Research Article

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The Relationship Between Environmental Sensitivity, Ecological Attitude, and the Ecological **Product purchasing Behaviour of Tourists**

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Abstract: This research was conducted to determine the relationship between environmental sensitivity, ecological attitude, and ecological product purchasing behaviour of tourists. Within the scope of the research, a survey was conducted on foreign tourists who visited Manavgat, Turkey. The Smart PLS program was used to determine the relationships among the variables. According to the results of the research, it has been determined that tourists' environmental sensitivity has a strong effect on their ecological attitude and their behaviour in purchasing ecological products. Moreover, ecological attitude plays a mediating role in the relationship between environmental sensitivity and ecological product purchasing behaviour. Many suggestions are offered to the academicians, business managers in the sector, and destination management organisations at the end of the study.

Keywords: environmental sensitivity; ecological attitude; ecological product; tourist

1 Introduction

In recent years, almost all tourist destinations and tourism businesses have focused on sustainable tourism (Ahmad et al., 2018). In addition to the positive results generated by the developments in tourism, the negative impacts of tourists on nature and environment have caused concern in terms of sustainability. For this reason, suggestions made to tourists visiting the destination to be sensitive towards the environment have started to be important not only for the regional stakeholders but also for the determination of environmentally sensitive behaviours of the tourists (Ballantyne et al., 2011; Kim et al., 2011; Miller & Twining-Ward, 2005; Wu et al., 2013; Liu et al., 2019).

Environmental information is related to individuals' sense of responsibility for protecting the natural environment. Tourists who acknowledge environmental issues are more sensitive to their location, and more caring about that place (Huang & Shih, 2009; Peterson, 1982). Sustainable development in the tourism business is generally associated with environmental practices (Tepelus & Córdoba, 2005). In the most general sense, 'the environment' is the place in which all the living and non-living beings take shelter. For the sustainability of the energies of living beings, the habitat that exists spontaneously in nature must be protected. Some studies note that problems such as the increase in the level of sea water (Nicholls & Cazenave, 2010) and deterioration of natural areas (Sahoo & Bhaskaran, 2018) have increased environmental trends in tourism, as in all other sectors. In some destinations, the negative environmental impacts of tourism have been felt far more harshly because of the intensity of the number of travellers to the regions, which exceeds the bearing capacity of the destinations and is causes over-tourism (Ma et al., 2020).

Environmental sensitivity is related to an interest in the environment and presenting behaviours to protect it; it is a very important influence in ensuring sustainable development (Chawla, 1998; Dolnicar & Grün, 2009; Singh et al., 2021). 'Environmentally sensitive behaviours' refer to the actions of individuals and groups to minimise the damage to the natural environment and to solve environmental problems (Hungerford & Peyton, 1977; Chao & Lam, 2011). Therefore, environmental awareness contributes to the development of emotional bonds and responsible behaviour towards the environment in which the indi-

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viduals live or the products they use (Cheng & Wu, 2015; Singh et al., 2021).

Liu and Huang (2017) emphasised that environmental awareness has two steps. The first of these steps is to be aware of environmental change; the second is to be concerned about environmental problems and to strive to solve them. For this reason, individuals with environmental awareness strive to develop positive behaviours towards the environment (Pan et al., 2018).

For the last few decades, heavy toxic substances from industries have been mixed into the air, water, and soil. Environmental pollution has thus increased with the use of heavy metals (Niriagu, 1996). When evaluated in an environmental dimension, this situation has mainly affected the sustainability of natural resources. The development of the sustainability concept and the increase in environmental protection policies have pioneered the approach to events with social movement awareness and the globalised adoption of an ecological attitude (Akgül, 2010). In order to understand the attitude of people towards environmental issues, it is essential to examine how people adopt the attitude they already have. The process of an individuals gaining necessary ecological and pro-environmental attitudes will also affect their environmental behaviour (Cornelissen et al., 2008).

The individuals with a high sense of social and environmental responsibility give attention to acting accordingly, and this responsibility determines the products that they will buy within their consumption behaviour (Colins et al., 2007). In conjunction with the development of the individuals' environmental sensitivity, the changes observed in attitude and belief dimensions directly affect people's ecological product purchasing behaviour. The ecological product purchasing behaviour, which is also referred to as 'green purchasing,' is directly related to the environmental sensitivity of people (Gadenna et al., 2011). The products that are produced ecologically are the products which have been prepared to meet the personal needs of individuals and with the principle of not harming the environment. The businesses determining an environmentally friendly production strategy while preparing these products play an active role in gaining the trust of environmentally conscious customers, who will prefer these products as well (Chen & Chang, 2012).

The individuals with a high level of environmental sensitivity display environmentally friendly purchasing behaviours in accordance with this sensitivity. Given this tendency, while adopting pro-environmental attitudes individuals and also businesses, governments, and non-governmental organisations have the responsibility to protect the environment and leave a sustainable

home for future generations (Shetzer et al., 1991). For this reason, businesses have started to turn towards green practices to gain a sustainable, competitive advantage. These practices are very important for creating a positive brand image and meeting the expectations of customers (Lozano, 2015).

Individuals who prefer to purchase environmentally friendly products and act with a sense of responsibility towards the environment increase the demand in this area by creating a competitive environment among the businesses. For this reason, finding out the demand for ecological products is also a guide in terms of learning the potential of environmentally conscious individuals.

This study has provided important contributions to the literature as a result of the findings obtained. First of all, there are findings in the literature regarding the effect of environmental sensitivity on ecological product purchasing behaviour (Gadenna et al. 2011). In this research, the consideration of ecological attitude as one of the determinants of ecological purchasing intentions will significantly contribute to the literature. Second, unlike other studies, besides determining the direct impact of ecological attitude on ecological purchase intentions, this study aims to determine the mediating role of ecological attitude in the relationship between environmental stimuli and ecological purchasing intentions. Third, the data were collected from the Manavgat region, which is one of the most visited destinations in Turkey. The current state of environmental damage is rather high in the destination, which was visited by more than 4.5 million tourists in 2019. In this context, through the research that has been carried out in this destination on ecological product purchasing intention, precious contributions have been made to the determination of sustainable tourism policies which are planned and implemented by the management organisations in Manavgat and similar destinations.

2 Conceptual Framework

In order to ensure the sustainability of the living space and create ecological balance, human beings need to develop a system that accords with certain values. If people act as an organised community rather than only as self-directed individuals, while presenting an environmentally conscious attitude, sustainability is effectively created (Zsoka, 2008). In the changing world order, ignoring the ecological balance, destroying the soil, opening oil wells in areas where they should not be opened, have caused tremendous environmental damage. Although this situ-

ation has caused irreversible damages in issues such as the fertility of the soil and the sustainability of ecological systems, it also caused an increase in environmental sensitivity (Grob, 1995).

In order to exhibit environmentally conscious behaviours, it is first necessary to be aware of environmental problems and to be knowledgeable about the reasons that cause these problems to arise (Cetin et al., 2017). The concerns related to environmental issues first came to the fore in the 1960s with the damage caused by the waste materials that emerged with the industrialisation movement. The changes experienced in the incomes of individuals in the globalising world order have spread to the cultural worlds and contributed to the formation of ecologically conscious individuals (Straughan & Roberts, 1999). Environmentally conscious individuals are considered to be the ones who do not remain indifferent to the realisation of environmentally harmful activities in the society and who endeavour to make changes to prevent this harmful progress (Erten, 2004).

Ecological consciousness is very important in terms of the development of ecological behaviours. Ecological behaviours, which are directly related to the protection of the environment and ensuring sustainability, begin to be formed after three criteria are met: having knowledge about the environment; noticing environmental problems; and worrying about these problems (Chan et al., 2017). Environmental knowledge is mainly expressed as the individual's understanding and evaluation of the impacts of society on the ecosystem. As for environmental awareness, it occurs when people acknowledge the impacts of human behaviour on the environment (Kollmus & Agyeman, 2002). Finally, the concept perceived as 'environmental concern' is defined as 'evaluation of, or an attitude towards facts, one's own behaviour, or others' behaviour with consequences for the environment' (Fransson & Gärling, 1999). Environmental behaviours are the beneficial thoughts and actions developed towards the environment in dealing with fear, anger, restlessness, value judgments arising from environmental problems, and in salving the environmental problems (Erten, 2004).

Increasing environmental sensitivity has brought changes in the purchasing behaviours of individuals. Ecological products have an important role in the development of competition and ensuring sustainability (Baloğlu & McCleary, 1999; Northcote & Macbeth, 2006). Other than meeting purchasers' needs, the products purchased have started to be preferred for more reasons, such as creating a social awareness (Çolakoğlu et al., 2013).

A number of activities carried out with the aim of protecting the environment and ensuring sustainability and recyclable environmentally friendly (green) products have started to create positive influences on tourists who advocate for environmentalism. Therefore, environmentalist attitudes are very important in the preferences regarding agencies and tours (Kaypak, 2010). These changes created in attitude and purchase behaviours of individuals have created positive effects on issues such as consumers' being more knowledgeable about ecological products and developing positive approaches to environmental problems.

Almossawi (2014) drew attention to environmental sensitivity and the issues of environmentally friendly product purchases in her study. Within the scope of that study, the effect of the environment was examined by considering environmental attitudes and concerns. According to the findings of the study, it was observed that young people were not qualified enough in terms of environmental knowledge, but their thoughts about ecological balance activities were progressing positively and they had a positive approach to ecological product purchasing behaviour. Ogunbode and Arnold (2012) examined environmental sensitivity and attitude in Nigeria in their studies. In the study, the reflections of environmental sensitivity and attitudes on behaviour and the impact created by socioeconomic conditions were discussed. When the findings were examined, even though people were becoming more conscious day by day about environmental sensitivity in Nigeria, it was stated that public awareness is not yet formed enough. For the development of environmental sensitivity and attitudes, a proposal was made and according to this proposal necessary environmentally friendly practices should be implemented and public participation in these practices should be ensured. Gadenna, Kennedy, and McKeiver (2009) drew attention to the formation of environmental consciousness and practices that raise environmental awareness. In the study, the applications that had been put into operation by the enterprises were categorised. According to the findings obtained from the study, it was determined that with the change in environmental sensitivity, a number of differences were made in environmental practices. Another result obtained from the study is that there is a positive increase in the level of ecological awareness with the increase in environmental practices. When the current studies have been examined, it can be understood that the intensity of the effect of environmental sensitivity on the ecological attitude remains uncertain. For this reason, the research hypothesis has been developed as follows:

H1: The environmental sensitivity of tourists affects their ecological attitude in a positive way.

The people that have the consciousness of protecting the environment and an increased sensitivity to ecological events, despite being against the globalising world order, have started to consume more than what is produced, being unable to prevent their individual desires from dictating their consumption from time to time. Among the destructive effects of this situation, destruction of resources takes the first place. The individuals, who destroy their resources with their own hands and who irreversibly destroy nature, have aimed to bring a new social dimension to the events by making changes in their ecological attitude and purchasing behaviour with the awareness of environmental protection because of having worries about the future and sustainability (Türküm, 1998). Within this context, the desire to purchase ecological products has started to develop.

Environmental approaches have brought environmental marketing along with them. Environmental marketing is the marketing activities that take into account the natural environment (Tarhan, 1996). Environmentalist individuals prefer products that use less energy and do not harm natural resources, compared to other products, and at the same time, their purchases, behaviours, and product preferences are shaped in line with environmentalist attitudes (Mainieri et al., 1997). For this reason, environmental approaches direct people's attitudes and policy choices (Zinkhan & Carlson, 1995). Mainieri et al. (1997) associated environmentalist attitudes with lifestyles in this regard.

According to Aracioğlu and Tatlıdil (2009), the environmental awareness of individuals has been increasing, and this increase has also given rise to the demand for environmentally friendly products. In the study carried out by Colakoğlu et al. (2013), it was stated that the attitude towards the environment and the level of knowledge about the environment affect the preference of environmental products. In accordance with the findings obtained from the study conducted by Özgüven Tayfun and Öçlü (2016), individuals' decisions to purchase environmentally friendly products depend on the source from which they get the information about the environmental usefulness of these products. Kaiser et al. (1999a) examined the issues of environmental attitude, sensitivity, and ecological behaviour. The concepts included in the study have been dealt with within the scope of planned behaviour theory. According to the data obtained from the study, a holistic social action should be taken in order to transform environmental sensitivity into ecological behaviour. Herberger (1975) focused on the reasons for purchasing ecological products in his research. According to the findings of the study, it was determined that individuals with

high environmental sensitivity acted with awareness of social benefits and bought environmentally friendly products because they considered future generations, instead of directly purchasing the products. What's more, it was also determined that individuals whose consumption was environmentally friendly, by acting wisely and rationally, bought only the products that needed to be purchased. Schwepker and Cornwell (1991) examined the ecological concerns of environmentally conscious individuals in their study and focused on their purchase of environmentally friendly products. According to the data obtained from the research, it was determined that people who were environmentally sensitive and had the intention of purchasing ecological products were willing to pay more for environmentally produced products than they did for normal products. Moroz and Polkowski (2016), through their study in which they investigated the environmental attitudes of Generation Y and to what extent these attitudes affect their purchasing behaviour, determined that young people were willing to pay more for products that did not harm the ecological balance and they exhibited environmentally friendly behaviours while seeking solutions to the problems they encounter, as well. Based on all this information, the research hypothesis has been developed as follows:

H2: Ecological attitude affects the ecological product purchase behaviour of tourists in a positive way.

Akehurst et al. (2012) dealt with the issues of environmental awareness and ecological product purchasing in their research. They determined that as a result of the increase in environmental awareness, individuals had an incentive to protect the environment and the level of the tendency to prefer ecological products in their purchasing behaviours increased. In order to develop environmental sensitivity and create ecological awareness, individuals should primarily know the ecological balance, the damages of climate change, and the level of average temperatures in the world (Bergengren et al., 2011). In order to realise ecological purchase behaviour, firstly, environmental sustainability must be precisely understood and the action plans that have been designed to protect the ecosystem must be put into practice. All the unconscious behaviours that damage the natural environment have been affecting it in a negative way (Rossi et al., 2008). Within the scope of his study, Boztepe (2012) examined the effects of environmentalist product sales policies on the purchasing behaviour of consumers. He tried to define the dimension of the impacts caused by these policies. In his findings, the promotional activities and design of the product fea-

tures in accordance with ecological balance affected the purchasing behaviour of the consumers in a positive way. Aracıoğlu and Tatlıdil (2009) examined how having environmental awareness affected the consumer behaviours in their research.

In line with the data obtained, with the development of industrial systems and the increase in environmental pollution, the perspectives of consumers towards environmental pollution have changed; the level of awareness has increased, as well. It has been determined that there is a positive increase in the ecological product purchasing intention of individuals with differentiation in the level of consciousness. In their study, Yılmaz et al. (2009) analysed the effects of environmental sensitivity and environmental behaviour on ecological product purchasing behaviour. Within the findings obtained from the study, it was determined that the individuals who participated in the study had environmentally sensitive attitudes, but they were not very successful in translating these attitudes into behaviour. Another finding obtained from the study is that although ecological products are thought to be healthier in terms of environmental perspectives, this opinion was not sufficiently reflected in the purchasing behaviours of the individuals.

Straughan and Roberts (1999) determined in their study that individuals in younger age groups have higher environmental concerns, women are more interested in environmental issues than men, and higher level of education has positive effects on environmental attitudes and behaviours. According to Ay and Ecevit (2005), individuals' interest in the environment is highly effective in creating environmentally friendly consumers who purchase environmentally friendly products. Fraj and Martinez (2007) found that environmental attitudes have a significant impact on ecological behaviour. According to Odabaşı (1992), green consumers prefer green products (environmentally friendly products) over the other rival products in the product group they intend to buy. Alkaya et al. (2016) stated that environmentally sensitive consumers are more inclined towards ecological products, and therefore enterprises tend to produce ecological products. In the study carried out by Kim and Choi (2005), it was determined that consumers with high environmental sensitivity are more interested in environmental issues and there is a positive relationship between environmental awareness and green product purchasing behaviour.

Kalafatis et al. (1999) examined the strategies of environmental product marketing within the scope of ecological product purchasing behaviour. According to the findings obtained from the study, it was determined that having environmental awareness is directly related to the moral attitudes of individuals and social norms have a direct effect on the purchasing behaviour of consumers. Çakmak and Özkan (2016) examined the effects of ecological awareness on ecological product purchasing intention in their study. Within the scope of the research, in order to collect the required data a questionnaire was given to students from 100 different universities, and as a result of this research, it was understood that the students who had an ecological understanding with more environmental awareness had more intention to purchase ecological products than the other students. Yoo et al. (2013) investigated the ecological product purchasing behaviours of environmentally conscious individuals in their study. In the study, it was determined that businesses producing sustainable environmentally friendly products drew the customers having more environmental consciousness, and as a result, they created ecological product purchasing behaviours. Akehurst et al. (2012) dealt with environmental awareness and purchasing ecological products in their research. Based on all this information, the research hypotheses developed to determine the ecological behaviour of tourists are as follows:

H3: Environmental sensitivity affects the ecological product purchase behaviour of tourists in a positive way.

H4: Ecological attitude has a mediating role in the process of environmental sensitivity's affecting the ecological product purchase behaviours of the tourists.

In line with the determined hypotheses, the research model below has been tested (Figure 1).

3 Methodology

3.1 Research instrument

In this study, questionnaires were the data collection technique. The questionnaire has been prepared in two parts. In the first part demographic questions about the gender,

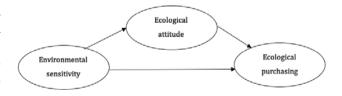


Figure 1: Conceptual model

age, marital status, and nationality of the tourists have been included. In the second part of the questionnaire, there are expressions about latent variables which have been formed depending on the purpose of the study. The statements in the research scale have been formed as the result of a comprehensive literature review (Kaiser et al., 1999a; Yılmaz et al., 2009).

Although there are several different scales related to the subject used in the literature, when the selected sample group was analysed, a number of constraints were evaluated while deciding on the scales. First, it was decided that the scale items should not be too long, since the sample group was foreign tourists visiting Manavgat. Tourists may be reluctant to fill out long questionnaires during their holiday experience. Secondly, since a structural model was used in the hypothetical research model, the scales, whose validity and reliability were tested in previous studies, with high factor load distributions, convergent and discriminant validity were preferred. Within the scope of the research, five statements regarding environmental sensitivity have been adapted from the study of Kaiser et al. (1999a). The related scale has frequently been preferred in the literature to measure environmental sensitivity. Yılmaz et al. (2009) used the mentioned scale in their study and found that all the values of the scale were strong. On similar grounds, three statements about ecological attitude have been determined based on the studies of Kaiser et al. (1999b) and Fraj and Martinez (2007). Finally, three statements about ecological product purchasing behaviour have been prepared by making use of Yılmaz et al. (2009). As a result, a total of 11 statements have been directed at tourists visiting the Manavgat destination. The expressions have been graded using a five-point Likert-type scale (1 = I strongly disagree, 5 = Istrongly agree).

3.2 Study area

Manavgat destination was chosen as the location of the study. Manavgat is one of the most important tourist destinations within the borders of Antalya in the southern part of Turkey. Besides, it has a considerable advantage thanks to its proximity to other touristic destinations such as Alanya and the central districts of Antalya. In fact, when the 2019 data have been evaluated, it can be seen that 4.8 million tourists visited Manavgat (Culture and Tourism Ministry, 2019). This number shows that Manavgat is the destination that attracts the most tourists in Antalya. The tourists coming to Manavgat are mostly from Russia,

Germany, and Ukraine (Alanya Touristic Hoteliers Association, 2021).

3.3 Sampling and data collection

A pilot study was applied before the actual data collection process was started. The pilot study was applied for two days in July 2019. Based on the results obtained from the pilot study conducted on 25 tourists, it was decided that all expressions were clear and understandable. In addition to this, it was understood in the reliability analvsis that the statements measure the relevant variables. Building on this result, the stage of collecting the actual data of the research was started. The data was obtained by the researchers, from the foreign tourists who visited Manavgat in July and August 2019, which is one of the busiest seasons of tourism. Within the specified period, 588 questionnaires were collected using the convenience sampling method, and the remaining 512 questionnaires were evaluated upon removing the incomplete and incorrect questionnaires.

3.4 Data analysis

The data obtained from the research was transferred to the SPSS package program and percentage and frequency tables were used accordingly. In order to test the developed model and determine the relationships between variables, the Smart-PLS program, which is an appropriate analysis approach in exploratory research, was used (Wold, 1985).

4 Findings

4.1 Demographic findings

The findings regarding the demographic characteristics of the tourists can be found in Table 1. Of those who have participated in the research, 45% are women (f = 229) and 55% are men (f = 283). While 12% are between the ages of 18 and 25 (f = 62), 34% are between 26 and 35 (f = 172), 25% are 36 to 45 (f = 128), 17% are 46 to 55 (f = 88) and 12% of them are in the age range of 56 and over (f = 62). When their marital status was examined, it has been determined that 62% are single (f = 317) and 38% are married (f = 195). When the distribution of the participants according to their nationalities was analysed, it has been concluded that 51% of them are German (f = 261), 36% of them are

Table 1: Demographic characteristics of the tourists

	Demographic Variables	n	%
Candan	Men	283	55.3
Gender	Women	229	44.7
	18-25	62	12.1
	26-35	172	33.6
Age	36-45	128	25.0
	46-55	88	17.2
	56 and over	62	12.1
Marital Status	Married	195	38.1
	Single	317	61.9
	German	261	51.0
	Russian	186	36.3
Nationalities	Dutch	40	7.8
	Austrian	15	2.9
	Belgian	10	2.0

Russian (f = 186), 8% of them are Dutch (f = 40), 3% of them are Austrian (f = 15), and 2% of them are Belgian (f = 10).

4.2 Model validity

Before analysing the model created depending on the research purpose, the validity and reliability values for the variables were examined. In this context, the internal consistency reliability, convergent validity, and discriminant validity were evaluated concerning the model validity. Table 2 contains the results regarding the internal consistency reliability and convergent validity of the variables in the study.

In the model validity, first of all, factor load values of the expressions were examined. Hair et al. (2011) argue that factor load values should have a minimum value of 0.40 and above, and expressions below the mentioned value should be removed from the model. Within this context, when the table has been analysed, it is seen that the factor loadings take a value of minimum 0.515. In addition, Cronbach's Alpha and rho A values and composite reliability (CR) values above 0.70 and average variance extracted (AVE) values above 0.50 indicate that the model validity is ensured (Hair et al., 2005; Fornell & Larcker, 1981). In addition to the values given in Table 1, the decomposition validities were also examined in order to test the model validity of the research. Henseler et al. (2015) claimed that the correlation averages of the expressions of all variables examined within the scope of the study should have a value of 0.85 or less to the geometric mean in order to ensure decomposition validity. Table 3 contains the values of the heterotrait-monotrait ratio (HTMT) criteria, and it is seen that values below the aforementioned value are reached. As a result, it can be said that the model is valid.

4.3 Path diagram and parameter estimates

The results obtained for the model are given in Figure 2.

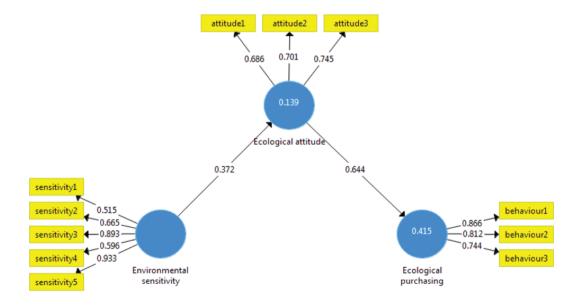


Figure 2: Structural model

Table 2: The results of measurement model

Factors / Expressions	Factor Loadings	t-value	$R^{^{2}}$	CR	Rho_A	CA	AVE
Environmental Sensitivity			-	0.851	0.887	0.851	0.546
It frustrates me that official institutions do not take measures to control environmental pollution.	0.515	4.367*					
I get angry and mad when I think about the environmental pollution caused by industrial factories.	0.665	6.576*					
Environmental pollution worries me.	0.893	13.254*					
I am concerned about the effects of polluted air on me and my family.	0.596	5.525*					
I'm afraid that the continuation of environmental pollution will drag the world into an uninhabitable environment.	0.933	9.949*					
Ecological Attitude			0.136	0.752	0.755	0.754	0.506
I think that the ecological products are tastier than the other products.	0.686	11.622*					
I think that the ecological products are grown in more natural conditions than the other products.	0.701	12.769*					
I think that the ecological products are healthier than the other products.	0.745	15.676*					
The Behaviour of Ecological Product Purchasing			0.413	0.850	0.854	0.850	0.654
I prefer to buy ecological products in order to protect the environment.	0.866	20.121*					
I buy ecological products with a peace of mind.	0.812	19.465*					
I prefer the ecological products, although they are expensive compared to similar products.	0.744	16.004*					

^{*}P< 0.001

Table 3: The results of discriminant validity HTMT criteria

Factor	1	2	3
1. Environmental sensitivity	-		
2. Ecological attitude	0.368	-	
3. Ecological product purchase behaviour	0.282	0.644	-

Within the research model, PLS algorithm was implemented to calculate linearity, path coefficients, and the (f2) values of R² values and effect sizes. Besides, to examine the predictive power of dependent variables (Q2), Blindfolding analysis was realised. To evaluate the significance of path coefficients, t-values were calculated by taking 5000 sub-samples through a re-sampling process

Table 4: Research model coefficients

Variables	Standardise β	t-value	p	f ²	Q^2	VIF	Result
ES → EA	0.372	6.020	0.000	0.161	0.059	1.000	Accepted
EA → EP	0.644	11.560	0.000	0.709	0.201	1.000	Accepted
ES → EP	0.285	5.230	0.000	0.089	0.042	1.000	Accepted

(bootstrapping). Findings regarding the research results are shown in Table 4.

When the VIF (Variance Inflation Factor) values between variables are examined, it can be said that the values are below the maximum value of 3. As a result, there is no linearity problem between the variables (Hair et al., 2005). In addition, when the results of the research were examined, it was found that environmental sensitivity positively affected the ecological attitude (β = 0.372; p <0.001), while ecological attitude had a significant effect $(\beta = 0.644; p < 0.001)$ on the intention to purchase ecological products. Moreover, study findings show that environmental sensitivity positively affects the intention to purchase ecological products (β = 0.285; p < 0.001). H1, H2, and H3 hypotheses have been accepted as a result of the evaluation.

When the values in Table 5 are examined, it is observed that environmental awareness indirectly affects the intention to purchase ecological products through ecological attitude (β = 0,240; p <0.001) and it seems that the intermediary role is partial. According to these results, H4 hypothesis has been accepted.

5 Discussion

In this study, the relationship between environmental sensitivity, ecological attitude, and ecological product purchasing intention has been analysed. The data of the study were collected from the tourists who visited the Manavgat destination using a questionnaire method. According to the data derived from the study, it has been determined that environmental sensitivity affects the ecological attitude in a positive way, while the ecological attitude has a significant and positive effect on the ecological product purchasing intention. The findings obtained from the research have parallel aspects to the studies carried out by Kaiser et al. (1999b) and Yılmaz et al. (2009).

In accordance with the tested hypotheses and findings, it is possible to say that environmental sensitivity positively affects the ecological product purchasing intention. It is important for enterprises in the tourism sector to design this purchase intention in a sustainable manner in accordance with customer preferences and needs to determine a certain price index considering the price balance in the market in terms of making environmental products more preferable and creating a specific ecological product market. Furthermore, the aforementioned findings of the study show similarities in line with the results of the studies conducted by other researchers such as Aaker and Joachimsthaler (2002), Hartmann and Ibáñez (2006), Tilikidou (2007), D'Souza et al. (2007), Lin and Chang (2012), Mostafa (2009), Suki (2013), Huang et al. (2014).

The study carried out by Cheng and Wu (2015) determined that environmental awareness has a positive effect on environmentally sensitive behaviours. Ntanos et al. (2019) analysed the environmental sensitivity of the students studying at a faculty of management, and they concluded that their environmental sensitivity directs their attitudes. Priadi et al. (2018) found that environmental awareness is effective in the formation of environmental citizenship behaviour. Dagher et al. (2015) stated that environmental concerns can generate environmental behaviours. The study carried out by Lin and Niu (2018) determined that environmental awareness, environmental knowledge, and social norms of consumers positively affect environmental attitudes, and at the same time, their purchase intention and behaviour are in favour of green products. D'Amico et al. (2016) found in their research that environmental sensitivity affects food preference and food consumption behaviours.

In the study of Moser (2016), it was determined that the importance given to the environment by the individuals who care about the environment and who are sensitive to the environment affects their environmental attitudes. and these environmental attitudes are particularly a consideration in environmentally friendly product purchasing behaviour. Trivedi et al. (2018) found in their study that introverted environmental attitude has an important role in green purchasing behaviour. According to the findings of the study presented by Chekima et al. (2016), environmental attitude affects green purchasing intention. The study conducted by Wahab et al. (2017), posited that environmental concerns affect consumer behaviour and the

Table 5: The results regarding the indirect impact

Variables	Standardise β	t-value	p	Result
$ES \rightarrow EA \rightarrow EP$	0.240	5.149	0.000	Accepted

intention to buy green (environmentally friendly product) products. Rusyani et al. (2021) found that environmental concern and green attitude have a strong impact on the intention to purchase environmentally friendly products. Therefore, it can be stated that the findings of this study have been supported by the previous studies analysing the same aspects.

According to another finding derived from the study, it is possible to say that environmental sensitivity indirectly affects the ecological product purchasing intention through ecological attitude and plays a partial mediating role. In the light of the data obtained, it can be stated that protecting the environment and creating environmental awareness affects the ecological attitudes of people, and as a result of this effect, the preferences of the individuals are in favour of environmentally friendly products during the purchase process. The study has presented similar results to the studies carried out by Kalafatis et al. (1999) and Junior et al. (2015).

In an examination of former studies, studies on green purchasing and environmental policies are available in the literature (Kim & Choi, 2005; Kilbourne & Pickett, 2008; Lee, 2009; Aman et al., 2012; Murtagh et al., 2012; Shahnaei, 2012; Yang & Zhang, 2012; Kaufmann et al., 2012; Lasuin & Ng, 2014; Yang & Zhang, 2020). The findings from these studies have shown that environmental concerns have a direct and positive effect on green purchasing behaviour. More precisely, as consumers' attitudes and sensitivity regarding the environment develop positively, their intention to purchase green products also develops in the same direction. Nevertheless, some of these studies have generally been examined within the scope of price, business, and government policies, and the scope of the subject has not been sufficiently expanded. On the other hand, since this study has been carried out directly on the tourists visiting the Manavgat destination, it brings a sociological and touristic perspective to the subject. When the findings of the study have been examined from a holistic perspective, it can be stated that in order for the ecological attitude to be constituted, a number of ecological attitudes - such as the desire to protect the environment and sustainable environmental concern - must be created, and these attitudes can trigger environmental concerns and make people adopt environmentally friendly purchasing choices. What's more, informing the tourists about environmental problems and environmental negativities has a positive effect on increasing their sensitivity towards the environment and their willingness to participate in green practices within the scope of environmental protection (Chan, 2014; Trang et al., 2019).

Within the context of the findings obtained from the study, a number of recommendations could be made for the touristic enterprises producing ecological products. They should improve their product diversity and produce products that can compete with other businesses, and it is of great importance to consider the price level in the general market while producing these products. It is also essential for businesses to develop production strategies suitable for the needs and demands of the individuals while developing product variety at the same time.

In order to support environmental sensitivity through attitudes and behaviours, improving environmental awareness from an early age and keeping this awareness alive in future generations will be a fundamental achievement. Our environment is the greatest trust that the world in which we live has bestowed on living beings. Therefore, we should internalise this value in the best way and leave a sustainable world for future generations. Based on this study, focusing on what kind of factors are effective on holiday destination choices of environmentally friendly individuals, what kinds of influences environmentally focused hotels and enterprises have on the perceptions of customers, and analysis of their image perceptions can all be stated as good topics for future studies.

6 Conclusion

The new world order is in a never-ending globalisation process. Through this incessant process, heavy industries and factories, which have been preferred due to their high contribution to the economy, have led to economic growth while causing environmental degradation (Ramayah et al., 2010). The continuous impact of people on the ecological environment has created consequences such as drought, loss of woodlands, and destruction of sustainable environments, all of which harm ecological existence (Swetnam & Betancourt, 1998; Drake & Griffen, 2010).

In order to prevent ecological extinction, individuals should try to understand and attribute value to the world they live in. To achieve this, it is important for people to accept nature as it is and develop environmentalist attitudes to protect ecological existence, reconcile with the natural world, and provide spiritual awakening (Maxwell, 2003; Blowers, 2013).

The individuals who make peace with nature and develop pro-environmental attitudes become more interested in issues such as environmentally friendly consumption and purchasing products that do not harm the environment. Accordance to the studies carried out, it has

been observed that aspects such as being concerned about health and the continuation of sustainability are particularly effective in the increase of the aforementioned interests (Mainieri et al., 1997; Chan, 2001; Tilikidou, 2007; Fraj & Martinez, 2007). At the point where ecological products meet with consumers, it is of great importance that the products produced should meet the needs and demands of the consumers as well as create ecological awareness in order to increase the preferability of the product (Çabuk et al., 2008).

Leonidou et al. (2014) stated in their study that environmentally friendly attitudes are effective in the development of environmentally friendly behaviours and that tourists who exhibit sensitive behaviours in general experience much more satisfaction during their visits to the destinations. In their study conducted on tourists, Suki and Suki (2015) found that tourists who stay in green hotels have certain attitudes and behaviours with which they visit places with the same concept, and the environmental awareness they possess positively affects the intention to stay in green hotels and their ecological attitudes as well.

Ren et al. (2021), in their study on environmentally friendly behaviours, investigated the relationships between environmental knowledge, environmental attitude, consumption effectiveness, environmentally friendly behaviour, and environmental perceived value. Within the scope of the results obtained from the research, they have determined that there are positive relations between environmental knowledge, environmental attitude, environmentally friendly behaviours, and the value given to the environment. While the consumers exhibit an understanding of environmental sustainability and environmentally friendly consumption regarding their purchasing behaviour, they consider environmental sensitivity in the long term and accordingly present environmentally sensitive attitudes and purchasing behaviours (Kiatkawsin & Han, 2017; Dong et al., 2020; Han, 2021). Therefore, environmental awareness has a positive effect on ecological attitude, and ecological attitude positively affects the intention to purchase ecological products.

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References

- Aaker, D. A., & Joachimsthaler, E. (2002). Brand Leadership. Simon & Schuster.
- [2] Ahmad, F., Draz, M., Su, L., Ozturk, I., & Rauf, A. (2018). Tourism and environmental pollution: Evidence from the One Belt One Road Provinces of Western China. Sustainability, 10(10), 1-22.
- Akehurst, G., Afonso, C., & Gonçalves, H. M. (2012). [3] Re-examining green purchase behaviour and the green consumer profile: New evidences. Management Decision, 50(5), 972-988.
- [4] Akgül, U. (2010). Sürdürülebilir Kalkınma: Uygulamalı Antropolojinin Eylem Alanı. Ankara Üniversitesi Dil ve Tarih Coğrafya Fakültesi Antropoloji Dergisi, 24(2010), 133–164.
- [5] Alanya Touristic Hoteliers Association (2021). Tourism statistics. https://www.altid.org.tr/en/bilgi-hizmet-tipi/ turizm-istatistikleri/.
- [6] 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, 1(47), 121–134.
- [7] Almossawi, M. (2014). Promoting green purchase behavior to the youth (Case of Bahren). British Journal of Marketing Studies, 2(5), 1-16.
- Aman, A. L., Harun, A., & Hussein, Z. (2012). the influence of [8] environmental knowledge and concern on green purchase intention: The role of attitude as a mediating variable. British Journal of Arts and Social Sciences, 7(2), 145–167.

- [9] Aracıoğlu, B., & Tatlıdil, R. (2009). Tüketicilerin Satın Alma Davranışında Çevre Bilincinin Etkileri. Ege Akademik Bakış, 9(2), 435–461.
- [10] Ay, C., & Ecevit, Z. (2005). Çevre Bilinçli Tüketiciler. Akdeniz Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 5(10), 238–263.
- [11] Ballantyne, R., Packer, J., & Sutherland, L. A. (2011). Visitors' memories of wildlife tourism: Implications for the design of powerful interpretive experiences. *Tourism Management*, 32(4), 770–779.
- [12] Baloğlu, Ş., & McCleary, W. K. (1999). U.S. International pleasure travelers' images of four Mediterranean destinations: A comparison of visitors and non-visitors. *Journal of Travel and Tourism Research*, 38(2), 144–151.
- [13] Bergengren, J. C., Waliser, D. E., & Yung, Y. L. (2011). Ecological sensitivity: A biospheric view of climate change. Climatic Change, 107(3-4), 433-457.
- [14] Blowers, A. (2013). *Planning for a sustainable environment*. (1st edition). Routledge.
- [15] Boztepe, A. (2012). Green marketing and its impact on consumer buying behavior. European Journal of Economic and Political Studies, 5(1), 5–21.
- [16] Çabuk, S., Nakiboğlu, B., & Keleş, C. (2008). Tüketicilerin yeşil ürün satın alma davranışlarının sosyo demografik değişkenler açısından incelenmesi. *Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 17(1), 85–102.
- [17] Çakmak, A. Ç., & Özkan, B. (2016). Üniversite Öğrencilerinin Ekolojik Farkındalıklarının ve Ekolojik Ürün Satın Alma Niyetlerinin Ölçülmesi: İnteraktif Bir Araştırma. İnsan ve Toplum Bilimleri Araştırmaları Dergisi, 5(8), 3144–3170.
- [18] Çetin, F. A., Yıldırım, E. G., & Aydoğdu, M. (2017). Sürdürülebilir Yaşama Yönelik Ekolojik Ayak İzi Eğitiminin Çevre Sorunlarına Yönelik Tutum ve Davranış Düzeyine Etkisi. Kuramsal Eğitim Bilim Dergisi, 10(1), 31-48.
- [19] Chan, E. S. W. (2014). Green marketing: hotel customers' perspective. *Journal of Travel & Tourism Marketing*, 31(8), 915–936.
- [20] Chan, E. S. W., Hon, A. H. Y., Okumuş, F., & Chan, W. (2017). An empirical study of environmental practices and employee ecological behavior in the hotel industry. *Journal of Hospitality and Tourism Research*, 41(5), 585-608.
- [21] Chan, R. Y. (2001). Determinants of Chinese consumers' green purchase behavior. *Psychology & Marketing*, 18(4), 389-413.
- [22] Chao, Y. L., & Lam, S. P. (2011). Measuring responsible environmental behavior: Self-reported and other-reported measures and their differences in testing a behavioral model. *Environment and Behavior, 43*(1), 53–71.
- [23] Chawla, L. (1998). Significant life experiences revisited: A review of research on sources of Environmental sensitivity. Environmental Education Research, 4(4), 369-382.
- [24] Chekima, B., Syed Khalid Wafa, S. A. W., Igau, O. A., Chekima, S., & Sondoh Jr., S. L. (2016). Examining green consumerism motivational drivers: Does premium price and demographics matter to green purchasing? *Journal of Cleaner Production*, 112(2016), 3436–3450.
- [25] Chen, Y. S., & Chang, C. H. (2012). Enhance green purchase intentions: The roles of green perceived value, green perceived risk, and green trust. *Management Decision*, 50(3), 502–520.

- [26] Cheng, T. M., & Wu, H. C. (2015). How do environmental knowledge, environmental sensitivity, and place attachment affect environmentally responsible? An integrated approach for sustainable island tourism. *Journal of Sustainable Tourism*, 23(4), 557–576.
- [27] Çolakoğlu, E., Türk, B., Başar, E. E., & Gül, O. (2013). Kişisel değerler ve çevre bilincinin çevreci ürünlerin tercih edilmesindeki etkileri: Karşılaştırmalı bir araştırma. *Ulusal* Pazarlama Kongresi, 18: 1–18.
- [28] Colins, C. M., Steg, L., & Koning, M. A. S. (2007). Customers' values, beliefs on sustainable corporate performance, and buying behavior. *Psychology & Marketing*, 24(6), 555-577.
- [29] Cornelissen, G., Pandelaere, M., Warlop, L., & Dewitte, S. (2008). Positive cueing: Promoting sustainable consumer behavior by cueing common environmental behaviors as environmental. *International Journal of Research in Marketing*, 25(2008), 46–55.
- [30] Culture and Tourism Ministry (2019). Business (Ministry) certified facility accommodation statistics in 2019. https:// yigm.ktb.gov.tr/TR-201121/isletme-bakanlik-belgeli-tesis-konaklama-istatistikleri.html.
- [31] D'Amico, M., Di Vita, G., & Monaco, L. (2016). Exploring environmental consciousness and consumer preferences for organic wines without sulfites. *Journal of Cleaner Production*, 120(2016), 64–71.
- [32] D'Souza, C., Taghian, M., Lamb, P., & Peretiatko, R. (2007). Green decisions: Demographics and consumer understanding of environmental labels. *International Journal of Consumer Studies*, 31(4), 371–376.
- [33] Dagher, G. K., Itani, O., & Kassar, A. N. (2015). The impact of environmental concern and attitude on green purchasing behavior: Gender as the moderator. *Contemporary Management Research*, 11(2), 179–206.
- [34] Dolnicar, S., & Grün, B. (2009). Environmentally friendly behavior: Can heterogeneity among individuals and contexts/ environments be harvested for improved sustainable management? Environment and Behavior, 41(5), 693-714.
- [35] Dong, X., Liu, S., Li, H., Yang, Z., Liang, S., & Deng, N. (2020). Love of nature as a mediator between connectedness to nature and sustainable consumption behavior. *Journal of Cleaner Production*, 242(1), 1–12.
- [36] Drake, J. M., & Griffen, B. D. (2010). Early warning signals of extinction in deteriorating environments. *Nature*, 467(7314), 456–459.
- [37] Erten, S. (2004). Çevre eğitimi ve çevre bilinci nedir, çevre eğitimi nasıl olmalıdır? *Çevre ve İnsan Dergisi*, Sayı.65/66.

 Ankara: Çevre ve Orman Bakanlığı Yayın Organı. http://yunus. hacettepe.edu.tr/~serten/makaleler/cevre.pdf.
- [38] Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- [39] Fraj, E., & Martinez, E. (2007). Ecological consumer behavior: An empirical analysis. *International Journal of Consumer Studies*, 31(2007), 26–33.
- [40] Fransson, N., & Gärling, T. (1999). Environmental concern: Conceptual definitions, measurement methods, and research findings. *Journal of Environmental Psychology*, 19(4), 369–382. https://doi.org/10.1006/jevp.1999.0141.

- Gadenna, D. L., Kennedy, J., & McKeiver, C. (2009). An empirical study of environmental awareness and practices in SMEs. Journal of Business Ethics, 84(1), 45-63.
- [42] Gadenna, D., Sharma, B., Kerr, D., & Smith, T. (2011). The influence of consumers' environmental beliefs and attitudes on energy saving behaviours. Energy Policy, 39(12), 7684-7694.
- Grob, A. (1995). A structural model of environmental attitudes and behaviour. Journal of Environmental Psychology, 15(3), 209-220
- [44] Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. Journal of Marketing Theory and Practice, 19(2), 139-151.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2005). Multivariate data analysis (6th edition). Prentice
- [46] Han, H. (2021). Consumer behavior and environmental sustainability in tourism and hospitality: A review of theories, concepts, and latest research. Journal of Sustainable Tourism, 29(7), 1021-1042.
- [47] Hartmann, P., & Ibáñez, V. A. (2006). Green value added. Marketing Intelligence and Planning, 24(7), 673-680.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the Academy of Marketing Science, 43(2015), 115-135.
- Herberger, R. A. (1975). The ecological product buying motive: a challenge for consumer education. The Journal of Consumer Affairs, 9(2), 187-195.
- [50] Huang, P. S., & Shih, L. H. (2009). Effective environmental management through environmental knowledge management. International Journal of Environmental Science & Technology, 6(1), 35-50.
- [51] Huang, Y. C., Yang, M., & Wang, Y. C. (2014). Effects of green brand on green purchase intention. Marketing Intelligence and Planning, 32(3), 250-268.
- [52] Hungerford, H. R. & Peyton, R. B. (1977). A paradigm of environmental action. Southern Illinois University, ERIC Number: ED137116. https://files.eric.ed.gov/fulltext/ ED137116.pdf
- [53] Junior, S. S. B., da Silva, D., Gabriel, M. L. D. S., & de Oliveira Braga, W. R. (2015). The effects of environmental concern on purchase of green products in retail. Procedia-Social and Behavioral Sciences, 170(2015), 99-108.
- [54] Kaiser, F., Ranney, M., Hartig, T., & Bowler, P. A. (1999a). Ecological behavior, environmental attitude, and feelings of responsibility for the environment. European Psychologist,
- [55] Kaiser, F., Wölfing, S., & Fuhrer, U. (1999b). Environmental attitude and ecological behavior. Journal of Environmental Psychology, 19, 1-19.
- Kalafatis, S. P., Pollard, M., East, R., & Tsogas, M. H. (1999). Green marketing and Ajzen's theory of planned behaviour: A cross-market examination. Journal of Consumer Marketing, 16(5), 441-460.
- Kaufmann, H. R., Panni, M. F. A. K., & Orphanidou, Y. (2012). Factors affecting consumers' green purchasing behavior: An integrated conceptual framework. Amfiteatru Economic Journal, 14(31), 50-69.

- Kaypak, Ş. (2010). Ekolojik turizmin sürdürülebilirliği. Uluskararası Alanya İşletme Fakültesi Dergisi, 2(2), 93–114.
- Kiatkawsin, K., & Han, H. (2017). Young travelers' intention to [59] behave pro-environmentally: Merging the value-belief-norm theory and the expectancy theory. Tourism Management, 59(2017), 76-88.
- [60] Kilbourne, W., & Pickett, G. (2008). How materialism affects environmental beliefs, concern, and environmentally responsible behavior. Journal of Business Research, 61(9), 885-893
- [61] Kim, A. K., Airey, D., & Szivas, E. (2011). The multiple assessment of interpretation effectiveness: Promoting visitors' environmental attitudes and behavior. Journal of Travel Research, 50(3), 321-334.
- [62] Kim, Y., & Choi, S. M. (2005). Antecedents of green purchase behavior: An examination of collectivism, environmental concern, and PCE. Advances in Consumer Research, 32(32), 592-599.
- [63] Kollmuss, A., & Agyeman, J. (2002). Mind the gap: Why do people act environmentally and what are barriers to pro-environmental behavior? Environmental Education Research, 8(3), 239-260.
- [64] Lasuin, C. A., & Ng, Y. C. (2014). factors influencing green purchase intention among university students. Malaysian Journal of Business and Economics, 1(2), 1-14.
- Lee, K. (2009). Gender differences in Hong Kong adolescent consumers' green purchasing behavior. Journal of Consumer Marketing, 26(2), 87-96.
- Leonidou, L. C., Kvasova, O., Coudounaris, D. F., & Christodoulides, P. (2014, July 7-10). Tourist environmental attitude and behavior: Antecedents, moderators, and outcomes [Conference Session]. 47th Academy of Marketing Conference, University of Bournemouth, United Kingdom.
- Lin, S. T., & Niu, H. J. (2018). Green consumption: Environmental knowledge, environmental consciousness, social norms, and purchasing behavior. Business Strategy and the Environment, 27(8), 1679-1688.
- [68] Lin, Y. C., & Chang, C. C. A. (2012). Double standard: The role of environmental consciousness in green product usage. Journal of Marketing, 76(5), 125-134.
- [69] Liu, C. H. & Huang, Y. C. (2017). A natural capital model of influences for ecotourism intentions and the buffering effects of emotional values. Journal of Travel & Tourism Marketing, 34 (7), 919-934.
- [70] Liu, J., Wu, J. S., & Che, T. (2019). Understanding perceived environment quality in affecting tourists' environmentally responsible behaviours: A broken windows theory perspective. Tourism Management Perspectives, 31(2019), 236-244.
- [71] Lozano, R. (2015). A holistic perspective on corporate sustainability drivers. Corporate Social Responsibility and Environmental Management, 22(1), 32-44.
- Ma, X., Jong, M., Sun, B., & Bao, X. (2020). Nouveauté [72] or cliché? Assessment on island ecological vulnerability to tourism: Application to Zhoushan, China. Ecological Indicators, 113(2020), 1-18.
- Mainieri, T., Barnett, E. G., Valdero, T. R., Unipan, J. B., & Oskamp, S. (1997). Green buying: The influence of environmental concern on consumer behavior. The Journal of Social Psychology, 137(2), 189-204.

- [74] Maxwell, L. E. (2003). Home and school density effects on elementary school children: The role of spatial density. *Environment and Behavior*, 35(4), 566–578.
- [75] Miller, G., & Twining-Ward, L. (2005). Monitoring for a sustainable tourism transition: The challenge of developing and using indicators (1st edition). CABI Publishing.
- [76] Moroz, M., & Polkowski, Z. (2016, March 2–3). The last mile issue and urban logistics: Choosing parcel machines in the context of the ecological attitudes of the Y generation consumers purchasing online [Conference session]. 2nd International Conference, Green Cities – Green Logistics for Greener Cities, Szczecin, Poland.
- [77] Moser, A. K. (2016). Consumers' purchasing decisions regarding environmentally friendly products: An empirical analysis of German consumers. *Journal of Retailing and Consumer Services*, 31(2016), 389–397.
- [78] Mostafa, M. M. (2009). Shades of green: A psychographic segmentation of the green consumer in Kuwait using self-organizing maps. Expert Systems with Applications, 36(8), 11030–11038.
- [79] Murtagh, N., Gatersleben, B., & Uzzell, D. (2012). Self-identity threat and resistance to change: Evidence from regular travel behaviour. *Journal of Environmental Psychology*, 32(4), 318–326.
- [80] Nicholls, R. J., & Cazenave, A., (2010). Sea-level rise and its impact on coastal zones. *Science*, 328 (5985), 1517–1520.
- [81] Niriagu, J. O. (1996). A History of Global Metal Pollution. Science, 272(5259), 223–224.
- [82] Northcote, J., & Macbeth, J. (2006). Conceptualizing yield.

 Annals of Tourism Research, 33(1), 199–220.
- [83] Ntanos, S., Asonitou, S., Kyriakopoulos, G., Skordoulis, M., Chalikias, M., & Arabatzis, G. (2019, July 17-21). Environmental Sensitivity of Business School Students and Their Attitudes towards Social and Environmental Accounting [Conference Session]. 8th ICSIMAT, Northern Aegean, Greece.
- [84] Odabaşı, Y. (1992). Yeşil pazarlama: Kavram ve gelişmeler. Pazarlama Dünyası, 36(6), 4–9.
- [85] Ogunbode, C. A., & Arnold, K. (2012). A study of environmental awareness and attitudes in Ibadan, Nigeria. Human and Ecological Risk Assessment: An International Journal, 18(3), 669–684.
- [86] Özgüven Tayfun, N., & Öçlü, B. (2016). Çevreci ürünlerin tüketicilerin satın alma kararları yeri üzerine bir uygulama. Niğde Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 9(3), 185–198.
- [87] Pan, S. L., Chou, J., Morrison, A. M., Huang, W. S., & Lin, M. C. (2018). Will the future be greener? The environmental behavioral intentions of university tourism students. Sustainability, 10(3), 1–17.
- [88] Peterson, N. (1982). Developmental variables affecting environmental sensitivity in professional environmental educators. Southern Illinois University.
- [89] Priadi, A., Fatria, E., Nadiroh, N., Sarkawi, D., & Oktaviani, A. (2018). Environmental citizenship behavior (the effect of environmental sensitivity, knowledge of ecology, personal investment in environmental issues, locus of control towards students' environmental citizenship behavior). E3S Web of Conferences, 74(2018), 1-6.
- [90] Ramayah, T., Lee, J. W. C., & Mohamad, O. (2010). Green product purchase intention: Some insights from a developing

- country. *Resources, Conservation and Recycling*, *54*(12), 1419–1427.
- [91] Ren, J., Su, K., Chang, Y., & Wen, Y. (2021). Formation of environmentally friendly tourist behaviors in ecotourism destinations in China. *Forests*, 12(4), 1–19.
- [92] Rossi, P., Pecci, A., Amadio, V., Rossi, O., & Soliani, L. (2008). Coupling indicators of ecological value and ecological sensitivity with indicators of demographic pressure in the demarcation of new areas to be protected: The case of the Oltrepò Pavese and the Ligurian-Emilian Apennine area (Italy). Landscape and Urban Planning, 85(1), 12–26.
- [93] Rusyani, E., Lavuri, L., & Gunardi, A. (2021). Purchasing eco-sustainable products: Interrelationship between environmental knowledge, environmental concern, green attitude, and perceived behavior. Sustainability, 13(9), 1–12.
- [94] Sahoo, B., & Bhaskaran, P. K. (2018). Multi-hazard risk assessment of coastal vulnerability from tropical cyclones

 a GIS based approach for the Odisha coast. *Journal of Environmental Management*, 206(2018), 1166–1178.
- [95] Schwepker, C. H., & Cornwell, T. B. (1991). An examination of ecologically concerned consumers and their intention to purchase ecologically packaged products. *Journal of Public Policy & Marketing*, 10(2), 77–101.
- [96] Shahnaei, S. (2012). The impact of individual differences on green purchasing of Malaysian consumers. *International Journal of Business and Social Science*, 3(16), 132–140.
- [97] Shetzer, L., Stackman, R. W., & Moore, L. F. (1991). Business-Environment Attitudes and the New Environmental Paradigm. The Journal of Environmental Education, 22(4), 14–21.
- [98] Singh, S., Sharma, P., Garg, N., & Bala, R. (2021). Groping environmental sensitivity as an antecedent of environmental behavioural intentions through perceived environmental responsibility. *Journal of Enterprising Communities: People* and Places in the Global Economy, 16(2), 299–319.
- [99] Straughan, R. D., & Roberts, J. A. (1999). Environmental segmentation alternatives: A look at green consumer behavior in the new millennium. *Journal of Consumer Marketing*, 16(6), 558–575.
- [100] Suki, N. M., & Suki, N. M. (2015). Consumers' environmental behaviour towards staying at a green hotel. *Management* of Environmental Quality: An International Journal, 26(1), 103–117.
- [101] Suki, N. M. (2013). Green products purchases: structural relationships of consumers' perception of eco-label, eco-brand and environmental advertisement. *Journal* Sustainable Science and Management, 8(1), 1–10.
- [102] Swetnam, T. W., & Betancourt, J. L. (1998). Mesoscale disturbance and ecological response to decadal climatic variability in the American Southwest. *Journal of Climate*, 11(12), 3128–3147.
- [103] Tarhan, A. B. (1996). Turkish consumers perceptions of environmental claims. Yüksek Lisans Tezi, *Ortadoğu Teknik Üniversitesi, Sosyal Bilimler Enstitüsü*, İstanbul.
- [104] Tepelus, C. M., & Córdoba, R. C. (2005). Recognition schemes in tourism-from 'eco' to 'sustainability'? *Journal of Cleaner Production*, 13(2), 135–140.
- [105] Tilikidou, I. (2007). The effects of knowledge and attitudes upon Greeks' pro-environmental purchasing

- behaviour. Corporate Social Responsibility and Environmental Management, 14(3), 121-134.
- [106] Trang, H. L. T., Lee, J. S., & Han, H. (2019). How do green attributes elicit pro-environmental behaviors in guests? The case of green hotels in Vietnam. Journal of Travel & Tourism Marketing, 36(1), 14-28.
- [107] Trivedi, R. H., Patel, J. D., & Acharya, N. (2018). Causality analysis of media influence on environmental attitude, intention and behaviors leading to green purchasing. Journal of Cleaner Production, 196(2018), 11-22.
- [108] Türküm, A. S. (1998). Çağdaş Toplumda Çevre Sorunları ve Çevre Bilinci. Anadolu Üniversitesi, G. Can (Ed). Çağdaş Yaşam Çağdaş İnsan. Anadolu Üniversitesi Açık Öğretim Fakültesi İlköğretim Öğretmenliği Lisans Tamamlama Programı, Eskisehir, 165-181.
- [109] Wahab, Z., Tama, R. A., Shihab, M. S., Widad, A., Nofiawaty, N., & Diah, Y. M. (2017). Analysis of the effect of environmental concern and green advertising to green purchasing in Palembang City. Sriwijaya International Journal of Dynamic Economics and Business, 1(3), 297-310.
- [110] Wold, H. (1985). Partial least squares. In S. Kotz & N. L. Johnson (Eds.), Encyclopedia of Statistical Sciences (pp. 581-591). Wiley.

- [111] Wu, J., Huang, D., Liu, J., & Law, R. (2013). Which factors help visitors convert their short- term pro-environmental intentions to long-term behaviors? International Journal of Tourism Sciences, 13(2), 33-56.
- [112] Yang, W., & Zhang, Y. (2012). Research on factors of green purchasing practices of Chinese. E3 Journal of Business Management and Economics, 3(5), 222-231.
- [113] Yang, X., & Zhang, L. (2020). Diagnose barriers to sustainable development: A study on "desensitization" in urban residents' green purchasing behavior. Sustainable Development, 28(1), 143-154.
- [114] Yılmaz, V., Çelik, H. E., & Yağızer, C. (2009). Çevresel Duyarlılık ve Çevresel Davranışın Ekolojik Ürün Satın Alma Davranışına Etkilerinin Yapısal Eşitlik Modeliyle Araştırılması. Anadolu Üniversitesi Sosval Bilimler Deraisi, 9(2), 1-14.
- [115] Yoo, J. J., Divita, L., & Kim, H. Y. (2013). Environmental awareness on bamboo product purchase intentions: Do consumption values impact green consumption? International Journal of Fashion Design, Technology and Education, 6(1), 27-34.
- [116] Zinkhan, G. M., & Carlson, L. (1995). Green advertising and the reluctant consumer. Journal of Advertising, 24(2), 1-6.
- [117] Zsóka, Á. N., (2008). Consistency and "awareness gaps" in the environmental behaviour of Hungarian companies. Journal of Cleaner Production, 16(3), 322-329.