

Article

What Factors Influence Consumers to Buy Green Products? An Analysis through the Motivation–Opportunity–Ability Framework and Consumer Awareness

Gizem Yener ¹, Arzu Secer ^{2,*}  and Pascal L. Ghazalian ³ ¹ Independent Researcher, Gaziantep 27100, Turkey² Department of Agricultural Economics, Faculty of Agriculture, Cukurova University, Sarıcam 01330, Turkey³ Department of Economics, University of Lethbridge, Lethbridge, AB T1K 3M4, Canada; pascal.ghazalian@uleth.ca

* Correspondence: asecer@cu.edu.tr

Abstract: The value of sustainable consumption behaviors has dramatically increased and become an important focus area in the market and society. This study examines the internal and external drivers influencing consumers' purchasing behavior toward green products. The Motivation–Opportunity–Ability (MOA) framework is used and expanded with consumer awareness of sustainability as the conceptual basis of this study. The data were basically gathered from 439 consumers in Greece through an online survey. Logistic Regression Analysis is used to reach the research objectives. The findings of this study point out that consumers' motivation, abilities, and awareness of sustainability significantly affect their green product purchasing behavior. In contrast, consumers' opportunity circumstances have no significant effects on their purchasing behavior. The outcomes of this study are pertinent for marketing activities, plans of action, and campaigns organized by marketing agents, governments, or other organizations to promote green consumerism.

Keywords: green products; MOA framework; consumer awareness; logistic regression analysis

**Citation:** Yener, G.; Secer, A.;

Ghazalian, P.L. What Factors

Influence Consumers to Buy Green Products? An Analysis through the Motivation–Opportunity–Ability Framework and Consumer

Awareness. *Sustainability* **2023**, *15*, 13872. <https://doi.org/10.3390/su151813872>

Received: 28 July 2023

Revised: 2 September 2023

Accepted: 8 September 2023

Published: 18 September 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Sustainability has become a major concern, and consumers' behavior has emerged as a primary factor in shaping the future of consumption. In this context, it is essential that consumers have more awareness of what they purchase and how their consumption patterns affect natural resources [1]. Since the Industrial Revolution, the expanded and intensive use of natural resources has caused several environmental issues, jeopardizing biodiversity and adversely affecting human well-being [2]. These emerging environmental problems have induced market stakeholders, governments, other organizations, and scholars to increase interest in sustainable activities and assume responsibility in building more balanced consumption systems [3].

Over the years, the notion of green marketing has been developed as a vital alternative for society's sustainable growth in the 21st century, taking into consideration the increasingly strained interplay between human beings and the environment [4,5]. Green marketing was described as "Any marketing activity of a firm that is intended to create positive impact or lessen the negative impact of a product on the environment" in the American Marketing Association Workshop on Ecological Marketing in 1975. This concept has been described by many researchers and has risen to prominence since the early 1990s [6]. According to Solomon [7], it is critical to have a strategy that entails the production and promotion of environmentally friendly products, and that emphasizes such features while communicating with consumers. These definitions are also supported by other researchers [8–10]. In light of these definitions, green marketing implementation is not only a competitive strategy for firms, but it is also a prudent approach for businesses

to achieve sustainable growth. It can be also inferred that green marketing is a business practice that takes into account consumers' concerns about the protection and preservation of the natural environment.

Green marketing has become an important domain for society in general. Consumers, who are increasingly aware of sustainability issues, would typically attempt to mitigate these concerns by consuming more environmentally friendly products and by taking actions or performing behaviors that foster their responsibilities towards the environment [11,12]. In the context of green marketing, consumption behaviors induce actions that could lead to positive impacts on (or reduced damage to) the environment [13]. Some of these actions include recycling, saving paper and electricity, avoiding the use of aerosols, encouraging the use of biodegradable products, and consuming organic food [14]. As stated by Han et al. [15] consumer demand in terms of green movement is gradually sloping upward. It can be indicated that consumers have realized the increasing global environmental issues and have understood their responsibility in solving these problems [13,16]. Therefore, consumers' environmental concerns, attitudes, preferences, and awareness have become increasingly significant in the market and in society [17,18].

In the literature, there are some studies that examine consumers' environmental concerns [16,19,20], consumers' environmental awareness or knowledge [12,19,21], social norms [20], consumers' abilities or capabilities [22], and some other factors such as perceived consumer effectiveness [16], consumer values [21,23,24], green communication [25], and perceived benefits [16].

This study aims to better understand both the internal and external factors affecting consumers' green purchasing behavior. To reach the research goal, we used the MOA (Motivation–Opportunity–Ability) Framework and consumer awareness of sustainability. In this manner, motivation, ability, and awareness are included as internal factors, whereas opportunity is considered as an external factor in the model. Hence, this study can evaluate both internal and external drivers of consumers' green purchasing behavior. The research questions of the study are as follows:

1. How does motivation affect consumer behavior toward green products?
2. How does opportunity affect consumer behavior toward green products?
3. How does ability affect consumer behavior toward green products?
4. How does consumer awareness of sustainability affect consumer behavior toward green products?
5. How do demographic features affect consumer behavior toward green products?

The contributions of this study are twofold. First, this paper presents a model to explain consumers' behavior through internal and external drivers. Previous studies mainly focused on motivation in explaining consumer behavior toward green products, such as [26,27]. Hence, there is still a wide margin to further comprehend consumers' green purchasing behavior. Second, the drivers that are covered by the MOA Framework, besides consumer awareness of sustainability, may assist marketing agents, governments, and other organizations in identifying the barriers, facilitating factors, and situational aspects that impact consumer activities, allowing them to form strategies and actions and to develop practices to stimulate consumers' green purchasing behavior.

The remainder of this paper is organized as follows. Following the Section 1, the Section 2 reviews the scientific literature on the main concepts and presents the research hypotheses. Section 3 is devoted to the methodology, with a detailed description of the survey and sample profile. Then, Sections 4 and 5 results are presented and discussed. Section 6 presents the concluding remarks along with policy recommendations and research implications.

2. Literature Review and Research Hypotheses

The MOA framework is used and combined with consumer awareness of sustainability and demographic characteristics to reach the research objectives (Figure 1). This framework was formerly developed by MacInnis and Jaworski [28] and it defines con-

sumers' behavior as having motivation, ability, and opportunity [29]. According to Ölander and Thøgersen [30], consistency between motivation (attitudes or desires) and behavior can be estimated in a more comprehensive and realistic approach if we account for the benefits of the predictive power of "ability" and "opportunity" in the analytical framework [31]. This approach has been effectively implemented in a variety of contexts, such as travel intentions [32,33], transit migration [34], teaching approaches [35], environment and land management behaviors [36], and pro-environmentalism [37]. The dimensions of the MOA framework, consumer awareness of sustainability, and demographic characteristics are further described in the sub-sections below.

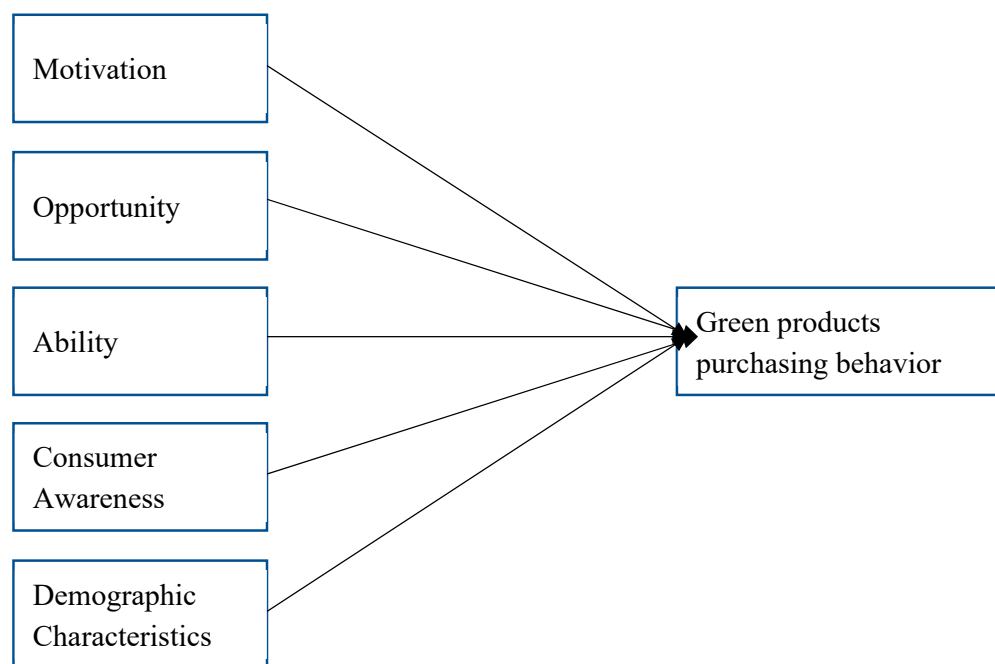


Figure 1. The conceptual model.

Motivation: This dimension refers to the rise of goal-oriented behavior and acts as a compelling factor that influences a person's decision-making process. It impacts the strength and orientation of specific actions [38,39]. In other words, this dimension reflects the attitudes, perceptions, beliefs, and desires of the individual to perform a certain behavior [35,40]. Motivation is concerned with an individual's desire or readiness to engage in a specific action. It encompasses the reasons or desires that motivate consumers to prioritize green products in the context of consumers' buying behavior [35]. Some previous studies have found significant relationships between motivation (attitudes or desires) and consumer behavior towards various sustainable product groups like organic products or eco-friendly products [41,42]. However, other studies have revealed no significant association [43]. Consequently, there is a need for a broader understanding of how motivation influences consumer behavior toward green products. Hence, the statements employed in this study comprise the underlying reasons that impact customers' decision-making processes when it comes to choosing green products. In this study, it is hypothesized that:

Hypothesis 1. *Motivation influences consumer behavior toward purchasing green products.*

Opportunity: This term is defined as the circumstances in which people are permitted or assisted in performing an action or behavior [44]. In other words, opportunity can be referred to as the objective conditions for carrying out the behavior [30]. This is frequently related to convenience in the form of location and time [45]. On the one hand, MacInnis et al. (1991) [38] define opportunity as the extent to which the consumer/individual is

free to interpret information derived from environmental, social, cultural, and situational elements that generate favorable or unfavorable conditions. Additionally, regarding green products, the availability of environmentally friendly products, access to knowledge and resources, and welcoming social and physical surroundings may influence consumer behaviors [46]. Only a few previous studies proved that opportunities affect purchasing behavior toward sustainable or eco-friendly products [47,48], but many other studies did not find evidence of such a relationship [49]. Then, it is important to investigate whether there is an association between opportunities and consumer behavior toward green products through the following hypothesis:

Hypothesis 2. *Opportunity influences consumer behavior toward purchasing green products.*

Ability: Apart from having motivation, consumers must also be able to execute the behavior. Skills, task knowledge, habit, and resources are often significant when performing a specific behavior. According to Binney et al. [36], regardless of how much an individual is driven, motivation may not lead to behavioral changes if the skill is inadequate. For example, Osbaldiston and Sheldon [50] contend that when people have the ability, they are highly motivated to carry out actions. In the literature, there is still a contradiction about the effects of consumers' abilities to buy sustainable products in general [47–49]. Hence, this study investigates how consumers' ability affects behavior toward green marketing. A corresponding hypothesis can be formulated as follows:

Hypothesis 3. *Ability influences consumer behavior toward purchasing green products.*

Awareness: The degree to which individuals are knowledgeable and concerned about environmental problems, such as climate change, pollution, deforestation, and resource depletion, can be referred to as awareness of sustainable issues [51]. This awareness includes a comprehension of the potentially detrimental effects of human actions on the environment as well as the significance of sustainable behaviors [52]. Being more aware of an individual's impact on the environment makes them more cautious in their buying behavior. As Sharma et al. [53] stated, consumer awareness is critical in creating sustainable and environmentally friendly activities, promoting sustainable actions, and mitigating the negative consequences of traditional consumption habits. At this point, consumers may boost demand for green products and induce corporations to adopt greener manufacturing techniques by being well-informed about the environmental ramifications of their decisions [54]. Furthermore, conscious consumers may hold corporations accountable for their environmental promises and demand transparency in their supply chains, ensuring that green marketing is backed up by genuine sustainability initiatives [55]. Adopting green buying habits has become more important as the world faces significant environmental concerns such as climate change and resource depletion [56]. Individuals may make better decisions by recognizing the environmental effects of their choices and taking into account variables such as product lifetime, energy efficiency, packaging, certifications, sourcing, and consumer education [57]. In the literature, some studies confirm that consumer awareness acts as a driver of buying green products [58–60]. Then, consumer awareness of sustainability is also included in the conceptual model, and the following hypothesis is formulated:

Hypothesis 4. *Awareness influences consumer behavior toward purchasing green products.*

Demographic Characteristics: These characteristics are also considered to be significant in explaining consumers' behavior toward purchasing green products [61]. It is commonly highlighted that gender [61–63], age [61,64], education level [63,65], and income [64,66] affect consumers' behavior toward purchasing green products. These studies reported varying (in some cases opposite) effects of demographic factors on consumers' behavior. In this study, pertinent demographic characteristics are included to enhance the

statistical analysis. Thus, we present the following general and specific hypotheses about demographic characteristics:

Hypothesis 5. *Demographic characteristics influence consumer behavior toward purchasing green products.*

Hypothesis 5a. *Gender influences consumer behavior toward purchasing green products.*

Hypothesis 5b. *Age influences consumer behavior toward purchasing green products.*

Hypothesis 5c. *Education influences consumer behavior toward purchasing green products.*

Hypothesis 5d. *Income influences consumer behavior toward purchasing green products.*

Hypothesis 5e. *Residence/location influences consumer behavior toward purchasing green products.*

3. Materials and Methods

In the current study, a quantitative research approach is conducted to explore factors affecting consumers' behavior to purchase green products. A standardized questionnaire form was used and sent online to collect the data. The number of volunteers who participated in the survey amounted to 439 individuals. Next, the datasets were analyzed via logistic regression analysis, which allows researchers to empirically examine the theoretical models and to have a better understanding of consumers' purchasing behavior and the factors affecting this behavior.

Procedure: The primary data were gathered from Greek consumers in the online environment through Google Forms. A web survey was preferred since it allows us to implement a questionnaire online by inviting potential respondents to complete it through websites. In this context, it is worth noting that the sampling procedure is, to some extent, non-probabilistic. Following a pilot study (with ten people), the final version of the questionnaire was available to respondents from the 1 March 2021 until the 14 June 2021 (3 months, 13 days). The survey link was propagated via Facebook, where the survey took place as a public post, allowing participants to observe and share with their networks. Friends of the authors were also asked to share the post and forward the survey link via email and social media to friends and colleagues.

Survey: The data have been collected using a standardized questionnaire form in Athens and Chania in Greece. These two cities (the capital of Greece and a major city in Crete, respectively) are selected as representative locations when collecting data. The survey consisted of three sections: (1) consumers' demographic characteristics (gender, age, education, occupation, and some other characteristics); (2) their green purchasing behavior (frequency of their green purchases); and (3) factors affecting their green purchasing behavior (motivation, opportunities, abilities, and consumer awareness). A diverse sampling method is used by including a diverse group of people in the survey, covering individuals from different age groups, genders, and geographic locations. Additionally, a variety of methods to reach individuals is used, such as online advertising, email, and social media. Hence, the survey attempted a random sampling method, within the limitations of the online survey, to render the dataset as representative of the overall population as feasible.

Measures: The factors affecting consumers' green purchasing behavior were obtained through scale measures, which are commonly used in the literature. Motivation was assessed with three items, as in Ottman's work [67]. Opportunities were measured with three items, following the work of Truelove and Parks, 2012 [68]. Two items were adopted to evaluate abilities, following Haytko and Matulich [69]. Finally, three items were used to assess consumer awareness of sustainability, as in Bhattacharya [70].

All scale items were evaluated by participants on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The reliability analysis was conducted using

Cronbach's alpha value to assess the internal consistency of the measurement scales. According to George and Mallery [71], this value should be above 0.50 for further analysis. The values obtained for motivation (0.551), opportunity (0.612), ability (0.527), and consumer awareness (0.612) indicate an acceptable level of reliability to do further analysis [72].

Logistic regression model: Logistic regression analysis is used to model the relationship between a categorical dependent variable and (one or more) categorical or continuous independent variables [73]. Models in which the dependent variable has only two categories, such as successful–unsuccessful, yes–no, or woman–man, are known as binary logistic regression analysis. This analysis is used to distinguish between two groups and to estimate the probability of occurrence of an event by fitting data [74,75]. In other words, logistic regression calculates the probability of an occurred event over the probability of a non-occurred event. The mean of the response variable p in terms of an explanatory variable X is modeled through the logistic regression model. The latter is used to examine the relationships between a categorical outcome variable and predictor variables. With logistic regression, the natural log of odds is presented as a linear function of the explanatory variable as follows [76]:

$$\text{logit}(Y) = \ln(\text{odds}) = \ln\left(\frac{p}{1-p}\right) = a + \beta X \quad (1)$$

where p is the probability of an outcome of interest, and X is the explanatory variable. The parameters of the logistic regression are α and β . The equation for predicting the likelihood that the desired event will occur can be constructed by taking the antilog of Equation (1) on both sides:

$$p = \text{probability}(Y = \text{outcome of interest} / X = x) = \frac{e^{a+\beta X}}{1 + e^{a+\beta X}} = \frac{1}{1 + e^{-(a+\beta X)}}$$

By applying the principles of simple logistic regression to many factors, it is possible to design a more intricate logistic regression model as follows:

$$\text{logit}(Y) = \ln\left(\frac{p}{1-p}\right) = a + \beta_1 X_1 + \dots + \beta_k X_k$$

Therefore, we obtain the following:

$$p = \text{probability}(Y = \text{outcome of interest} / X_1 = x_1, \dots, X_k = x_k) \\ = \frac{e^{a+\beta_1 X_1 + \dots + \beta_k X_k}}{1 + e^{a+\beta_1 X_1 + \dots + \beta_k X_k}} = \frac{1}{1 + e^{-(a+\beta_1 X_1 + \dots + \beta_k X_k)}}$$

In the binary logistic regression model, the occurrence and non-occurrence of the event are expressed in two categories, 0 and 1. The ratio between the probability of occurrence and the probability of non-occurrence is defined as the odds ratio and interpretations are made based on this ratio.

In this study, the dependent variable is defined as “the frequency of green product purchasing”. This variable was measured through a question with options. To measure this variable, the participants were asked, “How often did you buy green products in the last three months?” and they were given three options: “Once a week or more often”, “At least once a month”, and “Less than once a month”. The dependent variable was coded as “1” if the participants purchase once a week or more often (41.2% of the participants), otherwise “0” (58.8% of the participants). Definitions of demographic characteristics and other factors are given in Tables 1 and 2, respectively.

Table 1. Definition of the demographic characteristics used in the model.

Independent Variables	Categories	Frequency	Mean/Ratio
Cities	Athens = 1	218	49.66%
	Chania = 0	221	50.34%
Gender	Woman = 1	305	69.48%
	Man = 0	134	30.52%
Education	Master's and doctorate degree = 1	110	25.06%
	Others = 0	329	74.94%
Income	More than 9999 Euro = 1	252	57.40%
	Others = 0	187	42.60%
Age	Actual scores	Actual Scores	36.57 years

Table 2. Descriptive statistics of the MOA Framework and consumer awareness.

Independent Variables	Mean	Median	Std. Dev.
Motivation			
I use biodegradable products.	3.36	3.00	1.06
I avoid buying aerosol products.	3.85	4.00	1.12
I contribute money to environmental causes.	2.20	2.00	1.05
Opportunity			
Green products are reasonably priced.	2.96	3.00	1.00
Green products are easily accessible in stores.	2.97	3.00	1.00
Green products are well promoted.	3.13	3.00	0.94
Ability			
I read labels to see if the contents are environmentally safe.	3.28	3.00	1.17
It is easy for me to purchase these products.	3.47	4.00	0.94
Consumer Awareness of Sustainability			
I am willing to make a special effort to buy products that are made from recycled materials.	4.13	4.00	0.84
Humans must live in harmony with nature to survive.	4.64	5.00	0.61
Humankind is severely abusing the environment.	4.59	5.00	0.67

To analyze the collected data, Athens was assigned a code of “1” (49.66% of the participants), while Chania was assigned a code of “0” (50.34% of the participants). Similarly, for the gender variable of participants, a coding system was employed, with “1” (69.48% of the participants) for female and “0” (30.52% of the participants) for male. For the education variable, master's and doctoral degrees were designated as “1” (25.06% of the participants), while other educational levels were designated as “0” (74.94% of the participants). For the income variable, an income exceeding EUR 9999 was encoded as “1” (57.40% of the participants), whereas other income groups were encoded as “0” (42.60% of the participants). Lastly, the age variable was gathered through an open-ended question format and was not subjected to any specific coding procedure.

Descriptive statistics (mean, median and standard deviation) related to the MOA framework and consumer awareness are presented in Table 2. Participants expressed that the most important items were “I use biodegradable products” (mean: 3.85; median: 4.00; std dev: 1.12) as motivation, “Green products are well promoted” (mean: 3.13; median: 3.00; std dev: 0.94) as opportunity, “It is easy for me to identify these products” (mean: 3.47;

median: 4.00; std dev: 0.94) as ability, and “Humans must live in harmony with nature to survive” (mean: 4.64; median: 5.00; std dev: 0.61) as consumer awareness of sustainability.

The demographic characteristics of the participants are presented in Table 3 in detail. It is slightly skewed toward women, who account for 69.48% of the total number of participants. The age class with the highest number of observations is 31–40, and the average age of participants is 37.57 years. There is a significant number of participants with university diplomas (150 participants—34.17% of total number of participants). Regarding income level, the participants are almost evenly distributed between the two income classes—lower-income (EUR 0–9999 per year) and middle-income families (EUR 10,000–29,999 per year). These two classes together cover most observations (96.36% of total number of participants).

Table 3. Descriptive statistics of the demographic characteristics of participants.

Indicators	Athens		Chania		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Gender						
Women	152	69.72	153	69.23	305	69.48
Men	66	30.28	68	30.77	134	30.52
Age Groups						
18–30	46	20.81	105	48.17	151	34.40
31–40	86	38.91	74	33.94	160	36.45
41–50	44	19.91	27	12.39	71	16.17
51–78	45	20.36	12	5.50	57	12.98
Mean	32.56 years		40.53 years		36.57 years	
Education						
No Formal Education	0	0.00	1	0.45	1	0.23
Primary School	0	0.00	3	1.36	3	0.68
Middle School	2	0.92	2	0.90	4	0.91
High School	43	19.72	59	26.70	102	23.23
Vocational-Technical Secondary	27	12.39	42	19.00	69	15.72
University (Undergraduate)	94	43.12	56	25.34	150	34.17
Master and Ph.D.	52	23.85	58	26.24	110	25.06
Income						
0–9999	108	49.54	79	35.75	187	42.60
10,000–29,999	98	44.95	138	62.44	236	53.76
30,000–49,999	11	5.05	1	0.45	12	2.73
More than 50,000	1	0.46	3	1.36	4	0.91
Mean	EUR 1674		EUR 1564		EUR 1619	

4. Results

The empirical model that exclusively includes demographic characteristics shows a very small explanatory power (χ^2 (df = 5, n = 439) = 7306, p = 0.199). When other indicators are added, the empirical model shows a higher degree of explanatory power and becomes statistically significant (χ^2 (df = 16, n = 439) = 101,127, p ≤ 0.00). Furthermore, in the case of the augmented empirical model, the −2Log likelihood value is 493,881, the Cox and Snell R^2 is 0.206, the Hosmer and Lemeshow “ p ” equals 587, and the Nagelkerke R^2 value is 0.277.

The estimation results from the logistic regression are presented in Table 4. The estimated coefficients on the variables are deemed to be statistically significant when the P -value is less than 0.1. The estimated coefficients on seven variables are statistically significant and exhibit the predicted sign. The results indicate that an increase in the motivation indicator “I use biodegradable products” by one unit increases the likelihood that Greek customers buy green products more frequently by a factor of 1.298, *ceteris paribus*. This means that consumers who are motivated to consume biodegradable products are 1.298 times more likely to buy green products compared to the corresponding less motivated consumers. Additionally, an increase in the motivation indicator “I avoid buying aerosol products” by one unit raises the likelihood of purchasing green products

more frequently by a factor of 1.300, *ceteris paribus*. When the motivation indicator depicting money contribution to environmental causes increases by one unit, the likelihood that Greek consumers purchase green products rises by a factor of 1.254, *ceteris paribus*. Additionally, when the indicators of consumers' ability to read labels to see if contents are environmentally safe and to purchase these products easily increase by one unit, they will be willing to purchase green products 1.436 times and 1.366 times more frequently, respectively, *ceteris paribus*. Moreover, consumers who are willing to make a special effort to buy products that are made from recycled materials and believe that humans must live in harmony with nature to survive tend to buy green products 1.632 times and 0.658 times more frequently, respectively, *ceteris paribus*.

Table 4. Results of logistic regression.

Variables	B	S.E.	Wald	Sig.	Exp(B)
Demographics					
Gender	0.257	0.251	1.055	0.304	1.294
City	0.065	0.246	0.070	0.792	1.067
Income	−0.349	0.251	1.934	0.164	0.706
Education	−0.072	0.266	0.073	0.787	0.931
Age	−0.014	0.011	1.574	0.210	0.986
Motivation					
I use biodegradable products.	0.261	0.138	3.573	0.059	1.298
I avoid buying aerosol products.	0.263	0.117	4.998	0.025	1.300
I contribute money to environmental causes.	0.227	0.114	3.926	0.048	1.254
Opportunity					
Green products are reasonably priced.	−0.185	0.122	2.289	0.130	0.831
Green products are easily accessible in stores.	0.206	0.129	2.553	0.110	1.228
Green products are well promoted.	−0.022	0.129	0.029	0.864	0.978
Ability					
I read labels to see if the contents are environmentally safe.	0.362	0.126	8.249	0.004	1.436
It is easy for me to purchase these products.	0.312	0.139	5.066	0.024	1.366
Consumer Awareness of Sustainability					
I am willing to make a special effort to buy products that are made from recycled materials.	0.490	0.167	8.609	0.003	1.632
Humans must live in harmony with nature to survive.	−0.418	0.234	3.191	0.074	0.658
Humankind is severely abusing the environment.	−0.187	0.214	0.762	0.383	0.830
Constant	−3.745	1.167	10.292	0.001	0.024

B = Coefficient; SE = Standard error; Sig. = Significance level; Exp(B) = Odds ratio.

These results show that some hypotheses are verified through empirical analysis, namely the influence of motivation (H1), ability (H3), and consumer awareness factors (H4)

on the purchasing behavior of consumers toward green products. However, the results do not support other hypotheses about the influence of the demographic characteristics of consumers (H5) and opportunity factors (H2) on Greek consumers' behavior toward green products.

5. Discussion

This study contributes to the literature on green products' marketing by aiming to have a better understanding of both the internal (motivation, awareness, and ability) and external (opportunity) factors that could influence consumers' decisions to purchase green products. This paper has two main objectives. First, it suggests a model that includes various internal and external drivers. Second, it provides information to assist different marketing stakeholders in organizing their plans for action. The Motivation–Opportunity–Ability (MOA) Framework, besides consumer awareness of sustainability, is used as the theoretical basis to reach the research objectives. The outcomes of the descriptive analysis and logistic regression shed light on the main factors that influence consumer decisions to buy green products.

Regarding the hypotheses, the results show that motivations (H1), abilities (H3) and consumer awareness (H4) play significant roles in consumers' green products' purchasing behavior. The findings show that consumers' motivations significantly affect their decisions to buy green products. This is consistent with earlier studies that highlighted the significance of consumers' motivations, such as feelings, attitudes, or aspirations toward sustainable or eco-friendly product consumption [77,78]. Additionally, Choi and Johnson [79] stressed that both environmental and hedonic motivations have considerable effects on green product purchase intention. Consumers' capabilities to purchase green products are included in the ability dimension, and the results show that reading labels and easiness in purchasing green products have significant effects on consumers' purchasing behavior. These results are consistent with several studies which confirmed that consumer behavior toward specific products is affected by capabilities [20,41,47,49]. These studies also stressed that abilities refer to barriers to using these products, and that lower rates of green product purchases can be attributed to deficient abilities. Lastly, consumer awareness of sustainability has become a major consideration when choosing green products. This finding implies that customers' behavior is highly influenced by their knowledge of environmental issues, their comprehension of those issues, and the implications of their purchase choices on the environment. These results could be associated with previous studies that emphasized the value of environmental education and communication efforts to raise consumer awareness and encourage sustainable purchasing patterns. [12,60,80,81].

As one of the important variables, opportunity implies that the availability of green products and the availability of pertinent information have a considerable influence on consumers' choices. Surprisingly, this study could not find any statistically significant relationship between opportunities (H2) (in terms of price, accessibility, and promotion) and consumers' behavior. These results contrast with those of other studies that found significant positive effects of opportunity factors on consumer purchasing behavior [8,12,82]. Additionally, it should be noted that demographic characteristics (H5), such as age, education, and income, are not found to be statistically significant predictors of decisions to buy green products. These results correspond to those of some other studies [65,67] which indicated that consumers' demographic characteristics may not have significant impacts on their purchasing behavior. They imply that variables other than demographic traits play a more important role in determining consumers' behavior, as prior research has demonstrated [58,83–85].

In summary, consumers' green product purchasing behavior can be principally explained by consumers' motivation, ability, and awareness of sustainability. In other words, we can say that if consumers have sufficient motivations to consume green products, awareness of sustainability, and ability to purchase green products, they will be more willing to

purchase the products. At this point, it can be determined that the MOA framework helped in understanding green purchasing behavior.

6. Conclusions, Practical Implications, Limitations and Future Directions

Understanding consumers' behavior toward green products has become the focus of marketing agents, market stakeholders, governments, and other organizations. This study reveals that consumers' motivation, ability, and awareness have significant impacts on consumers' behavior toward purchasing green products. It implies that market players' stimulation of these drivers would raise public interest in green consumerism.

Overall, the findings of this study provide valuable insights into the factors that influence consumers' decisions to purchase green products. One of the most robust factors is motivation, which constitutes an inner driver towards purchasing green products. Hence, market stakeholders such as producers, marketers, or logistic providers should aim to understand consumers' feelings and aspirations and meet their demands. Thus, consumers would be willing to participate in green marketing and act with the market stakeholders to satisfy their motivation. Additionally, this driver can be a very useful tool for governments, organizations, and non-governmental organizations to stimulate individuals towards green consumerism and sustainable consumption patterns. This study also suggests that individuals with more ability to purchase green products tend to consume more green products. Then, when consumers exhibit higher capabilities toward green products, they increase their consumption levels of green products. These outcomes would stimulate the marketing of green products and would give wider opportunities to improve the system as a whole. Additionally, when consumers exhibit awareness, they will likely purchase more green products. This means that consumer awareness of green products should be enhanced by governments, organizations, and marketing agents to raise public interest. Thus, marketers, policymakers, and other organizations may design effective methods to encourage sustainable consumption and foster a more environmentally conscious society by recognizing the main drivers.

This study has some limitations that should be mentioned along with directions and recommendations for future research. First, this study is based on self-reported data, which could be skewed due to social desirability bias and other flaws. Future studies could use a longitudinal methodology and a larger sample size to further understand green product purchasing behavior. Second, this study exclusively covers consumers in Greece. Future research could focus on cross-country (or cross-cultural) analysis of consumers' behavior toward purchasing green products. Third, online surveys have the advantage of reaching a wider geographic and demographic coverage, but there are some drawbacks. There could be bias in the type of people who participate in online surveys (or sample selection). Additionally, online surveys may not accurately reflect the diversity and characteristics of the general population, especially when examining the consumption of a specific product group, such as organic food, green products, or functional foods. Hence, future studies could use other types of surveys (e.g., in-person, paper, and mail surveys). Lastly, the current study aimed to derive information and results based on the MOA framework and consumer awareness. Some other drivers may be added in future studies, such as cultural factors, and consumer values. Such additions are particularly relevant when implementing cross-country (or cross-cultural) analysis.

The findings in this study provide information to marketing agents, market stakeholders, governments, scholars, and other organizations to develop policies and strategies and to enhance consumers' purchases of green products.

Author Contributions: Conceptualization, G.Y. and A.S.; methodology, G.Y. and A.S.; software, G.Y.; validation, A.S., G.Y. and P.L.G.; formal analysis, A.S.; investigation, A.S. and G.Y.; resources, G.Y. and A.S.; data curation, A.S.; writing—original draft preparation, G.Y. and A.S.; writing—review and editing, A.S., G.Y. and P.L.G.; visualization, A.S.; supervision, A.S. and P.L.G.; project administration, A.S., G.Y. and P.L.G. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Acknowledgments: The authors acknowledge the participants of the survey and the anonymous reviewers for their constructive comments.

Conflicts of Interest: The authors declare no conflict of interest.

References

- Li, X.; Du, J.; Long, H. Theoretical Framework and Formation Mechanism of the Green Development System Model in China. *Environ. Dev.* **2019**, *32*, 100465. [\[CrossRef\]](#)
- Subramanian, K. The Crisis of Consumption of Natural Resources. *Int. J. Recent Innov. Acad. Res.* **2018**, *2*, 8–19.
- Tomşa, M.-M.; Romonţi-Maniu, A.-I.; Scridon, M.-A. Is Sustainable Consumption Translated into Ethical Consumer Behavior? *Sustainability* **2021**, *13*, 3466. [\[CrossRef\]](#)
- Vijai, C.; Anitha, P. The Importance of Green Marketing. *Int. J. Future Gener. Commun. Netw.* **2020**, *13*, 4137–4142.
- Yang, S.; Chai, J. The Influence of Enterprises' Green Marketing Behavior on Consumers' Green Consumption Intention—Mediating Role and Moderating Role. *Sustainability* **2022**, *14*, 15478. [\[CrossRef\]](#)
- Nogueira, S. The Importance of a Green Marketing Strategy in Brand Communication—M. Coutinho Multi-Brand Car Dealer Case in Northern Portugal. In Proceedings of the Third EBOR Conference, Rome, Italy, 20–22 November 2020; pp. 351–373.
- Solomon, M.R. *Consumer Behavior: Buying, Having, and Being*; Pearson Education: Essex, UK, 2017.
- Lampe, M.; Gazda, G.M. Green Marketing in Europe and the United States: An Evolving Business and Society Interface. *Int. Bus. Rev.* **1995**, *4*, 295–312. [\[CrossRef\]](#)
- Peattie, K. Towards Sustainability: The Third Age of Green Marketing. *Mark. Rev.* **2001**, *2*, 129–146. [\[CrossRef\]](#)
- Mishra, P.; Sharma, P. Green Marketing: Challenges and Opportunities for Business. *BVIMR Manag. Edge* **2012**, *7*, 78–86.
- Majeed, M.U.; Aslam, S.; Murtaza, S.A.; Attila, S.; Molnár, E. Green Marketing Approaches and Their Impact on Green Purchase Intentions: Mediating Role of Green Brand Image and Consumer Beliefs towards the Environment. *Sustainability* **2022**, *14*, 11703. [\[CrossRef\]](#)
- Jaiswal, D.; Kant, R. Green Purchasing Behaviour: A Conceptual Framework and Empirical Investigation of Indian Consumers. *J. Retail. Consum. Serv.* **2018**, *41*, 60–69. [\[CrossRef\]](#)
- Grob, A. A Structural Model of Environmental Attitudes and Behaviour. *J. Environ. Psychol.* **1995**, *15*, 209–220. [\[CrossRef\]](#)
- Gilg, A.; Barr, S.; Ford, N. Green Consumption or Sustainable Lifestyles? Identifying the Sustainable Consumer. *Futures* **2005**, *37*, 481–504. [\[CrossRef\]](#)
- Han, H.; Hsu, L.-T.; Sheu, C. Application of the Theory of Planned Behavior to Green Hotel Choice: Testing the Effect of Environmental Friendly Activities. *Tour. Manag.* **2010**, *31*, 325–334. [\[CrossRef\]](#)
- Gomes, S.; Lopes, J.M.; Nogueira, S. Willingness to Pay More for Green Products: A Critical Challenge for Gen Z. *J. Clean. Prod.* **2023**, *390*, 136092. [\[CrossRef\]](#)
- Ansu-Mensah, P. Green Product Awareness Effect on Green Purchase Intentions of University Students': An Emerging Market's Perspective. *Future Bus. J.* **2021**, *7*, 48. [\[CrossRef\]](#)
- Barbu, A.; Catană, Ş.-A.; Deselnicu, D.C.; Cioca, L.-I.; Ioanid, A. Factors Influencing Consumer Behavior toward Green Products: A Systematic Literature Review. *Int. J. Environ. Res. Public Health* **2022**, *19*, 16568. [\[CrossRef\]](#) [\[PubMed\]](#)
- Kumar, A.; Pandey, M. Social Media and Impact of Altruistic Motivation, Egoistic Motivation, Subjective Norms, and EWOM toward Green Consumption Behavior: An Empirical Investigation. *Sustainability* **2023**, *15*, 4222. [\[CrossRef\]](#)
- Khan, S.N.; Mohsin, M. The Power of Emotional Value: Exploring the Effects of Values on Green Product Consumer Choice Behavior. *J. Clean. Prod.* **2017**, *150*, 65–74. [\[CrossRef\]](#)
- Xiao, J.; Wang, Q.; Dai, J.; Yang, B.; Li, L. Urban Residents' Green Agro-Food Consumption: Perceived Risk, Decision Behaviors, and Policy Implications in China. *Sustainability* **2023**, *15*, 10505. [\[CrossRef\]](#)
- Cerri, J.; Testa, F.; Rizzi, F. The More I Care, the Less I Will Listen to You: How Information, Environmental Concern and Ethical Production Influence Consumers' Attitudes and the Purchasing of Sustainable Products. *J. Clean. Prod.* **2018**, *175*, 343–353. [\[CrossRef\]](#)

23. Panda, T.K.; Kumar, A.; Jakhar, S.; Luthra, S.; Garza-Reyes, J.A.; Kazancoglu, I.; Nayak, S.S. Social and Environmental Sustainability Model on Consumers' Altruism, Green Purchase Intention, Green Brand Loyalty and Evangelism. *J. Clean. Prod.* **2020**, *243*, 118575. [\[CrossRef\]](#)
24. Joo, K.; Hwang, J. Do Consumers Intend to Use Indoor Smart Farm Restaurants for a Sustainable Future? The Influence of Cognitive Drivers on Behavioral Intentions. *Sustainability* **2023**, *15*, 6666. [\[CrossRef\]](#)
25. Do Paço, A.; Shiel, C.; Alves, H. A New Model for Testing Green Consumer Behaviour. *J. Clean. Prod.* **2019**, *207*, 998–1006. [\[CrossRef\]](#)
26. He, H.; Zhu, L. Online Shopping Green Product Quality Supervision Strategy with Consumer Feedback and Collusion Behavior. *PLoS ONE* **2020**, *15*, e0229471. [\[CrossRef\]](#) [\[PubMed\]](#)
27. Dong, X.; Jiang, B.; Zeng, H.; Kassoh, F.S. Impact of Trust and Knowledge in the Food Chain on Motivation-Behavior Gap in Green Consumption. *J. Retail. Consum. Serv.* **2022**, *66*, 102955. [\[CrossRef\]](#)
28. MacInnis, D.J.; Jaworski, B.J. Information Processing from Advertisements: Toward an Integrative Framework. *J. Mark.* **1989**, *53*, 1. [\[CrossRef\]](#)
29. Zhu, B. Consumer's Motivation, Opportunities and Abilities for Sustainable Consumption: A Case in China. *Uwf UmweltWirtschaftsForum* **2016**, *24*, 337–352. [\[CrossRef\]](#)
30. Ölander, F.; Thøgersen, J. Understanding of Consumer Behaviour as a Prerequisite for Environmental Protection. *J. Consum. Policy* **1995**, *18*, 345–385. [\[CrossRef\]](#)
31. Jackson, T. Motivating Sustainable Consumption: A Review of Evidence on Consumer Behaviour and Behavioural Change. *Sustain. Dev. Res. Netw.* **2005**, *29*, 30–40.
32. Hung, K.; Petrick, J.F. Investigating the Role of Motivation, Opportunity and Ability (MOA) on Travel Intentions: An Application of the MOA Model in Cruise Tourism. *Travel Tour. Res. Assoc. Adv. Tour. Res. Glob.* **2016**, *55*, 1–13.
33. Krapež Trošt, J.; Škerlavaj, M.; Anzengruber, J. The Ability–Motivation–Opportunity Framework for Team Innovation: Efficacy Beliefs, Proactive Personalities, Supportive Supervision and Team Innovation. *Econ. Bus. Rev.* **2016**, *18*, 77–102. [\[CrossRef\]](#)
34. Syed Zwick, H. Narrative Analysis of Syrians, South Sudanese and Libyans Transiting in Egypt: A Motivation-Opportunity-Ability Approach. *J. Ethn. Migr. Stud.* **2022**, *48*, 2223–2244. [\[CrossRef\]](#)
35. Davis, F.D.; Bagozzi, R.P.; Warshaw, P.R. Extrinsic and Intrinsic Motivation to Use Computers in the Workplace. *J. Appl. Soc. Psychol.* **1992**, *22*, 1111–1132. [\[CrossRef\]](#)
36. Binney, W.; Hall, J.; Oppenheim, P. *The MOA Framework and Behavioural Response*; Thyne, M., Deans, K., Gnoth, J., Eds.; University of Otago: Dunedin, New Zealand, 2007.
37. Nye, M.; Hargreaves, T. Exploring the Social Dynamics of Proenvironmental Behavior Change. *J. Ind. Ecol.* **2009**, *14*, 137–149. [\[CrossRef\]](#)
38. MacInnis, D.J.; Moorman, C.; Jaworski, B.J. Enhancing and Measuring Consumers' Motivation, Opportunity, and Ability to Process Brand Information from Ads. *J. Mark.* **1991**, *55*, 32. [\[CrossRef\]](#)
39. Rothschild, M.L. Carrots, Sticks, and Promises: A Conceptual Framework for the Management of Public Health and Social Issue Behaviors. *J. Mark.* **1999**, *63*, 24–37. [\[CrossRef\]](#)
40. Van Geffen, L.; van Herpen, E.; Sijtsema, S.; van Trijp, H. Food Waste as the Consequence of Competing Motivations, Lack of Opportunities, and Insufficient Abilities. *Resour. Conserv. Recycl. X* **2020**, *5*, 100026. [\[CrossRef\]](#)
41. D'Souza, C.; Taghian, M. Green Advertising Effects on Attitude and Choice of Advertising Themes. *Asia Pac. J. Mark. Logist.* **2005**, *17*, 51–66. [\[CrossRef\]](#)
42. Ayaviri-Nina, V.D.; Jaramillo-Quinzo, N.S.; Quispe-Fernández, G.M.; Mahmud, I.; Alasqah, I.; Alharbi, T.A.F.; Alqarawi, N.; Carrascosa, C.; Saraiva, A.; Alfheaid, H.A.; et al. Consumer Behaviour and Attitude towards the Purchase of Organic Products in Riobamba, Ecuador. *Foods* **2022**, *11*, 2849. [\[CrossRef\]](#)
43. Nedra, B.-A.; Sharma, S.; Dakhli, A. Perception and Motivation to Purchase Organic Products in Mediterranean Countries. *J. Res. Mark. Entrep.* **2015**, *17*, 67–90. [\[CrossRef\]](#)
44. Ou-Yang, H.-Y.; Ariphongphokin, R.; Trung, N.H. Adopting the Motivation-Opportunity-Ability Model to Evaluate the Intentions of Thai Students to Study Abroad. *Int. J. Soc. Sci. Educ.* **2014**, *4*, 502–515.
45. Fogt Jacobsen, L.; Pedersen, S.; Thøgersen, J. Drivers of and Barriers to Consumers' Plastic Packaging Waste Avoidance and Recycling—A Systematic Literature Review. *Waste Manag.* **2022**, *141*, 63–78. [\[CrossRef\]](#)
46. Pilgrimienė, Ž.; Žukauskaitė, A.; Korzilius, H.; Banytė, J.; Dovalienė, A. Internal and External Determinants of Consumer Engagement in Sustainable Consumption. *Sustainability* **2020**, *12*, 1349. [\[CrossRef\]](#)
47. Hasbullah, N.N.; Sulaiman, Z.; Mas'od, A.; Ahmad Sugiran, H.S. Drivers of Sustainable Apparel Purchase Intention: An Empirical Study of Malaysian Millennial Consumers. *Sustainability* **2022**, *14*, 1945. [\[CrossRef\]](#)
48. Tong, L.; Toppinen, A.; Wang, L.; Berghäll, S. How Motivation, Opportunity, and Ability Impact Sustainable Consumption Behaviour of Fresh Berry Products. *J. Clean. Prod.* **2023**, *401*, 136698. [\[CrossRef\]](#)
49. Adrita, U.W.; Mohiuddin, M.F. Impact of Opportunity and Ability to Translate Environmental Attitude into Ecologically Conscious Consumer Behavior. *J. Mark. Theory Pract.* **2020**, *28*, 173–186. [\[CrossRef\]](#)
50. Osbaldiston, R.; Sheldon, K.M. Promoting Internalized Motivation for Environmentally Responsible Behavior: A Prospective Study of Environmental Goals. *J. Environ. Psychol.* **2003**, *23*, 349–357. [\[CrossRef\]](#)

51. Iman, F.; Miarsyah, M.; Sigit, D.V. The Effect of Intention to Act and Knowledge of Environmental Issues on Environmental Behavior. *JPBI (J. Pendidik. Biol. Indones.)* **2019**, *5*, 529–536. [\[CrossRef\]](#)
52. Costa, C.S.R.; da Costa, M.F.; Maciel, R.G.; Aguiar, E.C.; Wanderley, L.O. Consumer Antecedents towards Green Product Purchase Intentions. *J. Clean. Prod.* **2021**, *313*, 127964. [\[CrossRef\]](#)
53. Sharma, R.; Nguyen, T.; Grote, U. Changing Consumption Patterns—Drivers and the Environmental Impact. *Sustainability* **2018**, *10*, 4190. [\[CrossRef\]](#)
54. Correia, E.; Sousa, S.; Viseu, C.; Larguinho, M. Analysing the Influence of Green Marketing Communication in Consumers' Green Purchase Behaviour. *Int. J. Environ. Res. Public Health* **2023**, *20*, 1356. [\[CrossRef\]](#) [\[PubMed\]](#)
55. Nemes, N.; Scanlan, S.J.; Smith, P.; Smith, T.; Aronczyk, M.; Hill, S.; Lewis, S.L.; Montgomery, A.W.; Tubiello, F.N.; Stabinsky, D. An Integrated Framework to Assess Greenwashing. *Sustainability* **2022**, *14*, 4431. [\[CrossRef\]](#)
56. Zhang, L.; Xu, M.; Chen, H.; Li, Y.; Chen, S. Globalization, Green Economy and Environmental Challenges: State of the Art Review for Practical Implications. *Front. Environ. Sci.* **2022**, *10*, 870271. [\[CrossRef\]](#)
57. Boz, Z.; Korhonen, V.; Koelsch Sand, C. Consumer Considerations for the Implementation of Sustainable Packaging: A Review. *Sustainability* **2020**, *12*, 2192. [\[CrossRef\]](#)
58. Alamsyah, D.P.; Othman, N.A.; Mohammed, H.A.A. The Awareness of Environmentally Friendly Products: The Impact of Green Advertising and Green Brand Image. *Manag. Sci. Lett.* **2020**, *10*, 1961–1968. [\[CrossRef\]](#)
59. Sun, Y.; Li, T.; Wang, S. "I Buy Green Products for My Benefits or Yours": Understanding Consumers' Intention to Purchase Green Products. *Asia Pac. J. Mark. Logist.* **2022**, *34*, 1721–1739. [\[CrossRef\]](#)
60. Iftikhar, F.; Asghar, A.; Khan, M. The Impact of Green Marketing and Environmental Awareness on Consumers Green and Conscious Consumption of Green Products. *Acad. J. Soc. Sci. (AJSS)* **2022**, *6*, 077–094. [\[CrossRef\]](#)
61. Witek, L.; Kuźniar, W. Green Purchase Behavior: The Effectiveness of Sociodemographic Variables for Explaining Green Purchases in Emerging Market. *Sustainability* **2020**, *13*, 209. [\[CrossRef\]](#)
62. Dagher, G.K.; Itani, O.; Kassar, A.N. The Impact of Environment Concern and Attitude on Green Purchasing Behavior: Gender as The Moderator. *Contemp. Manag. Res.* **2015**, *11*, 179–206. [\[CrossRef\]](#)
63. Chekima, B.; Syed Khalid Wafa, S.A.W.; Igau, O.A.; Chekima, S.; Sondoh, S.L. Examining Green Consumerism Motivational Drivers: Does Premium Price and Demographics Matter to Green Purchasing? *J. Clean. Prod.* **2016**, *112*, 3436–3450. [\[CrossRef\]](#)
64. Wang, L.; Wong, P.P.; Narayanan, E.A. The Demographic Impact of Consumer Green Purchase Intention toward Green Hotel Selection in China. *Tour. Hosp. Res.* **2020**, *20*, 210–222. [\[CrossRef\]](#)
65. Liu, X.; Wang, C.; Shishime, T.; Fujitsuka, T. Sustainable Consumption: Green Purchasing Behaviours of Urban Residents in China. *Sustain. Dev.* **2012**, *20*, 293–308. [\[CrossRef\]](#)
66. Patino, A.; Kaltcheva, V.D.; Pitta, D.; Sriram, V.; Winsor, R.D. How Important Are Different Socially Responsible Marketing Practices? An Exploratory Study of Gender, Race, and Income Differences. *J. Consum. Mark.* **2014**, *31*, 2–12. [\[CrossRef\]](#)
67. Ottman, J.A. *The New Rules of Green Marketing Strategies, Tools, and Inspiration for Sustainable Branding*; Greenleaf Publishing: Austin, TX, USA, 2011.
68. Truelove, H.B.; Parks, C. Perceptions of behaviors that cause and mitigate global warming and intentions to perform these behaviors. *J. Environ. Psychol.* **2012**, *32*, 246–259. [\[CrossRef\]](#)
69. Haytko, D.K.; Matulich, E. Green Advertising and Environmentally Responsible Consumer Behaviors: Linkages Examined. *J. Manag. Mark. Res.* **2008**, *1*, 2–11.
70. Bhattacharya, S. Consumer Attitude Towards Green Marketing in India. *IUP J. Mark. Manag.* **2011**, *10*, 62–71.
71. George, D.; Mallery, P. *SPSS for Windows Step by Step: A Simple Guide and Reference*; Allyn & Bacon: Boston, MA, USA, 2003.
72. Hair, J.F.; Black, W.C.; Babin, B.J.; Anderson, R.E. *Multivariate Data Analysis*, 8th ed; Cengage Learning: Boston, MA, USA, 2019.
73. Hosmer, D.W.; Lemeshow, S. *Applied Logistic Regression*; Wiley: New York, NY, USA, 2000.
74. Altunışık, R.; Coşkun, R.; Bayraktaroğlu, S.; Yıldırım, E. *Sosyal Bilimlerde Araştırma Yöntemleri—SPSS Uygulamaları*; Sakarya Yayıncılık: İstanbul, Turkey, 2007.
75. Park, H.-A. An Introduction to Logistic Regression: From Basic Concepts to Interpretation with Particular Attention to Nursing Domain. *J. Korean Acad. Nurs.* **2013**, *43*, 154. [\[CrossRef\]](#)
76. Peng, C.-Y.J.; Lee, K.L.; Ingersoll, G.M. An Introduction to Logistic Regression Analysis and Reporting. *J. Educ. Res.* **2002**, *96*, 3–14. [\[CrossRef\]](#)
77. Vermeir, I.; Verbeke, W. Sustainable Food Consumption among Young Adults in Belgium: Theory of Planned Behaviour and the Role of Confidence and Values. *Ecol. Econ.* **2008**, *64*, 542–553. [\[CrossRef\]](#)
78. Rusyani, E.; Lavuri, R.; Gunardi, A. Purchasing Eco-Sustainable Products: Interrelationship between Environmental Knowledge, Environmental Concern, Green Attitude, and Perceived Behavior. *Sustainability* **2021**, *13*, 4601. [\[CrossRef\]](#)
79. Choi, D.; Johnson, K.K.P. Influences of Environmental and Hedonic Motivations on Intention to Purchase Green Products: An Extension of the Theory of Planned Behavior. *Sustain. Prod. Consum.* **2019**, *18*, 145–155. [\[CrossRef\]](#)
80. Thøgersen, J. Norms for Environmentally Responsible Behaviour: An Extended Taxonomy. *J. Environ. Psychol.* **2006**, *26*, 247–261. [\[CrossRef\]](#)
81. Lin, S.-T.; Niu, H.-J. Green Consumption: Environmental Knowledge, Environmental Consciousness, Social Norms, and Purchasing Behavior. *Bus Strategy Environ.* **2018**, *27*, 1679–1688. [\[CrossRef\]](#)

82. Taufique, K.M.R.; Vaithianathan, S. A Fresh Look at Understanding Green Consumer Behavior among Young Urban Indian Consumers through the Lens of Theory of Planned Behavior. *J. Clean. Prod.* **2018**, *183*, 46–55. [[CrossRef](#)]
83. Mishal, A.; Dubey, R.; Gupta, O.K.; Luo, Z. Dynamics of Environmental Consciousness and Green Purchase Behaviour: An Empirical Study. *Int. J. Clim. Chang. Strateg. Manag.* **2017**, *9*, 682–706. [[CrossRef](#)]
84. González-Rodríguez, M.R.; Díaz-Fernández, M.C.; Font, X. Factors Influencing Willingness of Customers of Environmentally Friendly Hotels to Pay a Price Premium. *Int. J. Contemp. Hosp. Manag.* **2020**, *32*, 60–80. [[CrossRef](#)]
85. Kim, K.; Kim, W.G.; Lee, M. Impact of Dark Patterns on Consumers' Perceived Fairness and Attitude: Moderating Effects of Types of Dark Patterns, Social Proof, and Moral Identity. *Tour Manag.* **2023**, *98*, 104763. [[CrossRef](#)]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.