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ETHICAL PERCEPTION AND CONSUMER BEHAVIOR REGARDING GREEN LABEL AND GREENWASHING MARKETING

Bachelor's Thesis

Programme International Business Administration, specialization marketing

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I hereby declare that I have compiled the thesis independently. and all works, important standpoints, and data by other authors have been properly referenced and the same paper. has not been previously presented for grading.

The document length is eight thousand and five hundred words from the introduction to the end of the conclusion.

Amena Siddika Esha 17/12/2023 (signature, date)

ABSTRACT

Green-friendly consumption has grown exponentially in recent years. People have become more aware of their product choices and consumption practices. In addition to this, the increase in the concern regarding environmental sustainability has also increased significantly. As a result, consumers have started becoming more conscious of their consumption choices than before. However, companies advertise their products while using two marketing techniques; green-label and greenwashing. The consumers, on the other hand, may not be entirely aware of the difference between the two techniques, and hence, can easily fall into deception.

The aim of this research paper is to find out how ethical perceptions influence consumers' behavior regarding green-labeled products and/or services and their awareness regarding greenwashing. The instrument of questionnaire (online survey) is used to collect data from 213 respondents. By using simple random sampling, the data was collected from the people of Estonia. The online survey included 17 statements based on the research questions. The study was analyzed using SPSS linear regression, descriptive frequency, and correlation.

The study revealed that green-labeled marketing influence consumer's purchase decision, however, there are also other factors that may also have an impact on buyers' purchase choice other eco-labels and ethical perception. Moreover, a large segment of people may not be aware of the term greenwashing, however, they acknowledge the existence of deceptive language used by companies to market products.

Keywords: Green-label marketing, greenwashing marketing, ethical perception, consumer awareness, consumer behavior.

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INTRODUCTION

Consumers' interest in sustainable consumption (SC) has grown swiftly in recent years all across the world. SC is defined by Vermeir and Verbeke (2006) as a decision-making process that involves consumers' social responsibility apart from their own needs and desires. Furthermore, it comprises health issues like the rise in sales of organic food (Carrigan et al., 2004). Moreover, there are several studies that indicate a demand for environmental products as well as a demand for an awareness regarding the information of such products (Wessells et al., 1999).

The last decade is evidence of an increase in concern regarding environmental sustainability. Thus, it has resulted in the emergence of green-label marketing. Said marketing plays its role in promoting products or services that are environmentally friendly. In this regard, environmental-friendly consumption is largely considered a "complex form of consumer behavior, and the ethical perception is an important part of it" (Basgoze, 2012, p.477). A few pieces of ethical research have been conducted in order to explore the green aspects of certain practices of consumers (Mostafa, 2007; McDonald et al., 2009; Chan et al., 2008), however, the need for a more extensive exploration is needed to examine the relationship between ethical perception and consumer behavior as well as consumers' awareness regarding green-labeled marketing and greenwash techniques. The ethical perception of an individual can greatly influence their purchase decision. It indicates their ethical and moral perception of a particular product. Furthermore, consumer behavior refers to the actions and/or decisions that a consumer makes in regard to the purchase of any product.

The problem of this research is the lack of awareness and information amongst environmentally conscious Estonian consumers regarding greenwashing marketing and its techniques. In the meantime, it can also be difficult for them to distinguish such false marketing from green-label marketing. Since there is a rapid increase in the greenwashing marketing that may lead to ethical consumers not being able to differentiate both marketing strategies (greenwashing and green-labelling), hence, consequently, this can lead to ethical companies losing the consumers, who are ethical buyers, and environmentally conscious to purchase products. Moreover, such marketing

can also lead the customers into not trusting all the eco-friendly companies. As a result, a major decline in the purchase of green-friendly products can take place in future. Therefore, it is crucial to first find out the influence green-label marketing has on consumers' behavior, to further determine whether such consumers are aware of greenwashing marketing, and if ethical perceptions play any role in consumers purchase decisions.

To further explain the problem in question, green label marketing plays its role in helping consumers make informed decisions while keeping in view ethical perception, whereas, on the other hand, the strategy of greenwashing is actively incorporated by companies in misleading the consumers into thinking they are buying environmentally friendly products. Companies mislead consumers by falsely marketing their products and/or services as environmentally friendly, whereas, in reality, they are not. Both greenwashing and green-label marketing can influence ethical perception and consumer behavior. Through greenwashing, individuals are led to believe that the product is environmentally friendly. This ultimately affects their ethical perception. On the other hand, green labeling can help them in making the informed decision by making the right purchase choice, while keeping ethical perceptions under consideration. However, for consumers, it is not necessarily easy to distinguish both marketing strategies from each other since there is a lack of awareness regarding them.

Therefore, this thesis takes a closer look at green-label marketing and greenwashing marketing in terms of ethical perception and its relationship with consumer behavior. Moreover, these marketing strategies can have a significant effect on the decision-making process of consumers, therefore, the thesis keeps into account the various techniques that companies use to market their products or services as green-friendly. Additionally, it also keeps into account the various greenwashing techniques that consumers are not aware of and how said techniques can mislead consumers into making certain purchase decisions.

The aim of this study is to find out the role ethical perception plays in the purchase decision of consumers in regard to green-label marketed products and their awareness regarding greenwashing. The reason for exploring both marketing strategies (i.e., green-label and greenwashing) is that the author wants to bridge the gap left by previous studies. In the past, studies (Aasmäe, 2021; (Commission on Environment, n.d.; Urzua, 2014) primarily kept their focus on either green-label marketing or greenwashing marketing. However, both strategies, in relation to consumer purchase decisions and awareness have not been explored simultaneously. Therefore,

the current study examines both the techniques with the purpose of contributing more to the field and to spread awareness about them amongst consumers who make environmental-friendly purchase choices. The significance of the research is that it keeps its focus on both strategies and in order to analyze the data, it uses three distinctive methods in SPSS to obtain better results with minimum error.

Research Question 1: What is the effect of green-label marketing on consumers' behavior?

Research Question 2: Are consumers aware of greenwashing techniques?

Research Question 3: What is the relationship between ethical perceptions and consumer behavior regarding green-label marketing?

In order to obtain the answers to these questions, the author obtained the data from quantitative analysis. A quantitative data was used to find out the role of green-label marketing on consumers' behavior and to find out the relationship between ethical perceptions and consumer behavior regarding green-label marketing in addition to their awareness regarding greenwashing techniques.

The first chapter of the paper provides theoretical background regarding marketing strategies and their influence on consumer's behavior as well as their purchase decision along with their moral perceptions and purchase choices in regard to products that are marketed to be green-friendly. The second chapter provides an overview of greenwashing marketing and consumers' awareness towards it. The third chapter focuses on the research methodology, data collection, the analysis of data, results, findings, discussions, and suggestions. The thesis ends with the conclusion of the thesis, where the author states the main aim of the thesis, findings of each research questions, and the suggestions for future research.

1. THEORETICAL PART

This part of the thesis will take a closer look at the concept of consumer purchasing decision and more specifically the various stages of the consumer purchasing decision. Moreover, it will also take into account the influence companies have in shaping consumers' behavior. In addition to this, this section will also put an emphasis on green-label marketing and its impact on the behavior of consumers.

1.1. Ethical Perceptions and Consumer Purchase Decision

Sustainable consumption refers to the consumer's preference for products that do the "least damage to the environment" and continue to support ethical practices (Basgoze, 2012, p. 477). Ethical perception has long been part of green consumption. The concept derives from the Norm Activation Theory that discusses the environmental feelings that emerge as a result of an ethical way of thinking (Savari et al., 2023). There is no denying that consumer behavior, in recent years, has shifted significantly due to increased environmental awareness. This contributes heavily to their perception of green-labeled products. In the last few years, green awareness amongst the masses has introduced the concept of green conception in marketing as well. There is a prominent increase in concerns related to ecological elements and as a result, policymakers have started taking initiatives to promote green behavior that can have a positive effect on the environment (Iqbal et al. 2023, p. 976).

The rising concern regarding the environment and a significant surge in ethical perception regarding green products and their marketing have resulted in an increased demand for such products. Moreover, another reason behind the ethical perceptions and consumption of goods have increased is the fact that there is a growing environmental crisis that has forced consumers to think twice before buying any product. Because of this awareness, environmental information can directly have an impact on consumers so they can make informed decisions (Leire & Thidell, 2005)

The terms consumer and customer are often used interchangeably. Moreover, according to the Estonian Consumer Protection Act, a customer is a natural person who is served with products or services or who attains and utilizes goods or services for personal use rather than for their business or professional endeavors. Typically, a consumer is an individual who engages in purchasing activities at least once a day. As stated by Lautiainen (2015, p. 12), every purchase decision is different, and it requires a different amount of time and effort. To further simplify it, the process of Purchasing decisions is used by consumers or customers while buying any product or service.

Predominantly, the purchasing decision is determined by the level of involvement a consumer has in making a purchase decision. Thus, the American Institute of Marketing (AMA) defines Consumer behavior as "the study of how customers, both individuals and organizations, satisfy their needs and wants by choosing, purchasing, using, and disposing of goods, ideas, and services." In this regard, the term preference indicates the choice of consumers that may help in increasing the chances of their satisfaction with the product or service.

Various factors such as the specifications of a product and its characteristics influence any individual in the decision-making process. Previous studies have shown that corporate social responsibility (Elg & Hultman, 2016) and social media marketing can play quite crucial roles in influencing the purchase behavior of consumers as well as their attitude towards a certain brand.

However, upon relating the concept with a green-friendly product purchase, researchers (D'Souza et al., 2006) have found that factors like the inner feeling of obligation for the well-being of the environment, past experiences with the green-friendly products and several steps taken by the brands in supporting the environmental-friendly life can have an influence on consumer's purchase decision.

John Dewey introduced the five-stage decision process in 1910 which is still widely accepted by the majority of scholars and researchers. The concept continues to serve as the most important medium of understanding consumer behavior when it comes to purchasing any service and/or product. These stages have been named Problem Recognition, Information Search, Alternative Evaluation, Choice, and Outcomes. Given below is a detailed overview of all these five stages (Bruner & Pomazal, 1988).



Figure 1. Five Stages of Consumer Behavior

Source: Bruner & Pomazal (1988)

Problem Recognition:

In order to purchase a product, the consumer needs to first recognize their needs. By identifying the problem i.e., they require a product or service, they can move to the next stages. However, it is a prerequisite for them to recognize that there is a problem that needs a solution.

Information Search:

An eco-friendly purchase decision is unlike ordinary purchasing processes. The consumers need to first familiarize themselves with the features they look for in a green-friendly product. They can obtain this information from sources like advertisements, acquaintances, marketing mediums, etc.

Alternative Evaluation:

Once the consumer has decided what they are looking for in a product, the time for the process of searching for the products/services begins. In this stage, the consumer compares the different options in accordance with the green-friendly features and what they require from the product. This may include the quality, price, environmental friendliness, etc. After the comparison, the consumer decides which options meet all their requirements.

Choice:

In the fourth stage, the consumer decides to purchase the product after a complete analysis of it. In other words, the act of purchasing takes place.

Outcomes:

In the last stage, the consumer evaluates and reviews the product or service they have bought to judge whether it is the right one for them or not. Moreover, in this stage, the consumer may also decide whether they want to purchase the product again in the future or not (Comegys et al., 2006).

1.2. Companies Shaping Consumers' Behavior Through Green-label Marketing.

In recent eras, companies have started to pay more attention to green consumerism primarily due to the oil crisis and the rapid increase in the concerns regarding environment (Iqbal et al., 2023). This is also the reason why consumers are willing to invest in green products. In order to meet the demand of the masses, companies have started to take part in various marketing strategies to project their corporate image in a more positive way. Hence, this further helps them in shaping consumers' purchase behavior.

Several brands take measures to increase their customer base by delivering green-friendly products so they can participate in the growing trend of environmental protection. Green products gain massive attention because they help save the planet by minimizing pollution and toxicity levels and contributing to the conservation of resources (Sun et al., 2018). Companies also participate in awareness campaigns related to green-label products so they can shape the purchase intentions and decisions of consumers. However, as proposed by Keni et al., (2020), companies should also address the factors impacting consumers' green purchase intention. As a result, this can potentially mediate the green consumption behavior.

Moreover, many businesses have started to reconsider their products and services based on environmental conservation (Kumar & Anand, 2013 referenced in Iqbal et al., 2023, p. 976). Marketers of these organizations enlist help from different advertising strategies that predominantly focus on changing consumers' purchase process and their intention to make them more environment-conscious by advertising the features of green products. For instance, companies like Toyota highlight Prius' low emissions and fuel consumption and use this technique to persuade consumers to believe that the car can offer several environmental benefits (Iqbal et al., 2023). By using such strategies, companies shift the focus of customers to the green attributes of the products and hence, shaping their intentions and behavior consequently.

The concern regarding the environment and human's role in sustaining and maintaining it has increased significantly in recent years. One such concern is the massive usage of products that are non-eco-friendly. Some products are manufactured without paying much attention to the environment. As stated by (Rehan & Zafar, 2021)Rehan & Zafar (2021, p.327), "One of the major challenges with current packaging materials is that they are not biodegradable which causes environmental pollution, especially when not disposed of correctly." Due to these challenges faced by people, various practices related to sustainability have begun to emerge. Sustainability, as defined by the World Commission on Environment is "the ability to meet the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations World Commission on Environment and Development, 1987).

In recent years, several companies have started marketing their products as green or environmentally friendly. The green-label marketing is used to show social and environmental responsibility on the part of the companies as well as their loyalty to customers. In this regard, the American Marketing Association (n.d.) defines green marketing as the marketing of products that are considered environmentally friendly. Furthermore, Polonsky (2011)defined it as a marketing activity that puts emphasis on the fulfillment of human needs by paying attention to the possible environmental effects.

According to (Dangelico & Vocalelli, 2017), green marketing is also known as Environmental Marketing which is a strategy used by businesses to differentiate their products and services from others on the basis of their features and how they cater to the environment and the consumption of products. Such marketing can have a great impact on consumers as they become more ecologically aware and conscious about their purchase behavior and preferences. Furthermore, this type of marketing is different from traditional marketing because it helps companies achieve additional results which conventional marketing fails to provide (Laasri, 2023, p. 14).

1.3. Green-label Marketing in Estonia

According to the World Health Organization (WHO), Estonia has been identified as having one of the cleanest air in the world in 2021, as reported by Invest in Estonia. Thus, the country is considered one of the most environmentally friendly countries in the world due to its 51.3% territory which is covered in forest (Forestry).

Consumers are increasingly becoming aware of the environment and thus, it has resulted in the demand for eco-friendly products. This has consequently given rise to the concept of green-label marketing. Furthermore, the growing environmental crises have increased the awareness regarding it in companies and individuals. According to Leire and Thidell (2005), environmental information can have an impact on the purchasing choices of consumers. In this case, media and television play quite an integral role in spreading awareness about ethical issues. Various companies promote green marketing. In contemporary times, the internet has become a crucial source for carrying messages related to green-labeled products.

Moreover, according to Alexander and Nicholls (2006), consumers now seem to have become involved in gaining information about the production of purchased items, primarily with the aim of behaving in an ethical manner. They come in contact with some type of green product every day. More particularly, the younger generation, in this regard, has become more aware and educated about sustainability. They have a certain mindset towards consumption and ethically conscious products. Furthermore, the younger generation gathers more information before purchasing an item (Kanchanapibul et al., 2014). Green label marketing is responsible for providing businesses an edge in the market and against their competitors. Particularly in Estonia, the demand for green products is increasing rapidly, as reported by Liobikienė & Brizga (2022) a significant change in consumer purchase behavior has been observed in the last seven years in the Baltic States. Individuals have started purchasing environmentally friendly, local, and durable products. However, this behavior is not quite evident in Lithuania but in Estonia, consumers show a significant inclination towards organic, sustainable products.. Since the establishment of Cleantech Estonia in 2016, it is evident that the country has placed a strong emphasis on environmental sustainability through its "clean technology" (Oyetunde, 2022). Cleantech plays its role in promoting awareness regarding the environment and the issues related to its sustainability, specifically in relation to the implementation of various green policies.

Similarly, multiple companies and startups related to the tech industry have been promoting a green-friendly and sustainable lifestyle by producing environmentally friendly products and offering such services. These include Pakoo Packaging, SATU Laboratory, GaltTec, Decomer Technology, Nordic Soladry, and many more (F6S, n.d.)These companies promote and market their businesses to environment-conscious consumers by highlighting their green-friendly features in their advertisements.

In addition to this, Ülemiste City is considered one of the most rapidly developing companies located in Tallinn, Estonia. Considering the current environmental landscape that demands protection of green life and sustainability, Ülemiste City continues to implement various green marketing strategies to reach environmentally-conscious companies in order to promote sustainable practices. Moreover, Ülemiste City has also enlisted help from several green marketing strategies in order to promote sustainability and environmentally friendly practices amongst businesses in the region it has its operations in. For example, businesses functioning within the area can apply for EcoLabel, granted by the European Union to products and services in order to bring more validity to companies' green-friendly claims and to meet the standards of environment. This initiative further encourages businesses to meet the criteria for environmental certification. As a result, it promotes eco-friendliness amongst the community of various companies operating in Ülemiste City (Laasri, 2023).

Furthermore, as reported by Laasri (2023), Ülemiste City also works to promote green-transportation options. The district has already implemented a bike-sharing systems in which people are provided with electrical vehicles and charging stations and are encouraged to carpool together. This continues to promote the sustainable lifestyle and contributes in saving the planet while reducing the number of cars on roads and hence, decreasing the pollution that takes place predominantly due to the emissions.

1.4. Greenwashing and Greenwashing Marketing

According to (Dahl, 2010), when companies falsely promise greater environmental advantages than they can provide, consumers begin to see such green marketing as "greenwashing". The term greenwashing was first coined in 1986 by Jay Westerveld, an environmentalist. In his article, he talked about the common practice carried out at hotels by asking their guests to reuse towels in order to conserve energy. Westerveld wrote that in reality, those hotels were doing little to nothing to help the environment. Hence, the towel request is nothing but an act of greenwashing (Michael Kerner, n.d.) Greenwashing might be a result of various malpractices such as selective disclosures; unsupported claims, false certifications, or collaborating with companies that have already negatively impacted the environment (Nemes et al., 2022).

Several companies have used the term greenwashing in order to increase their sales and profits and reach maximum customers by claiming and promoting their products and services to be eco-friendly and sustainable, whereas, in reality, they may not be eco-friendly (Polonsky, 2011). The discourse surrounding anti-greenwashing marketing has been emerging quite significantly in recent years. Hence, the awareness regarding this topic has also started to take place amongst the consumers.

In marketing, greenwashing is executed through various ways such as; communication media. This media is popularly known as advertisements that enlist help from technology to reach a wider audience. Social networking platforms further make it easier for companies to promote their services and products as green-friendly, while in reality, they may not be eco-friendly. Predominantly, greenwashing arises the question of trust amongst the buyers (Guo et al., 2017) by simply making them doubt the rhetoric and discourse used for green practices. Upon facing allegations, companies may try to convince the buyers by bringing forth certain features of their products or highlighting their commitment towards green agents. However, this may not turn out to be an effective strategy.

1.5. Greenwashing Techniques and Its Awareness Amongst Consumers

Companies often take advantage of the increasing demand for green-friendly products by falsely claiming their services to be environmentally advantageous. They may pretend to show environmental concerns, whereas, in reality, they are not genuinely dedicated to sustainability. In doing so, they use several greenwashing techniques to create a false impression in the market. Although the (Federal Trade Commission, 2012) in the Green Guides advises companies to refrain from making any environmental claims, no such step has been taken by the industries. Many reports have been published that outline the techniques and tactics used by the companies to falsely market their products and services under the pretenses of them being green-friendly. Moreover, greenwashing is not only limited to companies' overstated green claims but also the perceptions of stakeholders that heavily effect the companies and industries on the whole as well the marketing practices (Seele & Gatti, 2017).

These techniques include the usage of misleading terminology such as "natural", "organic", or "eco-friendly" without drawing a definition of these terms. Moreover, another practice of such companies is to highlight an eco-friendly aspect of their product while disregarding other features that might be harmful to the environment. In addition to this, companies also use pictures of nature or the environment while marketing their products in order to leave an impression that they might be green-friendly. Similarly, the use of green logos or symbols is another quite popular technique used by different companies in their greenwashing marketing to mislead consumers into believing that the product is environmentally friendly (KnowESG, n.d.)

As the demand for green products and services has increased, it has become highly important for consumers to get awareness regarding greenwashing. More often than not, this technique is reflected in various products and their advertisements. Although companies, stakeholders, governments, and customers have started becoming more aware of environmental problems, which has resulted in higher demands for such products (de Freitas Netto et al., 2020).some groups still remain unaware of this marketing strategy. Companies have actively started taking part in green-product awareness campaigns in order to spread awareness amongst the public regarding the consumption of their products. However, the issue of the consumption of products that are not favorable to the environment is equally increasing and companies must address the factors that influence the intentions of consumers' green purchases (Keni et al., 2020). In this regard, awareness plays an integral element in the human automation process. It involves a conscious and

unconscious course of action. The process entails environmental features, automatic processes, and outcomes (Chartrand, 2005, pp. 204 - 205).



Figure 2. Model of Automatic Process by Chartrand (2005) Source: Chartrand (2005)

Environmental Features (A) refer to any event, situation, or people that could become a cause of an automatic process. The Automatic Process (B) includes processes that include activation of attitude, evaluation, non-conscious mimicry, and stereotyping. Whereas outcome (C) can include behaviors, decisions, emotions, and judgments. For instance, if a green product is endorsed by a celebrity, then it may trigger the automatic process of either accepting or rejecting the product consciously or unconsciously. As a result, the consumers form attitudes that lead to certain changes in their behavior. Moreover, Chartrand (2005) states that controlling, changing, or eliminating human behavior and their decisions are preceded by consumer awareness. In other words, consumer behavior only takes place if there is a presence of awareness in the consumer. Knowledge, however, can have a great impact on their decisions and actions Chartrand, 2005, p. 204).

2. RESEARCH METHODOLY AND RESULTS

This chapter takes a closer look at the research methodology of the current study, which is used to obtain the answers to the set research questions.

2.1. Research Method

The current study employed a quantitative method to collect data. It was used to measure the effect of green-label marketing on consumer behavior. Moreover, online surveys/questionnaires were designed as tools to collect responses from the participants. The questionnaire was designed while keeping the research questions under consideration. All the statements were based on the three objectives. The aim of the survey was to find out the ethical perception and its relations with consumer behavior in relation to green-label marketing. Furthermore, the questionnaire helped in examining whether consumers are well-aware of greenwashing marketing and its techniques or not.

For the questionnaire, closed-ended statements were used along with a Likert Scale of 5 stages to determine respondents' attitudes toward certain situations. It was divided into three parts, whereby, the first part helped the author in determining the demographic information, whereas the second part indicates the educational background of respondents. Lastly, the third part encompassed 17 statements with 5 stages of agreement to obtain the answers to research questions. The questionnaire was turned into a form of an online survey using Google Inc.'s online tool called Google Forms. Many researchers around the world use this tool for data collection, primarily due to the various advantages that it offers. The Google Form is a comprehensible tool that makes it easy to design, develop, and obtain the responses of participants in a simple and effective way (Raju & Harinarayana, 2016).

For the collection of data, the author shared the link to the online survey with various respondents via WhatsApp, Instagram, Facebook, and other social networking sites. The author made sure that participants knew that the questionnaire was voluntary work, and that the identity of respondents would not be disclosed to anyone. The questionnaire accepted the responses from 29.11.2023 to 04.12.2023. The questionnaire was written in English to make it easier for the users to understand and fill it without any ambiguity.

The questionnaire was divided into three sections, where the first section included the demographic information of the respondents encompassing their gender and age range. The next section included the educational background of the participants, and the third section included the 17 statements based on the research questions. The statements were composed using the Likert Scale of the stages of agreement. The Likert Scale was designed by Rensis Likert. Likert described a method to construct an attitude scale or related questions to measure the attitudes of subjects related to a certain issue, which is addressed in the questions. Furthermore, he demonstrated that the calculation of the responses gathered from the questions provided informative results related to the underlying attitudes (Likert, 1932). Therefore, the Likert Scale of the stages of agreement was employed in order to measure the attitudes of the respondents towards green-label marketing and greenwashing marketing.

2.2. Population, Sample and Sample Results

Probability sampling was used to select the respondents, whereby, the author selected the respondents based on simple random sampling. Simple random sampling helps in obtaining the data from a random selection of an entire population. In said population, every participant has an equal chance of selection (Nikolopoulou, 2023). The reason for choosing this particular sampling technique was time constraints and the lack of all the resources including budget. Simple random sampling allowed the author to gather data in a shorter period of time. The responses from the survey were analyzed and the average of each statement was calculated. The main goal of using a quantitative method of research was to collect enriched data and learn more about the consumer's ethical perception and behavior regarding green-label marketing and their awareness of greenwashing marketing.

The population used for the research was 1.331 million, which is the total population of Estonia, as reported by the consensus of 2021. However, due to time constraint and the unavailability of respondents, the sample size from simple random sampling came out to be 213 participants.

The section on demographics included two questions from which both were mandatory to answer. The first question covered the official gender of the respondents and the age range. The gender section had the options of Female, Male, and Other, in case they did not identify themselves as either of the gender options. The age range included 15-19, 20-24, 25-29, 30-34, 35-39, 40 or Older. Most answers came from males (109), whereas the total female respondents were 104. However, no respondent identified themselves in the third-mentioned category of Other.

Out of all the respondents, 55% were male, whereas 48% were females. In addition to this, the demographic information of age range showed that the majority of the respondents belonged to the age group of 25-29 (70), whereas the second group ranged between 30-34 (66). Moreover, the number of respondents in the age group of 20-24 was 44. The fourth group ranged between 35-39 (17). In addition to this, the age group of 15-19 was 13 and the least found group was 40 or older, where only 3 respondents participated in the survey.

The next part of the thesis included the educational background of the respondents with the options of High school, Bachelor's, Master's, Ph.D., and Prefer Not to Say, in case the respondents did not want to disclose their educational degree.

The data showed that the majority of respondents were students with Bachelor's degrees (93), whereas, the students with Master's degrees came in the second number (64). In addition to this, the number of high school students was 41, with 1 Ph.D. student. However, 14 respondents preferred not to mention their educational background in the survey.

2.3. Data Analysis

The data was analyzed using SPSS software. Each part of the questionnaire was analyzed separately based on the research question and variables they were based on. The first research question had two variables (independent and dependent variables). The independent variable was green-label marketing, whereas the dependent variable was consumers' behavior. Furthermore, each statement in based on this research question was further assigned its variable and hence, the information was put into the SPSS software and analyzed through simple linear regression.

The Model Summary provides important information about the performance of the regression model. The R Square value of 0.746 indicates that the model can explain around 74.6% of the variance in consumers' behavior. Hence, it offers valuable insights as a considerable part of the variability in consumers' behavior is captured by the predicator variable labelled as green-label marketing. Moreover, the Adjusted R Square of 0.745 refers to the number of predicators, which further ensure the reliability of the model's representation and explanation of the results. Furthermore, the ANOVA table assesses the importance of the regression model. The F-statistica results of 619.956 indicate that the model is important. The consumers' behavior variance is explained by this model. In addition to this, the p-value of 0.000 (p<0.05) supports the significance of the model. This shows that the relationship between green-label marketing and consumers' behavior is not coincidental.

Furthermore, the Constant term of 3.520 shows the expected value of consumer's behavior in such a case when the variable of green-label marketing is zero. This is the level of consumer's behavior under a circumstance when the green-label marketing has no influence on them. In addition to this, the coefficient for GLM is 1.392, which explains the increase in consumers' behavior with the increase in the variable of green-label marketing. The standardized coefficient of 0.846 shows the strength and positive relationship between green-label marketing and consumer's behavior.

The regression analysis brings forth a relationship between green-label marketing and consumer's behavior. The corresponding response of consumer's behavior increases with the increase in the perception of green-label marketing. The positive relationship showed by R Square value suggests that the aim of green-label marketing in promoting environmentally friendly purchases is fulfilled because it significantly influences the consumers' behavior. The study validates the previous research that highlight a positive influence of green-label marketing on buyer's purchase decision.

Overall, the results provide compelling insights regarding the green-label marketing and its impact on consumer's behavior. The high R Square value and standardized coefficient (Beta) indicate that companies can enlist help from green-label marketing to positively influence consumers' behavior.

Such results can help businesses in adopting environmentally friendly practices that will effectively help them in communicating with the consumers who are likely to purchase green-friendly products. This helps them in aligning their practices with the expectations and values of consumers. The analysis provides compelling evidence, whereby, green-label marketing highly influences consumers' behavior and it is supported by the model adopted for the analysis in which the R Square value and standardized coefficient (Beta) suggest the businesses to strategically take help from green-label marketing in order to have a positive impact on consumers' behavior.

The data based on the second research question regarding greenwashing awareness was analyzed using descriptive frequency method. The analysis gave the following results:

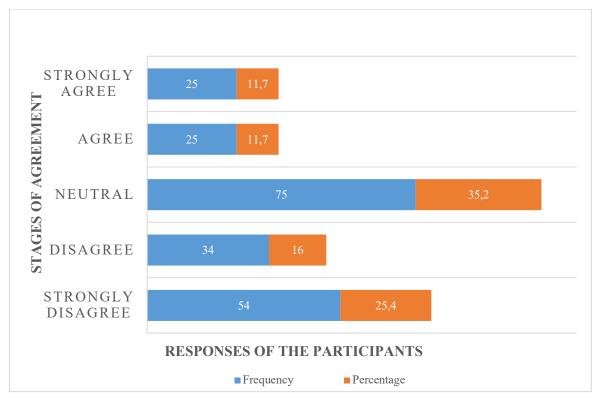


Figure 3. Familiarity with the term "Greenwashing" Source: Esha (2023), author's own calculations

The analysis of the statement shows that a considerable percentage (25.4%) is unfamiliar with the term "greenwashing". However, the majority of respondents (76.5%) belong to the stages of

neutrality, agree, or strongly agree, which indicate their awareness regarding the term. In this regard, 35.2% of participants responded with neutral answer, whereas, 11.7% agreed to the statement. Similarly, 11.7% strongly agreed to it.

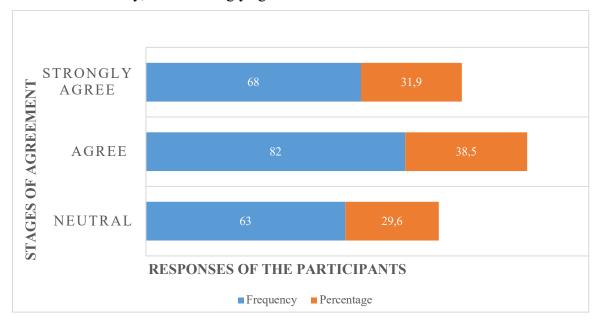


Figure 4. Use of deceptive language to make the products appear green-friendly Source: Esha (2023), author's own calculations

The analysis of the statement shows that a significant respondents (68.1%) either agree or strongly agree to the belief that companies use deceptive language to market products as green-friendly. Whereas, on the other hand, 29.6% of the participants gave neutral response. Surprisingly, none of the participants disagreed or strongly disagreed to the statement. This can mean that the majority of the respondents believe that businesses use deceptive language to make false claims of making their products seem green-friendly.

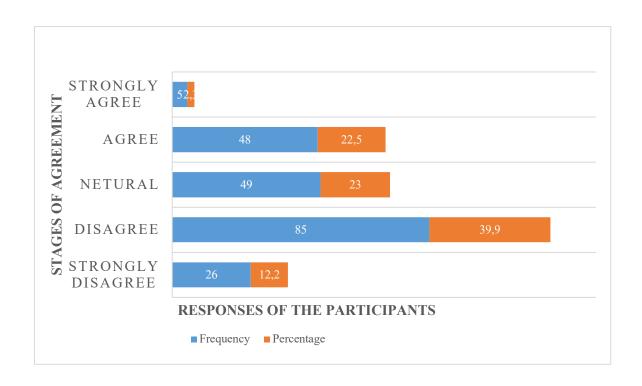


Figure 5. Identification of Greenwashing techniques Source: Esha (2023), author's own calculations

The surprising results of the analysis of the ability of consumers in identification of greenwashing techniques show that the large number of participants (52.1%) fall in the categories of either strongly disagree or disagree. However, 25% respondents agree and strongly agree to identifying the greenwashing techniques. This shows a moderate level of confidence amongst the participants in recognizing such practices.

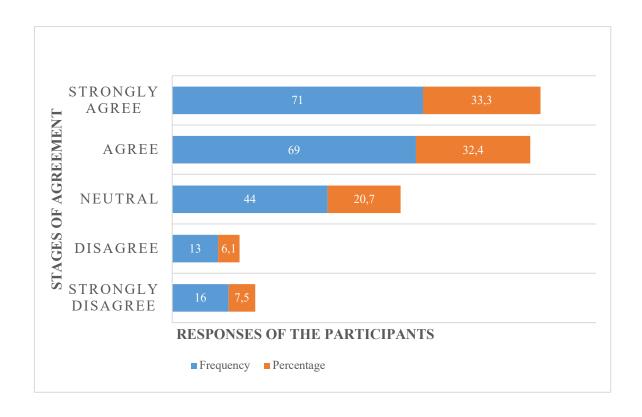


Figure 6. Influence of a green-labelled marketed products Source: Esha (2023), author's own calculations

The analysis of the influence of green-friendly advertisement on consumer behavior indicate that 7.5% of the participants strongly disagree with the statement that green-labelled marketing can have an influence on consumers. Furthermore, 6.1% disagreed to it, while 20.7% remained neutral towards the statement. However, 66.7% respondents either agreed or strongly agreed with the statement. This shows their receptiveness towards environmental-oriented marketing and its influence.

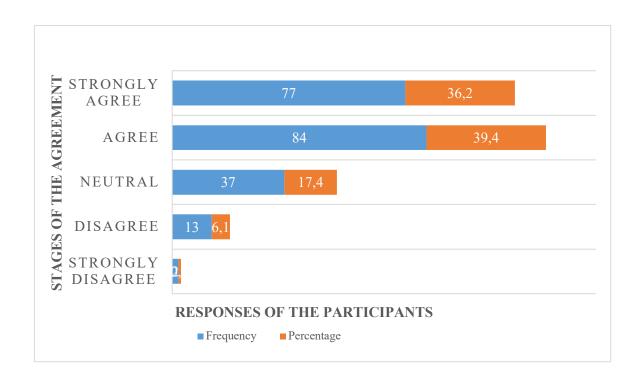


Figure 7. Trust on green-labels or eco-labels on products Source: Esha (2023), author's own calculations

Surprisingly, a total of 75.6% of participants either agree or strongly agree that they trust the green-labels or eco-labels on the products. This indicates a positive influence such labels have on the consumers. However, at the same time, it also shows that consumers are not entirely aware of the practices businesses often carry out in which they use eco-labels to make their products appear green-friendly, while it may not be entirely environmentally-friendly.

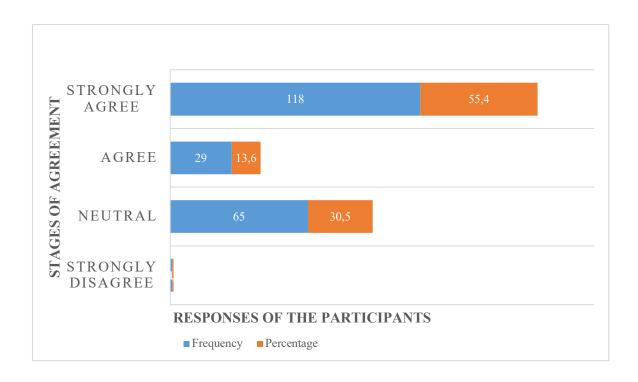


Figure 8. Detailed information about green-friendly products Source: Esha (2023), author's own calculations

The findings of the preference of consumers in terms of the information about the green-friendly products shows that the majority of the respondents (68.9%) either agree or strongly with the statement, suggesting their significant preference for the transparency from companies. This shows an increasing awareness amongst the consumers regarding the practices of businesses in hiding the actual information from the target market.

On the whole, the findings of the descriptive frequency table give valuable information regarding the consumers' awareness about greenwashing marketing. There is a portion of respondents that may not be entirely familiar with the concept, however, a significant number of participants are not only aware of it but also identify that companies use deceptive language to make their products come across as green-friendly. This portion also express the demand of transparency from companies in terms of highlighting their products and/or services.

The third question was analyzed using correlation method in SPSS. In this regard, the third research question had one independent variable (ethical perception), one dependent variable (consumer behavior), and one covariate (green-label marketing). Similar to the statements of research question one, the statements based on research question three were assigned their respective labels and thus, they were analyzed in SPSS using the correlation method.

The statistical analysis of ANOVA explores the effects of ethical perception and the presence of green-label marketing on consumers' behavior. The first part of the analysis highlights the distribution of respondents across various levels of ethical perceptions. In this regard, these respondents were categorized from Ethical Perception 3 to Ethical Perception 15. This represents the different degrees of ethical consideration found in the respondents. Furthermore, the Corrected Model gives valuable insights into the significance of ethical perception and green-label marketing. Moreover, the F-statistica of 234.438 with a p-value of 0.000 shows that the model provides gives important information about the relationship between green-label marketing, ethical perception, and the dependent variable (consumers' behavior).

The p-value also suggests a considerable baseline effect that also suggest that there are other factors that also influence consumers' behavior other than green-label marketing and ethical perception. Such factors involve external variables that should be considered in future research. In addition to this, the R Squared value of 0.928 indicates that the model is highly effective in explaining the complex relationship between green-label marketing, ethical perception, and consumers' behavior. Moreover, the Adjusted R Squared value taken from the analysis further accounts for the number of predictors. It remains high at the surprising level of 92.4% and thus, these values indicate that the model is effective in bringing forth the complex relationship between green-label marketing, ethical perceptions, and consumers' behavior.

Green-label marketing can have a significant effect on consumers' behavior. The F-statistica and p-value indicate that consumers are heavily influenced by products and/or services that have been labelled as green-friendly. Ethical perceptions level from EP 3 to EP 15 shows the understanding of consumers' behavior in terms of ethical purchase choice. In addition to this, the high value of R Squared and Adjusted R Squared also play an important role in understanding the effectiveness of the model and explaining the variance found in consumers' behavior. As a result, it indicates that green-label marketing combined with ethical perceptions can have a profound effect on driving consumers' buying choices. The overall ANOVA findings bring forth a complex relationship between green-label marketing, ethical perception, and consumers' behavior.

The final results suggest that businesses can enlist help from green-label marketing in order to persuade environmentally conscious consumers into purchasing their products and/or services. The current research shows that these marketing practices have a great impact on consumers'

behavior. At the same time, consumers are not entirely unaware of the greenwashing marketing. The respondents indicate that they are not familiar with the techniques used by companies, however, they do believe that many businesses use deceptive language and false information to market their products as green-friendly. Furthermore, the analysis of the relationship of ethical perceptions and consumers' behavior suggested that consumers' purchase decisions are often driven by their ethical beliefs. At the same time, green-labelled products and/or services can largely influence their decision. But there are some other external factors that play their part in influencing the consumers into buying certain products.

2.4. Findings, Discussions, and Suggestions

In this section, the author discusses the results and findings that were collected and obtained from the online surveys. This section also includes the results of previous studies in addition to the overview of the literature. As mentioned in the previous chapter, the online survey had a total of 213 respondents, of which 52% were male, whereas 48% were female. Moreover, 'the respondents were further divided into different age groups: 15-19, 20-24, 25-29, 30-34, 35-39, and 40 or older, however, the majority of the respondents belonged to the age group of 25-29 (70), whereas, the second group ranged between 30-34 (66). In addition to this, the number of respondents in the age group of 20-24 was 44. The fourth group ranged between 35-39 (17). In addition to this, the age group of 15-19 was 13 and the least found group was 40 or older, where only 3 respondents participated in the survey.

The results showed that there is a relationship between consumers' behavior and green-label marketing. Conscious and ethical buyers often depend on the green-friendliness of a product when it comes to purchasing products. This response towards a product increase with their perception toward green-label marketing. The model used to analyze this relationship also confirms that the aim of green-label marketing is fulfilled by influencing the behavior of consumers. Companies, as a result, can leverage from such marketing strategy in order to reach the target market effectively and promote their products to them. In addition to this, the descriptive statistical frequency analysis showed that the consumers may not be entirely familiar with the term of "greenwashing", however, they do recognize the deceptive marketing strategies used by companies in order to make their products seem green-friendly. Thus, it confuses the target market when it comes to identifying the

(Yang et al., 2021)that discusses how consumers often become confused when they are exposed to different types of similar green product(s). On top of it, they may fail to recognize the difference due to the complexities and unclear information advertised to them. Hence, it is necessary for companies to bring forth more information regarding a product instead of only highlighting certain features with the aim of deceiving the consumers. This supports the results where the respondents were of the view that companies should provide detailed information regarding their products instead of highlighting only certain features.

Moreover, the findings of the current thesis in regards to eco-labels and green-labels align with D'Souza et al., (2006) that suggests that there is an urgent need for companies to use effective communication of product features on the provided labels on the products. Without the satisfactory information, consumers can get confused as to what the product entails. Consumers perceive products labels as an important part of any purchase item. They demand accurate information on labels and if given false information, they may appear to be confused about the terminologies used on said products (Caswell & Mojduszka, 1996; Muller, 1985; Robertson & Marshall, 1987).

In addition to this, the findings also support the literature (Parguel et al., 2011 referenced in Yang et al., 2021) that states that companies often try to overstate their products and their role in affecting the environment positively through greenwashing practices. Similarly, consumers have also become more conscious and aware of the increasing environmental issues than before (Kautish et al., 2020). This aligns with the findings that state that consumers often purchase products because they have been labeled as green or environmentally friendly. Furthermore, the results of the online survey indicated that consumers put their trust in companies that have eco-label and green-friendly labels imprinted on them. However, this can also lead to brands losing their credibility if the consumers find out that they practice greenwashing (Qayyum et al., 2023). Hence, companies practicing greenwashing, in the form of green labeling can leave a negative effect on the consumers on the whole. As the previous study (Blome et al., 2017) suggests, greenwashing is popularly associated with negative outcomes. As a result, it can decrease the overall green purchase intentions among consumers (Bulut et al., 2021).

Furthermore, the results also suggest that green-label marketing and ethical perceptions influence consumers' behavior significantly, however, there are also other external factors that may play an important role in persuading the customers into purchasing environmentally friendly items. The

correlation analysis of the respondent's views regarding ethical perceptions and green-label marketing highlight their purchase decisions. At the same time, it also brings forth the surprising findings that suggest the necessity of researching the other factors that may be equally influencing the decision-making process. As stated by (Drummond & Ensor, 2006), social groups depend heavily on the cultural background of any society. Moreover, cultural norms various groups such as friends, co-workers, and family can have an impact on individuals and thus, it can guide their behavior. These norms further create codes that not only guide behavior but also encourage people into sharing values with each other. Hence, keeping this study in view, the influence of social class can be suggested as one of the external factors that may guide consumers' behavior into purchasing green-friendly items. However, there is still a need to further explore all the crucial factors that can drive consumers into choosing certain products or eco-labelled services other than their ethical perceptions.

For the future, the author has a few suggestions. First, the practices of greenwashing in marketing and advertisement have increased exponentially in the current era. Therefore, it has become crucial to spread awareness regarding the term and its techniques and practices. There is a significant number of consumers who are ethical buyers. These consumers also put their trust in the companies that claim to sell products or services that are supposedly green-friendly. If found practicing greenwashing marketing, these consumers may stop purchasing green-friendly products altogether.

Secondly, as the findings of the current thesis suggested, apart from the green-labelled marketing and ethical values of consumers, there are other factors that influence the decision-making process of buyers. Therefore, it is necessary to further explore this area of research and examine the factors that impact consumers' behavior.

The third recommendation for future research would be to examine and explore green-label marketing and green-washing marketing by analyzing the companies that supposedly fall into both categories and have the respondents, either in groups or individually identify the differences through discussions or interviews. This would help in obtaining enriched data with the hands-on experiences of the respondents.

CONCLUSION

As already mentioned, the practices of green-label marketing and greenwashing are on the rise. Along with it, the consumers of the current age have also become ethically aware of their purchase decisions and buyer practices. This can lead to a complex interplay of purchasing products that may or may not be green-friendly. The prime aim of this thesis is to find out the impact of green-labeled and greenwashing marketing on consumers and the role ethical perception plays for consumers while they are making a purchase decision for a green-friendly product. Furthermore, the paper statistically found out the awareness amongst consumers regarding greenwashing marketing, which refers to the marketing of products with the false pretenses of being completely eco-friendly.

The thesis had three research questions:

Research Question 1: What is the effect of green-label marketing on consumers' behavior?

Research Question 2: Are consumers aware of greenwashing techniques?

Research Question 3: What is the relationship between ethical perceptions and consumer behavior regarding green-label marketing?

The data was collected using the quantitative method in which the author employed the tool of online surveys/questionnaires in Google Forms. The survey had 17 statements with a Likert Scale of five stages of agreement (Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree). Moreover, the questionnaire was divided into three parts; demographic information, educational background, and statements that were based on the research questions. The questionnaire had 213 respondents in total including both males and females. The author used probability sampling with the tool of simple random sampling. The results were analyzed using SPSS method, whereby, the results of each research question were analyzed separately based on their respective variable.

To answer the research question "What is the effect of green-label marketing on consumers' behavior?" the author applied the formula of regression in SPSS in which green-label marketing was an independent variable and consumer's behavior was a dependent variable. The results showed that the model is highly significant, and the responses indicate a strong relationship

between green-label marketing and consumers' behavior. The findings of the first research question indicated that consumers are highly influenced by green-labelled marketing and they often purchase products due to the eco-labels found on the products and/or services.

To answer the second question "What awareness do consumers have regarding greenwashing techniques?" the author applied the formula of descriptive frequency where the percentages were calculated based on the responses. The results suggested that majority of the consumers may not be entirely aware of the term "greenwashing" and the techniques used in this marketing strategy, however, they identify that companies use deceptive language to market their products as environmentally friendly.

To answer the third question "What is the relationship between ethical perceptions and consumer behavior regarding green-label marketing?" the author applied the formula of Correlation and R Square, where the results highlighted a complex relationship between ethical perceptions, green-label marketing, and consumer behavior. The findings suggested that ethical perceptions influence consumers' behavior along with green-label marketing, however, there are also other factors that have an impact on consumers' buying behavior.

The research has its limitations in terms of methodology. The author could have utilized more questions with real-life examples in the survey to make the respondents understand the problem at hand more comprehensibly. In addition to this, due to time constraints and resource limitations, the author could only employ one methodology and could not use qualitative or mixed methodology to get extensive data. Furthermore, the author could not explore more factors that may play their part in influencing the consumers' into purchasing green-labelled products and/or services.

For future research, the author has three suggestions: (1) While interacting with participants or target audience, spread awareness regarding greenwashing techniques, (2) Explore and examine the other factors that influence consumers' behavior (3) Examine the companies that practice green-label marketing and greenwashing and have group discussions or open-ended interviews with consumers that are actively taking part in green consumption.

LIST OF REFERENCES

- Aasmäe, S. (2021). CONSUMER AWARENESS OF GREENWASHING AND THE RELIABILITY OF ECO-LABELS [Bachelor's thesis]. TALLINN UNIVERSITY OF TECHNOLOGY.
- Alexander, A., & Nicholls, A. (2006). Rediscovering consumer-producer involvement: A network perspective on fair trade marketing. *European Journal of Marketing*, 40(11–12), 1236–1253. https://doi.org/10.1108/03090560610702795
- American Marketing Association. (n.d.). Consumer behavior. <u>Https://Www.Ama.Org/Topics/Consumer-Behavior/Page/4/.</u>
- Basgoze, P. (2012). Ethical Perceptions and Green Buying Behavior of Consumers: A Cross-National Exploratory Study. *Journal of Economics and Behavioral Studies*, 4(8), 477–488. https://doi.org/10.22610/jebs.v4i8.349
- Blome, C., Foerstl, K., & Schleper, M. C. (2017). Antecedents of green supplier championing and greenwashing: An empirical study on leadership and ethical incentives. *Journal of Cleaner Production*, *152*, 339–350. https://doi.org/10.1016/j.jclepro.2017.03.052
- Bruner, G. C., & Pomazal, R. J. (1988). Problem recognition: The crucial first stage of the consumer decision process. *Journal of Services Marketing*, 2(3), 43–53. https://doi.org/10.1108/eb024733
- Bulut, C., Nazli, M., Aydin, E., & Haque, A. U. (2021). The effect of environmental concern on conscious green consumption of post-millennials: the moderating role of greenwashing perceptions. *Young Consumers*, 22(2). https://doi.org/10.1108/YC-10-2020-1241
- Carrigan, M., Szmigin, I., & Wright, J. (2004). Shopping for a better world? An interpretive study of the potential for ethical consumption within the older market. *Journal of Consumer Marketing*, 21(6), 401–417. https://doi.org/10.1108/07363760410558672
- Caswell, J. A., & Mojduszka, E. M. (1996). Using Informational Labeling to Influence the Market for Quality in Food Products. *American Journal of Agricultural Economics*, 78(5). https://doi.org/10.2307/1243501
- Chan, R. Y. K., Wong, Y. H., & Leung, T. K. P. (2008). Applying ethical concepts to the study of "green" consumer behavior: An analysis of chinese consumers' intentions to bring their own shopping bags. *Journal of Business Ethics*, 79(4), 469–481. https://doi.org/10.1007/s10551-007-9410-8
- Chartrand, T. L. (2005). The role of conscious awareness in consumer behavior. *Journal of Consumer Psychology*, 15(3), 203–210. https://doi.org/10.1207/s15327663jcp1503 4

- Comegys, C., Hannula, M., & Väisänen, J. (2006). Longitudinal comparison of Finnish and US online shopping behaviour among university students: The five-stage buying decision process. *Journal of Targeting, Measurement and Analysis for Marketing*, 14(4). https://doi.org/10.1057/palgrave.jt.5740193
- Commission on Environment, W. (n.d.). Report of the World Commission on Environment and Development: Our Common Future Towards Sustainable Development 2. Part II. Common Challenges Population and Human Resources 4.
- Dahl, R. (2010). Green washing: Do you know what you're buying? *Environmental Health Perspectives*, 118(6), 246–252. https://doi.org/10.1289/ehp.118-a246
- Dangelico, R. M., & Vocalelli, D. (2017). "Green Marketing": An analysis of definitions, strategy steps, and tools through a systematic review of the literature. *Journal of Cleaner Production*, 165. https://doi.org/10.1016/j.jclepro.2017.07.184
- de Freitas Netto, S. V., Sobral, M. F. F., Ribeiro, A. R. B., & Soares, G. R. da L. (2020). Concepts and forms of greenwashing: a systematic review. *Environmental Sciences Europe*, 32(1). https://doi.org/10.1186/s12302-020-0300-3
- Drummond, G., & Ensor, J. (2006). Introduction to Marketing Concepts. In *Introduction to Marketing Concepts* (1st ed.). Routledge. https://doi.org/10.4324/9780080454832
- D'Souza, C., Taghian, M., & Lamb, P. (2006). An empirical study on the influence of environmental labels on consumers. *Corporate Communications: An International Journal*, 11(2), 162–173. https://doi.org/https://doi.org/10.1108/13563280610661697
- Elg, U., & Hultman, J. (2016). CSR: retailer activities vs consumer buying decisions. *International Journal of Retail and Distribution Management*, 44(6), 640–657. https://doi.org/10.1108/IJRDM-10-2015-0155
- F6S. (n.d.). Top Green Technology companies and startups in Estonia | F6S Companies Estonia | F6S. Retrieved December 19, 2023, from https://www.f6s.com/companies/green-technology/estonia/co
- Federal Trade Commission. (2012, October 1). *Environmentally Friendly Products: FTC's Green Guides*. Retrieved August 5, 2023. https://www.ftc.gov/news-events/topics/truth-advertising/green-guides
- Guo, R., Tao, L., Li, C. B., & Wang, T. (2017). A Path Analysis of Greenwashing in a Trust Crisis Among Chinese Energy Companies: The Role of Brand Legitimacy and Brand Loyalty. *Journal of Business Ethics*, 140(3), 523–536. https://doi.org/10.1007/s10551-015-2672-7
- Iqbal, A., Kazmi, S. Q., Anwar, A., Ramish, M. S., & Salam, A. (2023). Impact Of Green Marketing On Green Purchase Intention And Green Consumption Behavior: The Moderating Role Of Green Concern. *Journal of Positive School Psychology*, 7(2), 975–993.

- Kanchanapibul, M., Lacka, E., Wang, X., & Chan, H. K. (2014). An empirical investigation of green purchase behaviour among the young generation. *Journal of Cleaner Production*, 66, 528–536. https://doi.org/10.1016/j.jclepro.2013.10.062
- Kautish, P., Khare, A., & Sharma, R. (2020). Values, sustainability consciousness and intentions for SDG endorsement. *Marketing Intelligence and Planning*, *38*(7), 921–939. https://doi.org/10.1108/MIP-09-2019-0490
- Keni, K., Asali, A., Teoh, A. P., & Muthuveloo, R. (2020). Factors Influencing Green Purchase Intention. *The 2nd Tarumanagara International Conference on the Applications of Social Sciences and Humanities (TICASH 2020)*, 1015–1022. https://doi.org/10.2991/assehr.k.201209.161
- KnowESG. (n.d.). What Are The Main Greenwashing Tactics Companies Use? Retrieved December 17, 2023, from https://www.knowesg.com/featured-article/what-are-the-main-greenwashing-tactics-companies-use
- Kumar, P. K., & Anand, B. (2013). Green Marketing: Theory, Practice, and Strategies. *Indian Journal of Marketing*, 43(1), 54–56. https://doi.org/10.17010/ijom/2013/v43/i1/34043
- Laasri, G. (2023). THE IMPACT OF GREEN MARKETING STRATEGIES ON CONSUMER PURCHASE DECISION [Graduation Thesis, ESTONIAN ENTREPRENEURSHIP UNIVERSITY OF APPLIED SCIENCES]. https://eek.ee/download.php?t=kb&dok=p1gvcditisac01kbo1o7112t7vb7
- Lautiainen, T. (2015). Factors affecting consumers' buying decision in the selection of a coffee brand [Bachelor's Thesis]. Saimaa University of Applied Sciences, Lappeenranta.
- Leire, C., & Thidell, Å. (2005). Product-related environmental information to guide consumer purchases A review and analysis of research on perceptions, understanding and use among Nordic consumers. *Journal of Cleaner Production*, 13(10–11), 1061–1070. https://doi.org/10.1016/j.jclepro.2004.12.004
- Likert, R. (1932). A Technique for the Measurement of Attitudes Archives of Psychology. *Archives of Psychology*, 22–140(55).
- Liobikienė, G., & Brizga, J. (2022). Sustainable Consumption in the Baltic States: The Carbon Footprint in the Household Sector. *Sustainability 2022, Vol. 14, Page 1567*, *14*(3), 1567. https://doi.org/10.3390/SU14031567
- McDonald, S., Oates, C., Thyne, M., Alevizou, P., & McMorland, L. A. (2009). Comparing sustainable consumption patterns across product sectors. *International Journal of Consumer Studies*, 33(2), 137–145. https://doi.org/10.1111/j.1470-6431.2009.00755.x
- Michael Kerner, S. (n.d.). *What is greenwashing?* Retrieved December 19, 2023, from https://www.techtarget.com/whatis/definition/greenwashing
- Mostafa, M. M. (2007). Gender differences in Egyptian consumers' green purchase behaviour: The effects of environmental knowledge, concern and attitude. *International Journal of Consumer Studies*, 31(3), 220–229. https://doi.org/10.1111/j.1470-6431.2006.00523.x

- Muller, T. E. (1985). Structural Information Factors which Stimulate the use of Nutrition Information: A Field Experiment. *Journal of Marketing Research*, 22(2), 68–75. https://doi.org/10.1177/002224378502200204
- Nemes, N., Scanlan, S. J., Smith, P., Smith, T., Aronczyk, M., Hill, S., Lewis, S. L., Montgomery, A. W., Tubiello, F. N., & Stabinsky, D. (2022). An Integrated Framework to Assess Greenwashing. *Sustainability (Switzerland)*, *14*(8). https://doi.org/10.3390/su14084431
- Nikolopoulou, K. (2023). *What Is Probability Sampling?* | *Types & Examples*. Scribbr. https://www.scribbr.com/methodology/probability-sampling/
- Oyetunde, B. (2022). *The booming Estonian cleantech ecosystem e-Estonia*. E-Estonia. https://e-estonia.com/the-booming-estonian-cleantech-ecosystem/
- Parguel, B., Benoît-Moreau, F., & Larceneux, F. (2011). How Sustainability Ratings Might Deter "Greenwashing": A Closer Look at Ethical Corporate Communication. *Journal of Business Ethics*, 102(1), 15–28. https://doi.org/10.1007/s10551-011-0901-2
- Polonsky, M. J. (2011). Transformative green marketing: Impediments and opportunities. *Journal of Business Research*, 64(12), 1311–1319. https://doi.org/10.1016/j.jbusres.2011.01.016
- Qayyum, A., Jamil, R. A., & Sehar, A. (2023). Impact of green marketing, greenwashing and green confusion on green brand equity. *Spanish Journal of Marketing ESIC*, 27(3). https://doi.org/10.1108/SJME-03-2022-0032
- Raju, V., & Harinarayana, N. S. (2016). Online survey tools: A case study of Google Forms.

 National Conference on "Scientific, Computational & Information Research Trends in Engineering, GSSS-IETW, Mysore.

 https://www.researchgate.net/publication/326831738
- Rehan, M., & Zafar, a. (2021). (n.d.). Sustainable packaging: eco-friendly and biodegradable materials. In Handbook of Sustainable Luxury Textiles and Fashion (pp. 327-343). Springer.
- Robertson, K. R., & Marshall, R. (1987). Amount of Label Information Effects on Perceived Product Quality. *International Journal of Advertising*, 6(3), 215–218. https://doi.org/10.1080/02650487.1987.11107019
- Savari, M., Damaneh, H. E., Damaneh, H. E., & Cotton, M. (2023). Integrating the norm activation model and theory of planned behaviour to investigate farmer pro-environmental behavioural intention. *Scientific Reports*, 13(1). https://doi.org/10.1038/s41598-023-32831-x
- Seele, P., & Gatti, L. (2017). Greenwashing Revisited: In Search of a Typology and Accusation-Based Definition Incorporating Legitimacy Strategies. *Business Strategy and the Environment*, 26(2), 239–252. https://doi.org/10.1002/bse.1912
- Sun, Y., Zheng, L., Yang, Y., Tian, Q., & Wang, S. (2018). Beyond Part Models: Person Retrieval with Refined Part Pooling (and A Strong Convolutional Baseline). In *Lecture Notes in*

- Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics): Vol. 11208 LNCS (pp. 501–518). https://doi.org/10.1007/978-3-030-01225-0_30
- United Nations World Commission on Environment and Development. (1987). Report of the World Commission on Environment and Development Our Common Future United Nations [Review of Report of the World Commission on Environment and Development Our Common Future United Nations]. United Nations.
- Urzua, L. A. (2014). Green Marketing & Ethical Consumerism: Shaping Consumer Behavior. *Master's Thesis*. https://www.diva-portal.org/smash/get/diva2:731607/FULLTEXT01
- Vermeir, I., & Verbeke, W. (2006). Sustainable food consumption: Exploring the consumer "attitude Behavioral intention" gap. *Journal of Agricultural and Environmental Ethics*, 19(2), 169–194. https://doi.org/10.1007/s10806-005-5485-3
- Wessells, C. R., Johnston, R. J., & Donath, H. (1999). Assessing Consumer Preferences for Ecolabeled Seafood: The Influence of Species, Certifier, and Household Attributes. *American Journal of Agricultural Economics*, 81(5), 1084–1089. https://doi.org/10.2307/1244088
 - Yang, S. P., Chang, S. C., Liang, T. C., Situmorang, R. O. P., & Hussain, M. (2021). Consumer confusion and green consumption intentions from the perspective of food-related lifestyles on organic infant milk formulas. *Sustainability (Switzerland)*, 13(4), 1604–1621. https://doi.org/10.3390/su13041606

APPENDICES

Appendix 1. Questionnaire

Questions	Stages items	Result	Stage
Gender	A1 = Male	51.4%	Nominal
	A2 = Female	48.6%	
	A3 = Others	0%	
Age	15-19	6.1%	Nominal
	20-24	20.6%	
	25-29	32.7%	
	30-34	31.3%	
	35-39	7.9%	
	40 or more	1.4%	
Educational Background	High School	19.2%	Nominal
	Bachelor's Degree	43.5%	
	Master's Degree Ph.D	30.4% 0.5%	
	Prefer Not to Say	6.5%	
It is important for me to purchase	Strongly disagree	1.9%	Likert
products from companies that are environmentally responsible	Disagree	3.7%	
chynolinentally responsible	Neutral	7.5% 52.8%	
	Agree Strongly Agree	34.1%	
I always think about the	Strongly disagree	5.6%	Likert
environmental impact of	Disagree	4.2%	

products/services before purchasing	Neutral	33.2%	
them.	Agree	40.7%	
	Strongly Agree	16.4%	
I have purchased products because they are labeled as "green" or environmentally friendly	Strongly disagree	3.3%	Likert
environmentally intentity	Disagree	5.6%	
	Neutral	14.5%	
	Agree	37.9%	
	Strongly Agree	38.8%	
The eco-label on the products/services influence my purchasing decisions. responsible	Strongly disagree	2.3%	Likert
purchasing decisions. responsible	Disagree	6.5%	
	Neutral	9.8%	
	Agree	50.9%	
	Strongly Agree	30.4%	
I'm willing to pay more for products that are environmentally friendly.	Strongly disagree	22.9%	Likert
menary.	Disagree	9.3%	
	Neutral	31.8%	
	Agree	29%	
	Strongly Agree	7%	
I purchase green-friendly products because they make me feel good morally.	Strongly disagree	0.5%	Likert
	Disagree	0.9%	
	Neutral	11.7%	

	Agree	37.9%	
	Strongly Agree	49.1%	
I believe consumers have moral and ethical responsibility to support environmentally-friendly	Strongly disagree	0.5%	Likert
businesses.	Disagree	0%	
	Neutral	20.1%	
	Agree	35%	
	Strongly Agree	44.4%	
I am familiar with the term "greenwashing".	Strongly disagree	25.2%	Likert
	Disagree	15.9%	
	Neutral	35%	
	Agree	11.7%	
	Strongly Agree	12.1%	
Some companies use deceptive language and marketing to make their products appear green-	Strongly disagree	0%	Likert
friendly.	Disagree	0%	
	Neutral	29.9%	
	Agree	38.3%	
	Strongly Agree	31.8%	
I can identify greenwashing techniques used by companies in the marketing of products.	Strongly disagree	12.1%	Likert
U 1	Disagree	39.7%	

	Neutral	23.4%	
	Agree	22.4%	
	Strongly Agree	2.3%	
I easily get influenced if a product or service is advertised as green-friendly.	Strongly disagree	7.5%	Likert
menary.	Disagree	6.1%	
	Neutral	20.6%	
	Agree	32.3%	
	Strongly Agree	33.6%	
I trust green-labels or eco-labels on products.	Strongly disagree	0.9%	Likert
	Disagree	6.1%	
	Neutral	17.35	
	Agree	39.7%	
	Strongly Agree	36%	
Companies should provide detailed information about their green-friendly products rather than	Strongly disagree	0.5%	Likert
highlighting only certain features.	Disagree	0%	
	Neutral	30.4%	
	Agree	13.6%	
	Strongly Agree	55.6%	
	Strongly disagree	0.9%	Likert

I keep my ethical responsibilities under consideration before making	Disagree	2.8%	
any purchases.	Neutral	27.6%	
	Agree	28%	
	Strongly Agree	40.7%	
I believe people who buy green- friendly products are ethically driven and care about the planet.	Strongly disagree	2.3%	Likert
and the same are plants	Disagree	2.8%	
	Neutral	15.9%	
	Agree	25.7%	
	Strongly Agree	53.3 %	
I believe that companies with green-label marketing promote ethical consumption practices.	Strongly disagree	0.5%	Likert
consent consent precises.	Disagree	8.9%	
	Neutral	21%	
	Agree	29.9%	
	Strongly Agree	39.7%	
It is important to me that a company should contribute to saving the planet while making a purchase	Strongly disagree	0%	Likert
decision.	Disagree	4.7%	
	Neutral	12.6%	
	Agree	25.7%	
	Strongly Agree	57%	
Source Esha (2022) outhor's own doe			

Source: Esha (2023), author's own designed questionnaire

Appendix 2. Results of Questionnaire

Statistics

I am familiar with the term "greenwashing".	213
Some companies use deceptive language and	213
marketing to make their products appear	
green-friendly.	
I can identify greenwashing techniques used	213
by companies in the marketing of products	
I easily get influenced if a product or service is	213
advertised as green-friendly.	
I trust green-labels or eco-labels on products	213
Companies should provide detailed	213
information about their green-friendly	
products rather than highlighting only certain	
features.	

Table 1. Frequency

Source: Esha (2023), author's own calculations

Frequency Table

	I am familiar with the term "greenwashing".				
		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	strongly disagree	54	25.4	25.4	25.4
	disagree	34	16.0	16.0	41.3
	neutral	75	35.2	35.2	76.5
	agree	25	11.7	11.7	88.3
	strongly agree	25	11.7	11.7	100.0
	Total	213	100.0	100.0	

Table 2. Descriptive Frequency 1

Son	Some companies use deceptive language and marketing to make their					
	F	roducts app	ear green-f	riendly.		
	Frequency Percent Valid Cumulative					
	Percent Percent					
Valid	neutral	63	29.6	29.6	29.6	
	agree	82	38.5	38.5	68.1	
	strongly agree	68	31.9	31.9	100.0	
	Total	213	100.0	100.0		

Table 3. Descriptive Frequency 2

I can	I can identify greenwashing techniques used by companies in the marketing					
		of pr	oducts.			
	Frequency Percent Valid Cumulative					
				Percent	Percent	
Valid	strongly disagree	26	12.2	12.2	12.2	
	disagree	85	39.9	39.9	52.1	
	neutral	49	23.0	23.0	75.1	
	agree	48	22.5	22.5	97.7	
	strongly agree	5	2.3	2.3	100.0	
	Total	213	100.0	100.0		

Table 4. Descriptive Frequency 3

Source: Esha (2023), author's own calculations

I easi	I easily get influenced if a product or service is advertised as green-friendly.					
		Frequency	Percent	Valid	Cumulative	
				Percent	Percent	
Valid	strongly disagree	16	7.5	7.5	7.5	
	disagree	13	6.1	6.1	13.6	
	neutral	44	20.7	20.7	34.3	
	agree	69	32.4	32.4	66.7	
	strongly agree	71	33.3	33.3	100.0	
	Total	213	100.0	100.0		

Table 5. Descriptive Frequency 4

	I trust green-labels or eco-labels on products.				
		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	strongly disagree	2	.9	.9	.9
	disagree	13	6.1	6.1	7.0
	neutral	37	17.4	17.4	24.4
	agree	84	39.4	39.4	63.8
	strongly agree	77	36.2	36.2	100.0
	Total	213	100.0	100.0	

Table 6. Descriptive Frequency 5

Companies should provide detailed information about their green-friendly products rather than highlighting only certain features. Frequency Percent Valid Cumulative Percent Percent .5 .5 Valid strongly disagree 1 .5 neutral 65 30.5 30.5 31.0 29 44.6 agree 13.6 13.6 strongly agree 118 55.4 55.4 100.0 Total 213 100.0 100.0

Table 7. Descriptive Frequency 6

Source: Esha (2023), author's own calculations

Table of Regression

	Variables Entered/Removed ^b				
Mode	Variables	Variables	Method		
1 Entered Removed					
1	GLM ^a		Enter		

Table 8. GLM Variable

Source: Esha (2023), author's own calculations

	Model Summary						
Mode R R Square Adjusted R Std. Error o							
1			Square	the Estimate			
1	.864ª	.746	.745	1.93537			

Table 9. Model Summary 1

ANOVA ^b							
Model		Sum of	df	Mean Square	F	Sig.	
		Squares					
1	Regression	2322.151	1	2322.151	619.956	$.000^{a}$	
Residual		790.337	211	3.746			
	Total	3112.488	212				

Table 10. ANOVA Results

Coefficients							
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
		В	Std. Error	Beta			
1	(Constant)	3.520	.668		5.271	.000	
GLM		1.392	.056	.864	24.899	.000	

Table 11. Coefficients Results

Source: Esha (2023), author's own calculations

Univariate Analysis of Variance

Between-Subjects					
Factors					
		N			
EP	3	1			
	6	4			
	7	3			
	8	19			
	9	9			
	10	16			
	11	14			
	12	19			
	13	46			
	14	35			
	15	47			

Table 12. EP Level

Tests of Between-Subjects Effects							
Dependent Varial	ole:CB						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.		
Corrected Model	2887.434ª	11	262.494	234.438	.000		
Intercept	405.114	1	405.114	361.814	.000		
GLM	142.761	1	142.761	127.502	.000		
EP	565.282	10	56.528	50.486	.000		

Error	225.055	201	1.120	
Total	86720.000	213		

Table 13. Subjects Effects 1

Tests of Between Subjects Effects

Source	Type III Sum	Df	Mean Square	F	Sig.
	of Squares				
Corrected	2887.434	11	262.494	234.438	.000
Model					
Intercept	405.114	1	405.114	361.814	.000
GLM	142.761	1	142.761	127.502	.000
EP	565.282	10	56.528	50.486	.000
Error	225.055	201	1.120		
Total	86720.000	213			
Corrected	3112.488	212			
Total					

Table 14. Subjects Effects 2

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