/EJ1219420.pdf

Salem, I.E., Elbaz, A.M., Al-Alawi, A., Alkathiri, N.A. & Rashwan, K.A. (2022). Investigating the role of green hotel sustainable strategies to improve customer cognitive and affective image: Evidence from PLS-SEM and fsQCA. *Sustainability*, 14, 3545. doi:https://doi.org/10.3390/su14063545

Sanchez M.J. & Lafuente, R. (2010). Defining and measuring environmental awareness. *Revista Internacional De Sociología, 68*(3), 732–755. DOI: 10.3989/ris.2008.11.03

Schmidt, J.E. (2007). From intentions to actions: The role of environmental awareness on college students. *UW-La Crosse Journal of Undergraduate Research*, Erişim adresi: https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=7c898a8459f93481f9378ab25faf924eb7a0edf1

Seyfang, G. (2005). Shopping for sustainability: Can sustainable consumption promote ecological citizenship? *Environmental Politics, 14* (2), 290 – 306. doi: https://doi.org/10.1080/09644010500055209

Seyfang, G. (2006). Ecological citizenship and sustainable consumption: Examining local organic food networks. *Journal of Rural Studies, 22*(4), 383–395. doi:10.1016/j.jrurstud.2006.01.003

Si, W., Jiang, C. & Meng, L. (2022). The Relationship between environmental awareness, habitat quality, and community residents' pro-environmental behavior—mediated impacts model analysis based on social capital. *International Journal of Environmental Research and Public Health, 19*, 13253. doi:https://doi.org/10.3390/ ijerph192013253

Sungur, O. (2016). *Korelasyon analizi. Şeref Kalaycı (Yay. Haz.). SPSS Uygulamalı Çok Değişkenli İstatistik Teknikleri* içinde, (115-116). Ankara: Asil Yayın Dağıtım.

Sünnetçioğlu, A., Yıldırım, H.M. & Atay. L. (2019). Çevre bilinçli tüketici davranışının yeşil otel tercih etme niyeti üzerindeki rolü. *Journal of Tourism and Gastronomy Studies, 7*(1), 205-224. Erişim adresi: https://jotags.net/index.php/jotags/article/view/568

Tabachnick, B.G. & Fidell, L.S. (2013). *Using multivariate statistics*, Boston: Pearson INC.

Ting, C.T., Hsieh, C. M., Chang, H. P. & Chen, H.S. (2019). Environmental awareness and green customer behavior: the moderating roles of incentive mechanisms. *Sustainability, 1*1(3), 819. doi: https://doi.org/10.3390/su11030819

Umar, M., Khan, S.A.R., Yusoff Yusliza, M., Ali, S. & Yu, Z. (2022). Industry 4.0 and green supply chain practices: an empirical study. *International Journal of Productivity and Performance Management, 71*(3), 814-832. doi:https://doi.org/10.1108/IJPPM-12-2020-0633

Ural, A. & Kılıç, İ. (2006). *Bilimsel Araştırma Süreci ve SPSS ile Veri Analizi*, Ankara: Detay Yayıncılık.

Uzmen, R. (2007). *Küresel Isınma ve İklim Değişikliği İnsanlığı Bekleyen Büyük Felaketmi*. İstanbul: Bilge Sanat Yapım Yayınları.

Yousaf, Z. (2021). Go for green: green innovation through green dynamic capabilities: accessing the mediating role of green practices and green value co-creation. *Environmental Science and Pollution Research, 28*, 54863–54875 (2021). doi:https://doi.org/10.1007/s11356-021-14343-1

Ziadat, A.H. (2009). Major factors contributing to environmental awareness among people in a third world country / Jordan. *Environment, Development Sustainability, 12*, 135–145. doi:https://doi.org/10.1007/s10668-009-9185-4

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