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CUSTOMER PERSPECTIVE
TOWARDS GREEN CONSUMPTION
IN VIETNAM

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ABSTRACT

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In recent years, green consumption is quite common in developed countries and has made initial progress in developing countries. In Vietnam, a sustainable lifestyle is not widely accepted since its concept requires things that go against the way society operates. The objective of this research is to identify factors affecting the green consumption behavior of consumers in Vietnam by studying their perspective, attitude, and personal motivation towards environmental concerns. Furthermore, from there, three relationships hypothesized will be tested and quantified.

The theoretical framework is constructed and based on an extended version of the Theory of Planned Behavior, which states that the factors that influence an individual's intention is the attitude, subjective, and cognitive control behavior. The empirical research consisted of a quantitative study which was carried out in the form of a 21-question online survey.

The result indicated an excellent consumer awareness of environmental issues and green consumption. It also showed a positive motivation and attitude of consumers to change to more sustainable consumption patterns and their willingness to contribute to a sustainable living style as individuals.

Keywords green consumption, environmentally friendly, sustainability, customer perspective

CONTENTS

ABSTRACT

1	INTRODUCTION.....	7
1.1	The aim of the Thesis.....	8
1.2	Research Method and Structure.....	9
1.3	Research Limitations.....	10
2	THEORETICAL FRAMEWORK.....	11
2.1	The Theory of Planned Behavior.....	11
2.2	Green Consumption.....	14
2.3	Hypothesis Development.....	20
3	EMPERICAL RESEARCH.....	22
3.1	Research Method.....	22
3.2	Sample Group.....	23
3.3	Research Design.....	23
3.4	Data Collection.....	24
4	DATA ANALYSIS.....	25
4.1	Respondents' Demographic Background.....	25
4.2	Respondents' Personal Perspective.....	28
4.3	Respondents' Personal Spending.....	31
4.4	Testing of Hypotheses.....	35
5	FINAL CONCLUSION.....	40
5.1	Final Conclusion and Reflections.....	40
5.2	Limitations and Suggestions for Further Research.....	41
	REFERENCES.....	42

APPENDICES

LIST OF FIGURES AND TABLES

Figure 1.	The Theory of Planned Behavior.	p.10
Figure 2.	Equation (1) - Attitude Equation.	p.11
Figure 3.	Equation (2) - Subjective Norm Equation.	p.12
Figure 4.	Equation (3) - Perceived Control Behavior Equation	p.12
Figure 5.	What is your gender?	p.24
Figure 6.	What is your age?	p.25
Figure 7.	What is your current occupational status?	p.25
Figure 8.	How much is your monthly allowance/salary?	p.26
Figure 9.	Who are you currently living with?	p.26
Figure 10.	Have you heard the term "green consumption" and "green product" before?	p.27
Figure 11.	Respondents' opinion on the following statements: 8, 9, 10 and 11.	p.28
Figure 12.	Respondents' opinion on the following statements: 12, 13 and 14.	p.29
Figure 13.	Respondents' opinion on the following statements: 15, 16 and 17.	p.30
Figure 14.	Have you ever purchased green products?.	p.31
Figure 15.	Do you intend to consume green product?	p.31
Figure 16.	Do you feel that you can afford green products?	p.32
Figure 17.	How much are you willing to pay for each purchase?	p.32
Figure 18.	Do you feel that you can afford green products?	p.33
Figure 19.	How often do you purchase green products (in 1 year)?	p.33

Figure 20.	How much are you willing to pay for each purchase?	p.32
Figure 21.	How satisfied are you with your experience of purchasing green products?	p.34
Table 1.	Questionnaire Sections and Variables.	p.23
Table 2.	Mean scores and Standard Deviation (SD) of each item of H1.	p.36
Table 3.	Mean scores and Standard Deviation (SD) of each item of H2.	p.37
Table 4.	Results of multiple regression analysis.	p.38
Table 5.	Crosstabulation table of Monthly Allowance/Salary and Price of Green Products.	p.39

LIST OF APPENDICES

APPENDIX 1. The frequency distribution table from statistics IBM PSPP.

APPENDIX 2. Questionnaire.

1 INTRODUCTION

The intimate relationship between human beings and the environment begins at birth. However, in the past, not until the problem has become more severe, people had a tendency not to be aware of it. In recent years, with the significant rapid development of the global economy, several environmental issues have arisen; for example, global warming, greenhouse effect, seawater invasion has been mentioned as a matter of concern in every aspect of life. Recognizing that, consumers now have pay attention to the negative impacts on the environment in purchasing activities. As shoppers are more concerned about environmental issues, they place greater emphasis on environmentally friendly purchasing practices and green consumption.

Green consumption is still a vague concept because there has not been any clear concept nor definition. It was first introduced in the United States around the 1970s when environmental issues started to be mentioned in societal marketing (Peattie K., 2010). Moreover, it is argued that “green consumption” is more of an idea than a dependent concept, because of its content related to other concepts, for example, sustainable, or responsible consumption. Moreover, green consumption is an integral part of sustainable consumption, with an emphasis on environmental factors. Green consumption is the purchase of environmentally friendly products and avoiding products that are harmful to the environment, which involves the selection of environmentally friendly products with appropriate consumption and waste disposal. (Chan R.Y.K, 2001).

Today, green consumption is quite common in developed countries and has made initial progress in developing countries. According to the recent global survey on customers' sustainable buying behavior in 60 countries, including Southeast Asian countries, where among them, Vietnamese consumers are the most conscious in paying extra for products and services from organizations that are committed to social and environmental (The Nielsen Global Survey, 2015). The report has pointed out, in 2015, that eighty-six percent Vietnamese (86%), nearly nine in ten, willing to purchase, compared to seventy-three percent (73%) in the 2014 survey.

The trend of green consumption also leads to the establishment of clean food chains such as Soi Bien (Sea Wolf), Bac Tom (Uncle Tom), Home Food, and Hano Farm to meet people's needs to buy sustainable products with specific origins. Supermarkets across the country, such as Co.op Mart, Lotte Mart, also have joined their hands in minimizing plastic waste by using banana leaves with vegetables, food packages, and distributing environmentally friendly packaging products. At the same time, a part of customers also prioritize choosing an environmentally friendly lifestyle; they have been actively carrying their bottles and glasses. Stepping into convenience stores, markets, or supermarkets, it is not rare to see customers refuse plastic bags and replace them with paper bags, cloth bags, and biological bags.

Although Vietnam has made significant progress in green consumption, the transition from awareness to actual action still depends on many factors, both subjective and objective. Moreover, Dr. Pham Gia Tran, Department of Geography, Ho Chi Minh University of Social Sciences and Humanities also said that the sustainable consumption is still limited because of Vietnamese customs and practices (Tap chi Tai Chinh, 2019). Some contents related to sustainable shopping, environmentally friendly, cleaner production, are provided in many legal documents. However, the scope of these contents is still narrow; it only stops at the level of supporting the production of environmentally friendly products and services, there is no official reinforcement strong enough to adjust the consumption behavior of products that are not "green" and not environmentally friendly.

The benefit that green consumption brings to consumers and the environment is undeniable. Nevertheless, there are still many difficulties and obstacles to completely replace ordinary polluting products with green products, especially with a developing country like Vietnam. Therefore, it is necessary to have the cooperation of the whole society, so that green consumption will not stop being a short-term movement.

1.1 The aim of the Thesis

In Vietnam, green consumption is no longer a new trend, but still not fully integrated into daily life. At the same time, many activities were calling for "green

living" on social networking sites and channels. From large-scale campaigns like clearing garbage, planting trees, to small actions like spreading more words to others to reduce single-use plastic items, use organic products. However, since all of these were happening at the same time and so "massively," that makes people wonder if these are just temporary actions. They could not help but doubt, by the time this subsided, the "environment protection" was only a fleeting word.

The aim of the research is to study Vietnamese consumers' perspective, attitude, their personal motivation towards green consumption, and identify what the main factors affecting their buying behavior are. At the same time, based from there, a questionnaire-based survey approach was adopted in order to test and quantify the relationships hypothesized:

H1. The concern about environmental issues affects consumers' purchasing decisions of green products.

H2. Perceived behavioral control impacts consumers' purchasing decision of green products.

H3. There is a relationship between monthly allowance/salary and the willingness to spend on green products.

1.2 Research Method and Structure

The research consists of two main sections, theoretical background and followed by quantitative research in the form of online questionnaires.

The theoretical framework is constructed and based on an extended version of the Theory of Planned Behavior, which was invented by Ajzen Icek in 1991, where he stated that the factors that influence an individual's intention is the attitude, subjective, and cognitive control behavior. Many researchers in consumer behavior studies have used this theory.

The questionnaire contains 21 questions in total, divided into three main categories based on the theoretical framework:

1. **Demographical Background** - includes necessary information such as age, gender, current residence city, current occupation, and monthly wages.
2. **Personal Perspective** - investigates consumers' level of concerns and environmental awareness, a possible attribute to green consumption intention.
3. **Personal Spending** - shows us the correlation between salary and spending habit on green products.

The full structure of the survey is translated into English and attached in the Appendix in this paper.

1.3 Research Limitations

According to Worldometer, the current population in Vietnam is more than 97 million, which makes it difficult to distribute the questionnaire to all Vietnamese consumers. Therefore, the targeted research market has been narrowed down to the region level, in which the capital city, Hanoi, the writer's home city. As a result, the sample group is relatively small compared to the whole country.

Moreover, due to the limited resources, time constraints, the finding of this paper may not be generalized; therefore, more extensive in the future is essential to understand this research area, particularly in Vietnam thoroughly.

2 THEORETICAL FRAMEWORK

2.1 The Theory of Planned Behavior

The Theory of Planned Behavior (TPB) was established by Icek Ajzen (1985) by adding behavior control awareness to the Theory of Reasoned Action (TRA) model (Ajzen, 1991). Figure 1 illustrates the structural diagram of the theory.

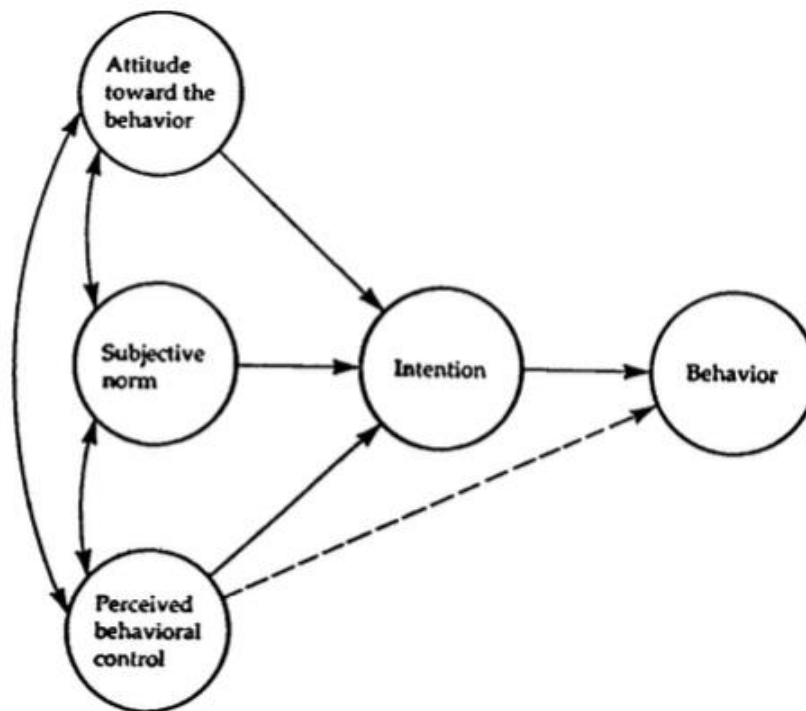


Figure 1: The Theory of Planned Behavior.

In this model, in addition to the factor affecting an individual's intention to conduct is the attitude, two more factors are subjective and perceived control behavior. The subjective norm is the impulse to do the intention of the influenced person. Behavioral control awareness refers to an individual's ability to perform a given behavior, reflecting how effortless or challenging it is to perform the behavior, and whether the performance is controlled or restricted. According to the TPB, attitudes, subjective standards, and perceived behavioral control directly affect intent and thereby directly influence behavior.

Ajzen (1991) stated that the individual's intention, which leads to the performance of any given behavior, is the central factor in the theory. As is assumed, intention

captures the motivational factors affecting behavior, which indicates how willing people are to do, about how much effort they intend to perform the behavior. However, behavior intention can actually happen if the mentioned behavior under the control of one's will. Furthermore, the performance of some behaviors may depend on the availability of other non-motivation factors, such as opportunities or resources, to some degree. Collectively, a person's actual control over behavior is proved by those factors, whether he or she has the required opportunities, resources, and intentions.

According to this model, by associating with specific attributes, such as other objects, characteristics, or events, Ajzen (1991) formed beliefs on the object of the attitude. Regarding the beliefs of behavior, the outcomes would be attitude perceived as positive or negative personal beliefs affected by psychological factors and situations that are encountered. Figure 2 presented the equation (1) of the attitudinal component as following,

$$A \propto \sum b_i e_i$$

Figure 2: Equation (1) - Attitude Equation

where (A) is a person's attitude towards the behavior, (b) is the strength of each salient belief, which combined with (e), the person's evaluation of the (b), over the (n) salient beliefs. Specifically, the summative belief index of (b) and (e) is directly proportional to the outcome's subjective value contributes to the attitude (A). This is also called the belief-based measure of attitude since it is an estimate of salient beliefs on the attitude object or behavior under evaluation of the respondent. However, Ajzen (1991) indicated that the model does not always show the relationship between one's attitude towards the behavior and his or her salient beliefs about that behavior. Those beliefs must be aroused from the respondents themselves, or a sample of respondents representing the research sample group. In general, there is an opinion that when attitudes are estimated on the salient beliefs, the correlation tends to be greater than when they are estimated based on natural selection.

The subjective norm of influence from the social community is defined as an awareness of social pressure to implement or not to perform actions. It is the influence of important and intimate people that can impact the individual who acts. The subjective norm (SN) is the sum of the strength of each normative beliefs (n) multiplied by one's motivation (m) toward the behavior in question. Figure 3 illustrates the equation (2) of the subjective norm as below.

$$SN \propto \sum n_i m_i$$

Figure 3: Equation (2) - Subjective Norm Equation

The normative factor is known as an individual's perceived social pressure to perform or not perform the behavior. Ajzen (1991) measured the subjective norm by asking respondents to evaluate whether the "important people" would agree or disagree toward their given behavior performance. Fundamentally, subjective norms are a person's perception of referent's beliefs in the conduct of a specific behavior. However, perception may or may not be the actual beliefs of others, and a person can only be influenced when he or she considers other people is essential in his or her life.

The third factor attributes to an individual's intention called perceived control behavior, which is the significant addition to the Theory of Reasoned Action (TRA) model (Ajzen, 1991). By the same way taken, as the two first factors, the equation (3) of perceived behavior control is stated by Ajzen (1991) as in Figure 4:

$$PBC \propto \sum p_i c_i$$

Figure 4: Equation (3) - Perceived Control Behavior Equation

The Perceived Behavior Control (PBC) is directly proportional to the sum of each control belief (c) multiplied by the perceived power (p) of a given control factor to conduct the behavior. Specifically, based on a person's experience with the behavior in the past, the control belief (c) is created. However, it may also be

influenced if he or she receives a piece of additional information regarding the same behavior, but from the experiences of relatives, friends, or acquaintances. Moreover, the control beliefs may depend on the availability of other non-motivation factors to some extent, such as opportunities or resources. The more resources and opportunities and fewer limitations and obstacles, the higher chance a person perceived control over the behavior. Ajzen (1991) also concluded that

Thus, just as beliefs concerning consequences of a behavior are viewed as determining attitudes toward the behavior, and normative beliefs are viewed as determining subjective norms, so beliefs about resources and opportunities are viewed as underlying perceived behavioral control.

To summarize, the Theory of Planned Behavior suggests three main determining factors affecting behavior intentions. The first factor is the attitude toward the behavior, which includes salient beliefs about the likely behavior consequences and the evaluation of these consequences. In the second factor, the subjective norm is based on normative expectations of referents about the behavior, and the motivation to conduct that behavior. Last but not least, the third factor called perceived control behavior, which presents the beliefs about available opportunities or resources and their perceived power, in order to facilitate the behavior. In general, the combination of these three factors formed the intention towards the behavior, which indicates how willing people are to do, and how much effort they intend to perform the behavior.

2.2 Green Consumption

In recent years, global warming has been a much discussed and well-publicized issue. As a result, citizens and companies have become aware that the environment cannot be overseeing anymore; they place greater emphasis on environmentally friendly purchasing practices and green consumption.

As Handayani (2017) mentioned, the “green” term has become an interesting issue in the research of knowledge. It is related to eco-friendly solutions or design or has resulted in less adverse impact in the environment and expected to be able to contribute to control global warming. However, since the explanation for the terms “green,” “natural,” or “eco-friendly” has been unclear, some skepticism has risen

(Conway-Branch, 2018). Green consumption is still a vague concept because there has not been any clear concept nor definition. It was first mentioned in the United States around the 1970s when environmental issues started to be mentioned in societal marketing (Peattie K., 2010). Moreover, it is argued that “green consumption” is more of an idea than a dependent concept, because of its content related to other concepts, for example, sustainable, or responsible consumption. Generally, the understanding of green consumption has been tied with the concepts of sustainable consumption and sustainable development, in which green consumption is an integral part of sustainable consumption, with an emphasis on environmental factors.

Peattie (2010) stated that in order to fully understand green consumption, a wide range of aspects needed to be taken into consideration. One of the most used methods is rooted in marketing, includes the examination of the intentions and consumer behavior, in which the actions they choose to make - purchase products and services - have particular impacts on the environment, direct and indirect (Jackson, 2005). Among numerous papers on green consumption behavior, consumers’ perceptions, beliefs, attitudes, behavior control, behavior intentions, which related to the environment, are the most recent studied aspects (Chan, 2001; Wu and Chen, 2014; Kumar and Ghodeswar, 2015; Aydin, 2016; Li, Keh, and Wang, 2019). Expressly, to what extent the consumers understand environmental issues and the possibility if they could connect the products they consume and the environmental issues they perceive and concern. Moreover, it is indicated that consumers with a higher level of attention are more willing to pursuit green consumption (Wu and Chen, 2014); they were also actively supporting the environment by purchasing products that are more sustainable (Kumar and Ghodeswar, 2015).

Furthermore, Wu and Chen (2014) stated that green consumption arises from the values held by the consumer as the continuation of consumerism action; it is not a result of statutory control. Collectively, it has started when customers are more aware of their rights to get a proper product, safe, and eco-friendly product. Moreover, Chan (2001) suggested that there is a significant relationship between behavioral intentions, concern for the environment, and green consumer behavior,

where green consumption behavior can be predicted by green consciousness of environmental protection and green consumption.

Therefore, many organizations have started to take actions regarding environmental responsibility, due to the attention of the society (Handayani, 2017). It is believed that the development of green products not only brings profit to the organization but also leads them to the best path forward. However, green products' main problem is its definition; it is unclear, poorly defined, and no commonly accepted definition (Durif, Boivin, Julien, 2010). It is proposed that,

A green product is a product whose design and/or attributes (and/or production and/or strategy) use recycling (renewable/toxic-free/biodegradables) resources and which improves environmental impact or reduces toxic environmental damage throughout its entire life cycle." Note that each code contains several synonymic terminologies; for example: Green: "environmental" or "ecological"; Attributes: "functions", "ideas", "practices", or "qualities"; Uses: "incorporates"; Recycling: "renewable", "toxic-free", or "biodegradable"; Resources: "energy", "materials", or "ingredients"; Benefits: "maximizes", "encourages", or "contributes"; Reduces: "minimizes", "saves", or "eliminates", and Toxic damage: "pollution".

For many years, prior research defined green products in different ways. The industries that participate in green practices are infinite; they include hospitality services, food and restaurant departments, real estate services, automobile businesses, health, and pharmaceutical systems, professional services, and consumer goods. It is essential to preserve resources, associate in recycling programs, create recyclable products, and eliminate toxic chemical use throughout the life-cycle of the product (DiPietro et al., 2013). Gershoff and Frels (2015) suggested that the greenness of the product relates to less pollution, less natural resources, preventing hazardous waste, and proper disposal by consumers, and less harmful to society. Green products in which elements of recyclability, organic ingredients, eco-friendly productions, and energy efficiency efforts. The consensus of green products is that they contain attributes that protect or enhance the environment by conserving energy and resources, reducing or eliminating contaminants, pollution, and waste.

Currently, numerous products are labeled “green” in the market, in the fashion market, consumer goods, and materials. Green products can be green in a green way manufactured or make for a greener way of life when used (Handayani, 2017). Construction materials should also be considered because they contain chemicals that may be hazardous to human health. Regarding industrial perspective, a green product is certified by an official entity that respects the "3Rs": "reduce," "reuse" and "recycle"; and not tested on animals (Durif, Boivin, Julien, 2010). For example, in recent years, sustainable concrete has been introduced as one of the accessible materials in the world (Susilorini et al., 2014). It is found that natural polymer-modified mortar with *eucheuma cottonii* (gel) and *gracilaria* sp. (powder) performed great value of compressive strength, which is very promising to become green construction material for sustainable concrete.

Green consumers are characterized as consumers who prefer products that are not expected to threaten human health or damage the ecosystem (Tekade & Sastikar, 2015). The green consumer is typically defined as one who supports eco-friendly attitudes and/or who purchases green products over the usual options (Boztepe, 2012). For example, when a consumer has the option to choose from two similar commodities, he or she will choose to buy an environmentally friendly one. Hence, they believe that the job of environmental protection should not only be responsible by the government, business, environmentalists, and scientists; they, as consumers can also play a part. They are also more open-minded or receptive to new products and ideas. Their open-mindedness helps them to accept green products and behaviors more willingly.

Green consumers may find specific information related to the environmental performance of companies and products, and consult peculiar sources such as online guides or web related to green consuming (Peattie, 2010). Green consumer behavior recognized as a commercial opportunity for an expanding range of businesses and developed further as a field for research. There were early efforts to define green consumers, to understand the connection between their attitudes and behaviors, which evolves into more attempts to understand their motivations and psychological factors. From a green consumption perspective, a critical informational issue is environmental knowledge, to what extent consumers

understand environmental concerns and their ability to connect their lives and the products they consume and environmental issues that they concerned about.

Conceivably, this progress in general environmental awareness among various consumer behavior has been attempt undertaken by companies to maintain green by introducing the idea of corporate environmentalism. Organizations and businesses are quite conscious of green consumer decisions profit-driven companies will be strongly encouraged to green themselves. Moreover, they have seen the transformation in consumer attitudes and have been striving to gain an advantage in the competitive green market industry. Several companies have begun engaging themselves to become more environmentally friendly since they are more aware of their responsibilities towards the environment. This may urge the lawmakers, environment activists, consumers, financial institutions, and the organization's employees to be more conscious of environmental aspects, which has led to an increase of policies and regulations at both the national and international levels (Cherian & Jacob, 2012).

Various factors that are influential in encouraging green consumers to buy green products have been studied. Over the years, researches classified the awareness of green issues, a grown level of knowledge on environmental sustenance, green marketing by organizations, increased attention for the environment, developed in recognition of green products by environmental and social foundations (Suki, 2013). It is suggested that consumers show environmental attention depending on product characteristics, the accuracy of green product origins, the information the product provided, and its positive impact.

According to Handayani (2017), consumers' environmental concerns are connected to the benefit of the biophysical environment since environmental issues connected to the consumer and the environment itself. Moreover, it is assumed that gender has an essential role in consumerism and environmental consciousness (Kaufmann et al., 2012). In prior research showed that women were more concerned about the environment than men.

Consumer attitude towards the environment is a general tendency that is learned or developed in responding consistently towards the environment in a positive or negative form, which is based on cognitive, affective, and conative (Handayani, 2017). This may result from the lack of consumers' knowledge about eco-friendly claims or advertisements. The consumer is more likely to believe information that is given by the company without processing the information carefully because the consumer may have the trust of product quality. The information on the product label has not been entirely given a precise picture to consumers about the impact on the environment from consuming that product. In reality, the availability of data and information linked with the environment and the products that are claimed green products still inconsistent; therefore, consumers may not know about the truth of those claims thoroughly.

Notwithstanding the increasing interest for and concern about the environment, the specific factors underlying the low level of consumers' recognition of green products are yet to be fully clarified. Tan et al., 2019 argued that most of the studies on consumer behaviors towards green products are from the Western context, with limited investigation from other parts of the globe, especially from developing countries. Therefore, the need to explore the situational contexts of consumers' green product buying decisions has also been suggested. Peattie (2010) mentioned that the scope of research regarding green consumption has continued to develop geographically, which reflects the globalization of environmental attention. However, some multi-country academic studies have been more frequently conducted by commercial market research companies. Related academic research in green consumer behavior more usually examines consumer responses across a small number of countries, particularly less wealthy countries (Conway-Branch, 2018). Such studies reveal the differences between specific countries and cultures in consumers' particular environmental concerns and responses to them; and the similarities in developing environmental concerns and the motivation in green consumption.

Several researchers desired to identify the role of attitude on green consumption. Hartmann & Apaolaza-Ibanez (2012) argued that attitudes towards green products contribute to the purchase of green products. On the other hand, Kim (2011)

examined the green consumption patterns by investigating the role of collectivism, personal values, environmental attitudes, and consumer perception.

The purchasing decision of green products depends on the consumer's intention to buy environmentally-friendly products while avoiding those that have negatively impact the environment (Ten et al. 2019). Expressly, the consumer's intention may be conducted as the willingness to purchase green products. The buying behavior of green products involves a complicated form of ethical decision-making, which requires customers to act socially responsible when buying products. The socially responsible consumers or the green products consumers have taken into account the public consequences of his or her private consumption and attention to use his her purchasing power to make changes in society. Moreover, green products may satisfy the consumers' needs, for example, conserve the environment, and contribute to sustainability.

In addition, consumers' purchasing decisions of environmentally-friendly products have been commonly connected with their underlying attitude, perception of values, and behavioral intentions towards green products (Maniatis, 2016). Specifically, the factors of the consumers' purchasing decisions of green products are both intrinsic and extrinsic (Kumar and Ghodeswar, 2015). It is considered that the intrinsic attribute associated with consumers' level of awareness of environmental issues, their responsibilities towards the environment, and willingness to act in approaches that may preserve the resource and reduce environmental degradation. On the opposite, the extrinsic factor related to consumers' social individuality and discrete features of the products. Laroche et al. (2001) suggested that consumers buying decisions of green products do not entirely depend on their attitude towards green products; other factors such as the products' price, its availability, promotional activities, social results and level of awareness on consumption decision and behavior may also contribute to their buying decisions.

2.3 Hypothesis Development

Among the recent researches concerning green consumerism, one of the most applied models is the Theory of Planned Behavior (TPB). It mentioned that behaviors are shaped by intentions, which are driven by three factors, (1) consumer

attitudes toward that behavior, and expected consequences from it, (2) a subjective norm indicating social beliefs about what others will think, and (3) perceived behavioral control included a moderator of norms, intentions, and behavior.

Therefore, drawing insights from the abovementioned, this research hypothesized that consumers' purchasing decision of green products depends on their attitude towards environmental issues, perceived behavioral control, and price-sensitivity of green products. The hypothesized relationships are stated in the following:

H1. The concern about environmental issues affects consumers' purchasing decisions of green products.

H2. Perceived behavioral control impacts consumers' purchasing decision on green products.

H3. There is a relationship between monthly allowance/salary and the willingness to spend on green products.

3 EMPERICAL RESEARCH

3.1 Research Method

Two research methods are widely used in collecting data and finalizing results: qualitative and quantitative research. Although, there are difference in purposes and goals, either one or both methods can be used in the same research.

According to Creswell J. W. (1998),

Qualitative research is an inquiry process of understanding based on distinct methodological traditions on inquiry that explore a social or human problem. The researcher builds a complex, holistic picture, analyses words, reports details of informants and conducts the study in a natural setting.

This type of study is focused on the "grounded theory approach," building theory, rather than testing theory or hypothesis (Glaser & Strauss, 1967). The quantitative method is considered to be suitable when studying human behavior in a natural setting, which allows respondents to reflect upon and express a personal point of view. Qualitative data can be gathered through different means of communication, such as face-to-face, focus group, interviews, telephone.

On the other hand, quantitative research methods are proper when writers are seeking to confirm the hypothesis, which is based on personal opinions, attitudes, values, and beliefs (Hammarberg, Kirkman, and Lacey, 2016). Moreover, the analytical objective of the quantitative approach is to quantify variation, predict and describe characteristics of a large sample size of the population.

In this research, the quantitative research is preferred because it allows collecting many responses in a short period. Moreover, in order to test and quantify the relationships hypothesized, a questionnaire method was adopted. The 21 items questionnaire consisted of three sections:

1. **Demographical Background** - includes necessary information such as age, gender, current residence city, current occupation, and monthly wages.

2. **Personal Perspective** - investigates consumers' level of concerns and environmental awareness, a possible attribute to green consumption intention.
3. **Personal Spending** - shows us the correlation between salary and spending habit on green products.

3.2 Sample Group

The process of sampling represents the selection of targeting population under study, which is a group of individuals who take part in the investigation, referred to as "participants" (McLeod, 2019).

This study researched a sample group whose residency is Hanoi, and consists of different age groups, genders, and occupational status. In total, the size of the targeted population was 362 participants.

3.3 Research Design

The questionnaire was designed in a way that would be able to attract attention, easy to understand, and concise. Moreover, it was adjusted anonymously in order to keep respondents' identification confidential. The structure is precise, with different types of questions, which are written in formal Vietnamese language to suit the research context. The questions in the first and third section are in multiple-choice format, focused on participants' demographical background, and personal spending; while those of the second section used the Likert scale with five levels from 1 - strongly disagree, to 5 - strongly agree, to allow the individual to express a personal opinion with a particular statement. PSPP tables that showed the frequency distributions can be found in Appendix 1, and the detailed questionnaire can be found in Appendix 2. Table 1 present the variables used in the questionnaire to measure each independent factor for abovementioned hypothesizes in the following:

Table 1. Questionnaire Sections and Variables.

Sections	Variables
A. Environment Awareness	<p>I believe that "green consumption" is essential in protecting the environment.</p> <p>Environment issues should be prior concern.</p> <p>Environmental pollution is a problem for the whole community.</p> <p>I am interested in finding solutions for environmental issues.</p>
B. Individual Behaviour	<p>I feel uncomfortable when looking for green products replacing common products.</p> <p>The fact that people around motivates me to consume green products.</p> <p>The mass media (newspapers, radio, TV, internet...) now give a lot of information about green products</p> <p>I have reduced or have limited use of plastic bags, plastic containers, and have replaced them with eco-friendly products such as cloth or paper.</p> <p>I/My family will encourage relatives/friends to consume green products.</p>
C. Price- sensitivity of Green Products	<p>Have you ever purchased green products?</p> <p>1. If yes:</p> <ul style="list-style-type: none"> - Do you feel that you can afford green products? - How much are you willing to pay for each purchase? - How satisfied are you with your experience of purchasing green products? <p>2. If no:</p> <ul style="list-style-type: none"> - Do you intend to consume green products? - Do you feel that you can afford green products? - How much are you willing to pay for each purchase?

3.4 Data Collection

The writer has collected information from both primary and secondary sources for this research. The primary source is in the form of the questionnaire, as mentioned above. Because of the surveyed participants are diverse and distributed over a wide area, this sampling method is implemented and considered to be a cost- and time-efficient. The online survey was constructed within the time period of April 2nd - April 6th, 2019, and was opened for responses with a duration of 8 days. The questionnaire was collected through an online form of 362 consumers in Hanoi city, resulting in 358 valid responses.

The secondary data was sourced from topic-related books, websites, business magazines, accessible journals, and annual reports.

4 DATA ANALYSIS

4.1 Respondents' Demographic Background

The questionnaire results were analyzed with IBM SPSS Statistical Software.

A total of 362 consumers in Hanoi city participated, and this resulted in 358 valid responses. The first section includes fundamental information of the respondents, such as age, gender, current occupation, and monthly allowance or salary.

In the first question, there was a significant difference in gender distribution, where 62 percent of participants are female, and only 38 percent male. Figure 5 below shows the gender distribution in bar-chart.

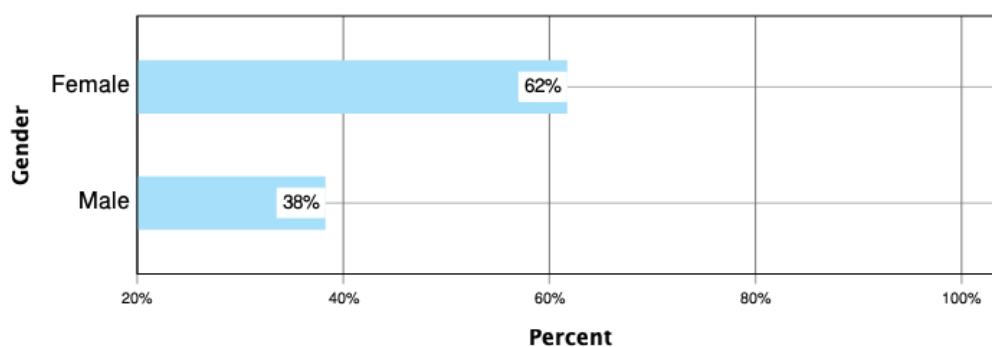


Figure 5: What is your gender? (n=358)

Followed by the second question, which illustrates the respondents' age. The age groups were categorized into four groups, where the majority from the age of 18 to 30 (76 percent). The second largest group consisted of 17 percent, which represents the age group from 31 to 60 years old. The last two smallest groups are respondents from the age below 18 (6 percent), followed by just 1 percent of ages above 60. Figure 6 shows the age categories as below.

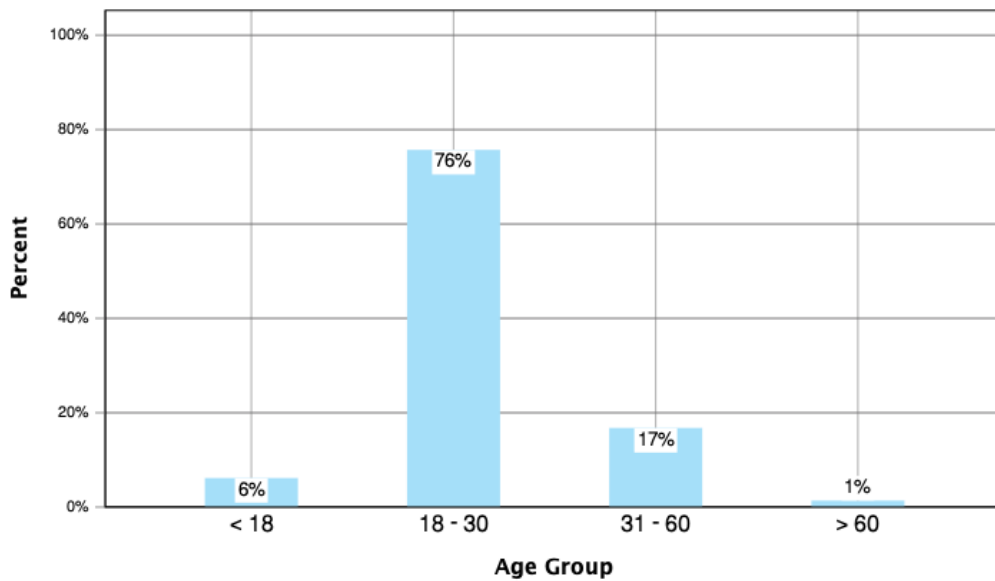


Figure 6: What is your age? (n=358)

Regarding the current occupational status in the third question, more than half are university students, which represent 59 percent of the respondents. The result shows that 17 percent were employees who work in private enterprises, while the people who work in government and officials were approximately half (9 percent). Houseperson or retired-person group was followed with 8 percent, and the rest of 7 percent were high school students. Figure 7 illustrates the occupation distribution.

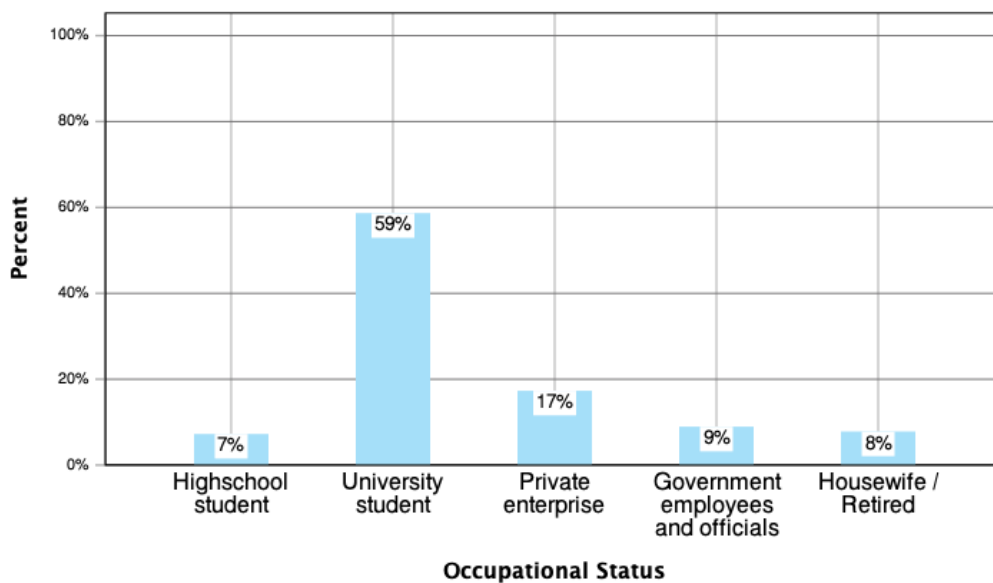


Figure 7: What is your current occupational status? (n=358)

Since the sample group is relatively young, the number of people has less than 115 euros per month which accounts for approximately half of the respondents (49 percent). Twenty-two percent and 20 percent of the surveyed have 115 to 275 euros and 275 to 585 euros monthly. The rest 9 percent are having/earning more than 585 euros each month. Figure 8 below shows the monthly allowance/salary distribution.

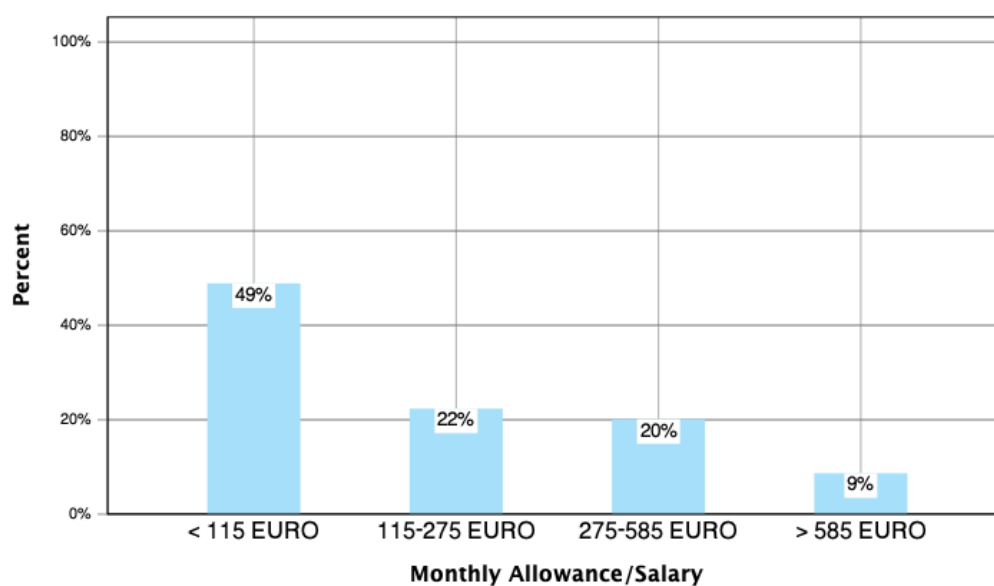


Figure 8: How much is your monthly allowance/salary? (n=358)

The final question regarding the personal background is about who lives with them. More than two-thirds of the respondents are currently living with their relatives (75 percent). The other third consisted of people accommodating with their friends (13 percent) and by themselves (11 percent).

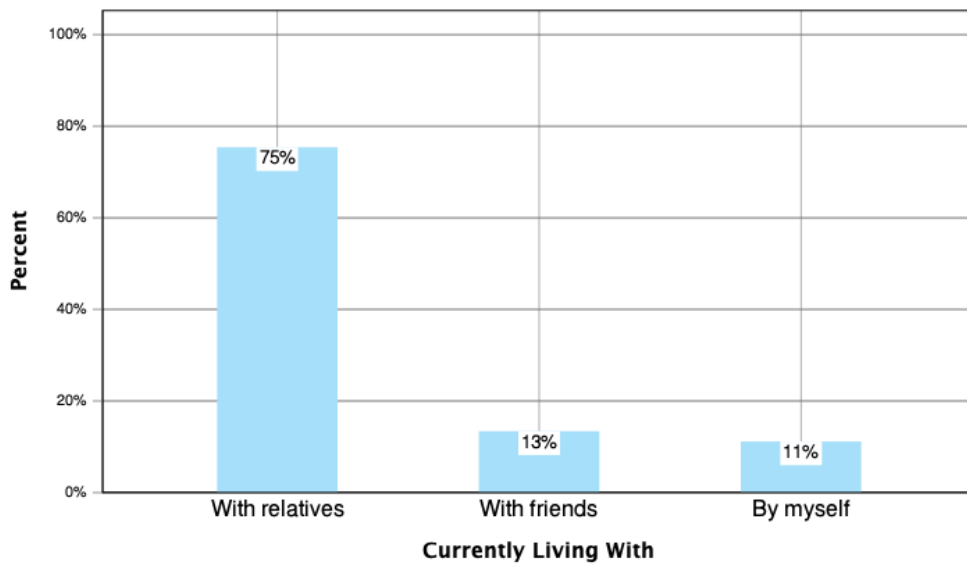


Figure 9: Who are you currently living with? (n=358)

Before continuing to the next section, the question "Have you heard the term "green consumption" and "green product" before?" acts as a bridge. As seen from Figure 10, a remarkable amount of the participants have already heard both terms "green consumption" and "green product" (92 percent).

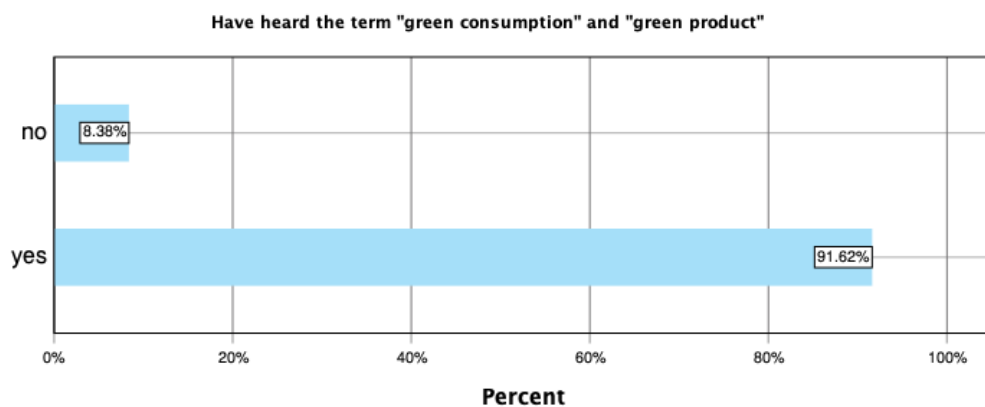


Figure 10: Have you heard the term "green consumption" and "green product" before? (n=358)

4.2 Respondents' Personal Perspective

The Personal Perspective section was built as core support for the green consumption intention in order to test the first hypothesis. This part divided into two sub-section: A. Environmental Awareness with four statements and B. Individual Behavior with six statements.

Awareness attributes as a crucial role in the activities of consumers, when they are aware of the nature and significance of green consumption behavior for individuals, families, and society, they may implement it.

In Part A, by analyzing answers from the first four statements, from statements 8 to 11, there was a shred of clear evidence that respondents have a keen awareness about the environmental issues. Figure 11 illustrates that in each statement, approximately 90 percent have chosen from "agree" to "strongly agree," only a small percent of less than 10 percent of the respondents chosen "neutral" to "strongly disagree" with the statements. Noteworthy, in statement 10, the "strongly agree" answers accounted for almost 64 percent of the total. As is observed, respondents believe that "green consumption" is essential in protecting the environment.

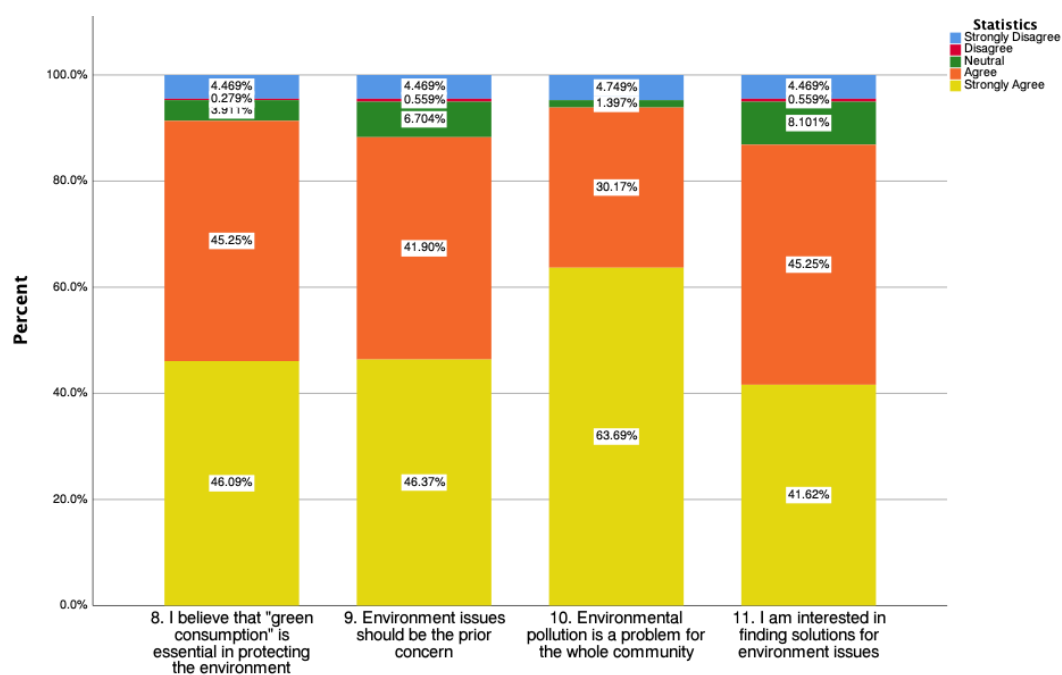


Figure 11: Respondents' opinion on the following statements: 8, 9, 10 and 11. (n=358)

As Figure 12 presents, in the next three statements, the ratio changed significantly in comparison with the first four. According to the data obtained on the 12th statement, almost half of the respondents (43.85 percent) have a neutral opinion about the unpleasantness of looking for green products replaced conventional products, a quarter agreed, and other quarter disagreed.

Data collected from the next statement shows that approximately 3/4 of the respondents agreed that people around motivates them to consume the green product. At the same time, 20 percent were neutral, and less than 10 percent disagreed.

Moreover, the respondents' answers concerning the mass media give information about green products shows roughly 60 percent of "agree" to "strongly agree." In contrast, 37 percent of the respondents have a neutral option, while only 8 percent disagreed.

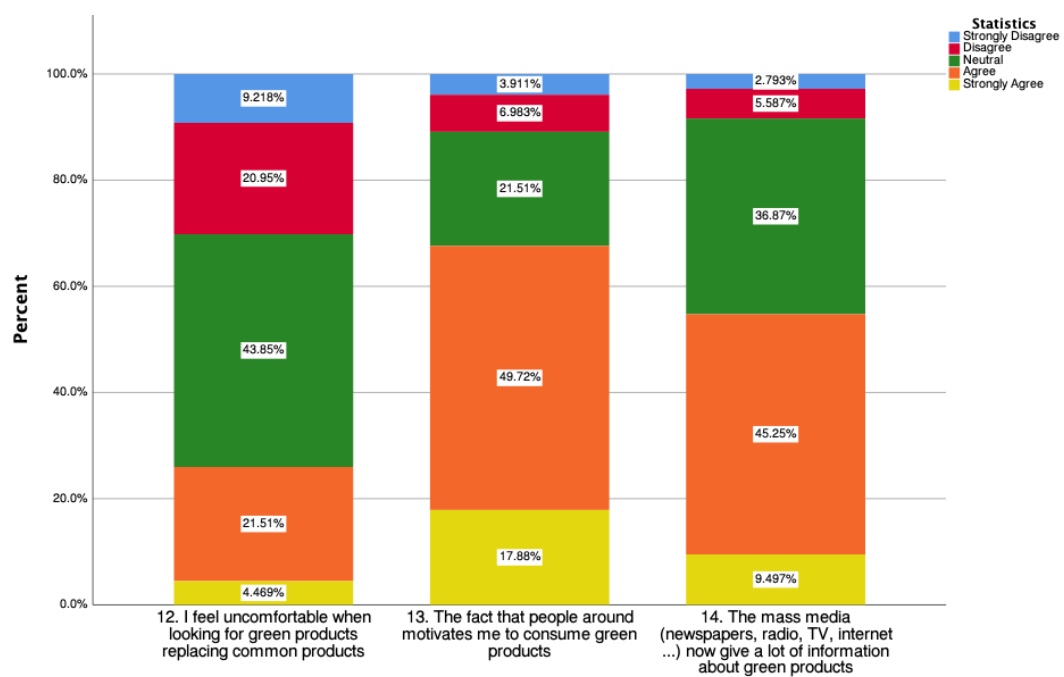


Figure 12: Respondents' opinion on the following statements: 12, 13 and 14. (n=358)

By analyzing the answers from the 15th, 16th, and 17th statements, and as seen in Figure 13, it is an outstandingly positive opinion regarding the green consumption behavior of individuals and social groups.

It seems that the majority of the respondents have used green products instead of plastic products, which concluded 70 percent. In comparison, only a small percentage of the respondents (5 percent) may not be aware of these environmental effects of product use.

By the same way token, while more than 75 percent of respondents totally agree or agree partially on the preference of buying green products for individuals and family, 22 percent of respondents were neutral towards these products.

According to answers to the 17th statement, interestingly, approximately 80 percent of the respondents will encourage their friends and family to consume green products, followed by a neutral opinion with 17 percent.

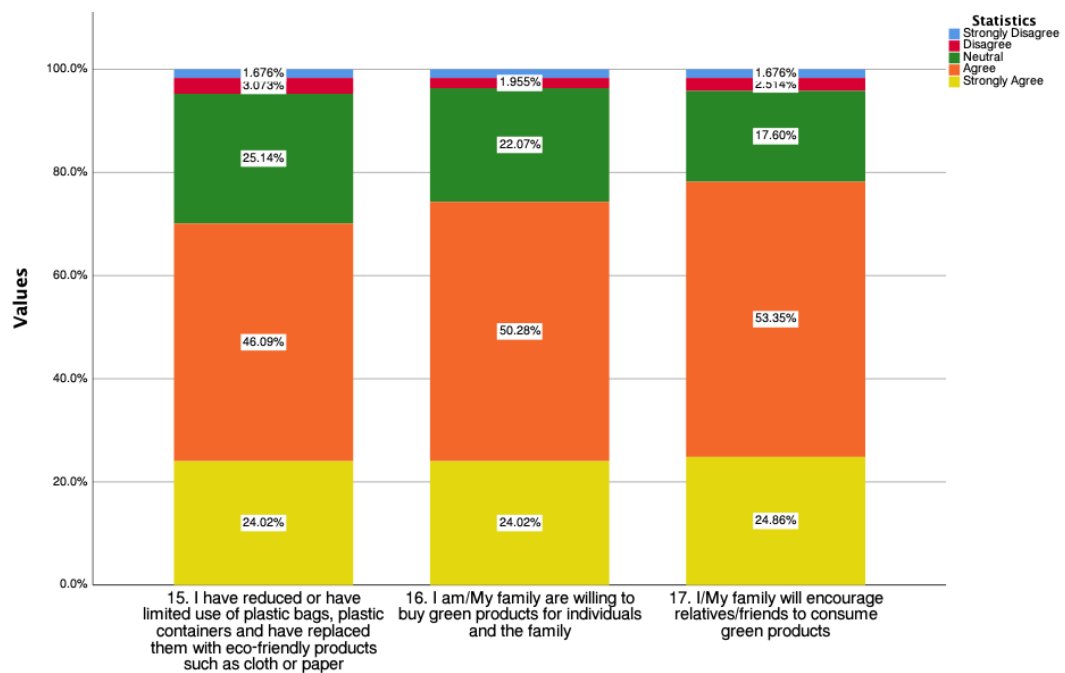


Figure 13: Respondents' opinion on the following statements: 15, 16 and 17. (n=358)

4.3 Respondents' Personal Spending

The Personal Spending section was built to explore the motivation and preferences for purchase green products, from both perspectives, have and have not been green consumers. Furthermore, from there, the data collected would be used to test the second hypothesis.

By answering question 18, each respondent's choice will lead them to the different follow-up questions. The result in Figure 14 showed a remarkable difference; 92 percent (n=328) of respondents have purchased green products before, and only 8 percent (n=30) of the respondents have never purchased them before.

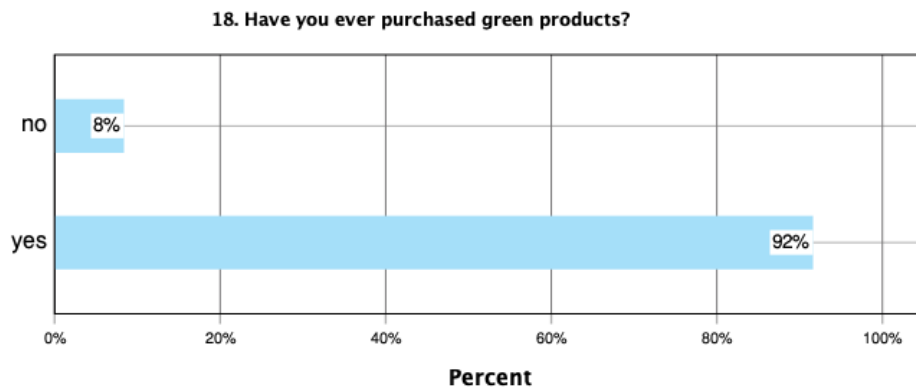


Figure 14: Have you ever purchased green products? (n=358)

Based on each preference, for those who have never bought green products, the next question will evaluate their willingness to consume in the future. Even though everyone was determined to buy green products, there was slight differences in their intention, more than half, 53 percent of respondents will definitely do that, while the remaining 47 percent are still cynical.

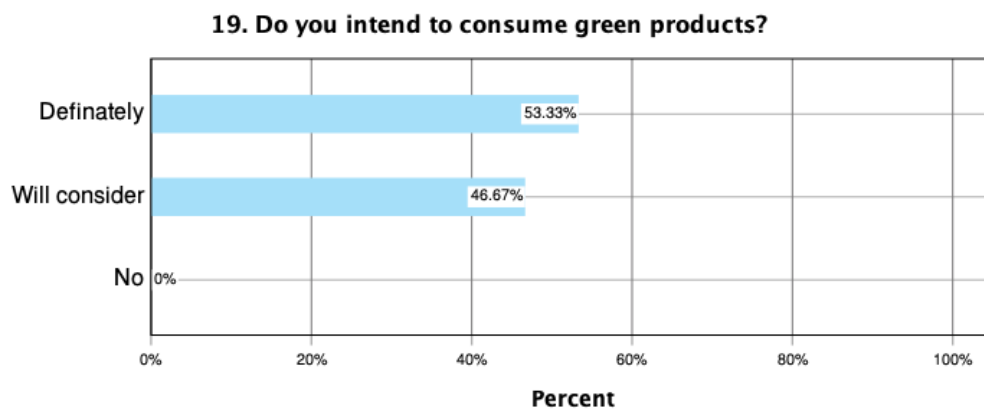


Figure 15: Do you intend to consume green product? (n=30)

The data in Figure 16 showed that 60 percent of the respondents, who have not consume green products, identified themselves as being able to afford green products. On the contrary, the other 40 percent have disagreed.

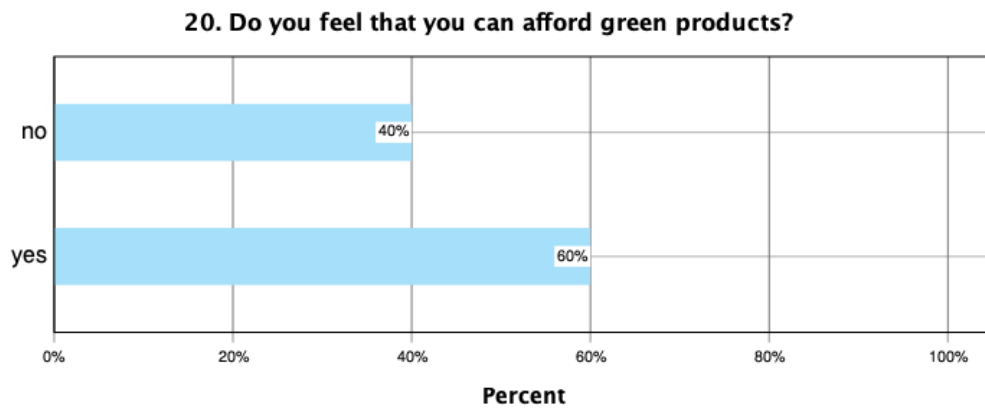


Figure 16: Do you feel that you can afford green products? (n=30)

At the same time, there was a considerable percentage of thirty-respondents, approximately 63 percent, who are willing to pay less than 4 euros each time, while 20 percent of the respondents may spend from 4 to 20 euro, and only 17 percent are contented to pay from 20 to 40 euros. Figure 17 represents the option distribution.

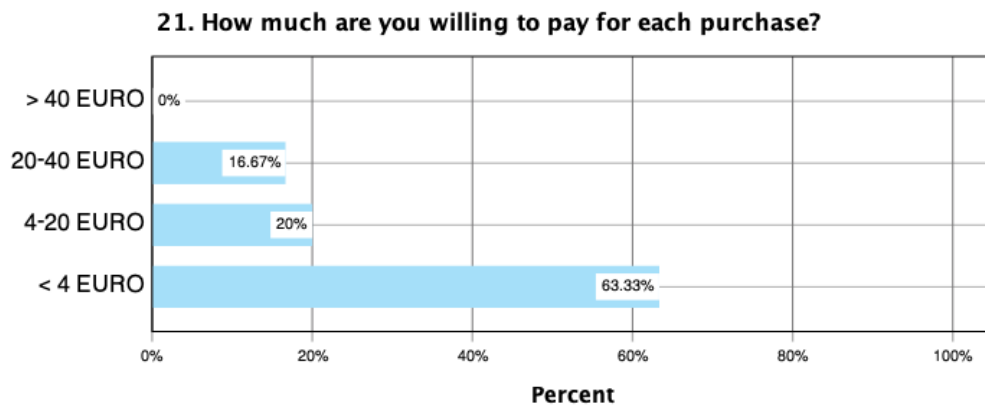


Figure 17: How much are you willing to pay for each purchase? (n=30)

On the other hand, for those 328 people who already were green consumers, 79 percent of the respondents agreed that their finances could support this buying habit. Meanwhile, 21 percent were opposed. Figure 18 illustrates the respondents' opinion on the question.

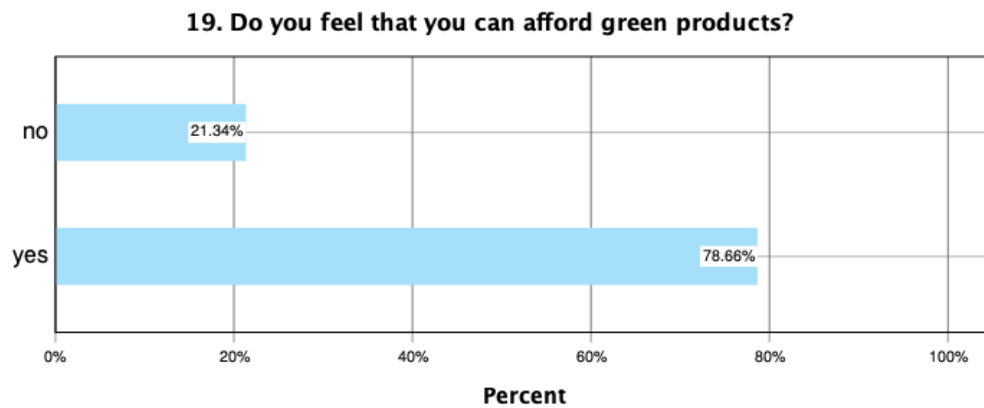


Figure 18: Do you feel that you can afford green products? (n=328)

Figure 19 represents the frequency of purchasing green products among 328 respondents in a period of one year. More than half of respondents, 53 percent of the respondents, sometimes buy green products, from 3 to 6 times yearly, which consider themselves being sustainable. Followed by people who purchase at least once per month each year, with 26 percent, and then 21 percent of respondents rarely acquire green products.

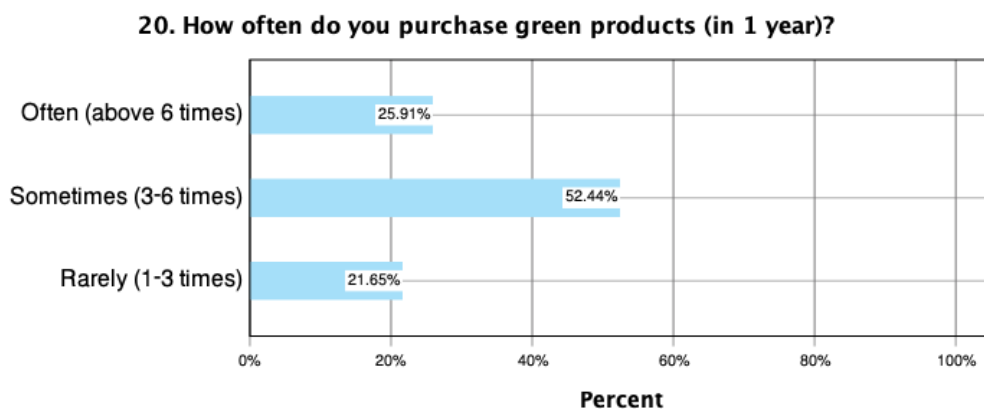


Figure 19: How often do you purchase green products (in 1 year)? (n=328)

Interestingly, compared with those who have never bought green products, green consumers are willing to spend more on each purchase. The majority of them, 60 percent, have spent from 4 to 20 euros, while 30 percent chose to pay less than 4 euros each time. Moreover, only 10 percent of green consumers chose to disburse from 20 to 40 euros or more. Figure 20 illustrates the respondents' expenditures.

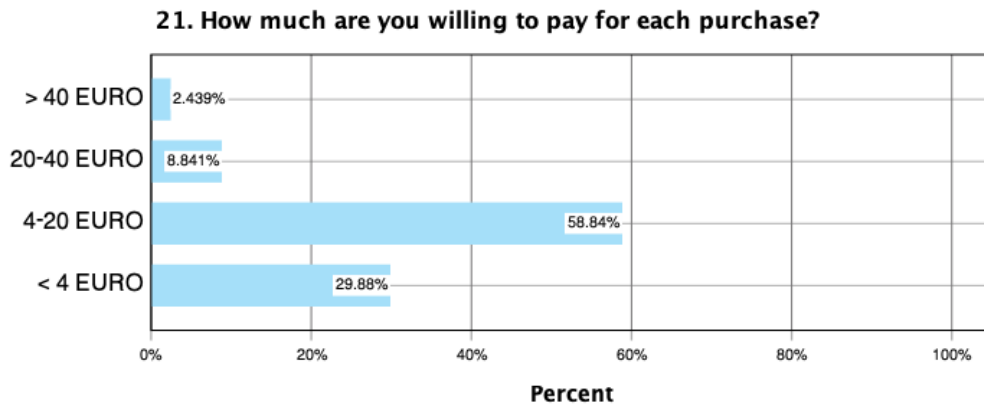


Figure 20: How much are you willing to pay for each purchase? (n=328)

The last question investigated whether or not respondents were satisfied with their experience of buying green products. Approximately 70 percent were satisfied, and 30 percent have a neutral opinion. Figure 21 shows the respondents' satisfaction based on their experience.

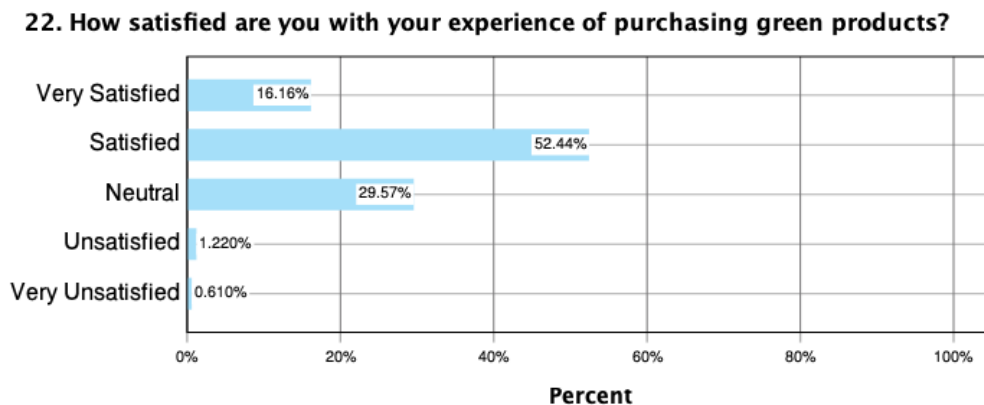


Figure 21: How satisfied are you with your experience of purchasing green products? (n=328)

4.4 Testing of Hypotheses

In order to test the hypotheses, the questions were grouped, as presented in Table 1. Means and standard deviations of the variables as a whole and by individual questions were analyzed. The mean scores indicate the central tendency of the data, while the standard deviation is a measure of how representative the mean is concerning the observed data (Sekaran and Bougie, 2016).

Table 2 indicates the mean and standard deviation of four items regarding Hypothesis 1. The overall mean score of the concern about environmental issues reflected a positive inclination towards green product purchasing. It is further supported by the fact that all the related four statements recorded significantly higher than the average mean i.e., 2.5 based on the five-point Likert scale used.

Table 2. Mean scores and Standard Deviation (SD) of each item of H1.

Variables	Mean	SD
I believe that "green consumption" is essential in protecting the environment.	4.28	0.914
Environmental issues should be prior concern.	4.25	0.946
Environmental pollution is a problem for the whole community.	4.48	0.922
I am interested in finding solutions for environmental issues.	4.19	0.942
Overall mean score	4.30	0.931

The mean ratings of environmental concern from the highest to the lowest were respondents agreed that environmental pollution is a problem for the whole community. (mean = 4.48, SD = 0.922); green consumption is essential in protecting the environment (mean = 4.28, SD = 0.914); environment issues should be the prior concern (mean = 4.25, SD = 0.946); and interested in finding solutions for environment issues (mean = 4.19, SD = 0.942). In general, the result showed a high level of concern about environmental issues, with an overall mean score of 4.30.

By the same token, Table 3 indicates the mean and standard deviation of five constructs regarding Hypothesis 1.

Even though all the five statements recorded higher than the average mean, i.e., 2.5 based on the five-point scale used, the overall mean score is much lower comparing to the first four.

The mean ratings of perceived behavior control from the highest to the lowest were customers were willing to encourage relatives/friends to consume green products (mean = 3.97, SD = 0.823); they have reduced or have limited use of plastic bags,

plastic containers and have replaced them with eco-friendly products such as cloth or paper (mean = 3.88, SD = 0.867); it was people around motivates them to consume green products (mean = 3.71, SD = 0.970); the awareness that the mass media gives a lot of information about green products (mean = 3.53, SD = 0.849); and they feel neutral whether they feel uncomfortable when looking for green products replacing common products (mean = 2.91, SD = 0.983). Generally, the result showed an acceptable level of the impact that perceived behavioral control factors, with an overall mean score of 3.60.

Table 3. Mean scores and Standard Deviation (SD) of each item of H2.

Variables	Mean	SD
I feel uncomfortable when looking for green products replacing common products.	2.91	0.983
The fact that people around motivates me to consume green products.	3.71	0.970
The mass media (newspapers, radio, TV, internet...) now give a lot of information about green products	3.53	0.849
I have reduced or have limited use of plastic bags, plastic containers and have replaced them with eco-friendly products such as cloth or paper.	3.88	0.867
I/My family will encourage relatives/friends to consume green products.	3.97	0.823
Overall mean score	3.6	0.898

In this research, in order to test the first two hypotheses, H1 and H2, the multiple regression analysis was used to determine the critical factors and their relationship with the buying decision of green products, as well as to test the first two hypotheses. Two outputs were used in regression analysis are standardized β coefficients and significant p-value.

A standardized β coefficient, also known as beta, is used to compare the strength of the impact of each independent variable on the dependent variable. β is a measure of the total effect of the predictor variables, so the top-ranked variable is theoretically the one with the most significant total effect. β can be smaller than -1 or larger than +1 if there are multiple predictor variables, and multicollinearity is

present (Statistics How To, 2016). Moreover, a p-value is used in testing hypotheses to support or reject: the smaller the p-value, the more vigorous the evidence. P values are expressed as decimals.

The results of the multiple regression analysis were presented in Table 4.

Table 4. Results of multiple regression analysis.

Critical Factors	Standardized β Coefficients	Significant p
Perceived Behavioral Control	0.530	0.000
Concern about Environmental Issues	0.122	0.013

Notes: Dependent variable: Green product buying decision. $R_2 = 0.360$; *Adjusted R₂ = 0.357*; $F = 100.059$; $p = 0.000$.

As shown in Table 4, the impact of perceived behavioral control was significant on customers' buying decisions ($\beta = 0.530$, $p = 0.000$). Therefore, H1 is supported. Moreover, the hypothesized relationship between the concern about environmental issues was notable ($\beta = 0,122$, $p = 0.013$). Thus, H2 was also supported. The R_2 value of 0.360 indicates that all the supported factors account for 36 percent variance in green product buying decisions, with perceived behavioral control was the more significant factor.

Regarding the third hypothesis, H3, a crosstabulation table, has been implemented to examine the relationship between two categorical variables. The results of the crosstabulation were presented in Table 5.

From the abovementioned, the H3 proposed that "there is a relationship between monthly allowance/salary and the willingness to spend on green products." The writer predicted that customers have a better (more) allowance or salary money in each month, the more they are willing to pay higher-price green products.

In the Monthly Allowance/Salary and Price of Green Products Crosstabulation table, the sample had 199 respondents chose to pay from 4 to 20 euros, 117 respondents for less than 4 euros, 34 for 20 to 40 euros, and only 8 for more than 40 euros each purchase.

Table 5. Crosstabulation table of Monthly Allowance/Salary and Price of Green Products.

		<i>How much are you willing to pay for each purchase?</i>				
		< 4 euro	4–20 euro	20–40 euro	> 40 euro	Total
<i>Monthly Allowance/Salary</i>	< 115 euro	60	96	16	3	175
	115-275 euro	25	45	6	4	80
	275-585 euro	23	40	8	1	72
	> 585 euro	9	18	4	0	31
Total		117	199	34	8	358

However, it is observed that there was no interaction between customers with more than 585 euros each month and their intention to purchase green products with a price higher than 40 euros. Unexpectedly, customers who are willing to pay more than 40 euros for each purchase come from the group that has less than 115 euros and from 115 to 275 euros monthly. Therefore, H3 was not supported.

5 FINAL CONCLUSION

5.1 Final Conclusion and Reflections

The aim of this research was to explore if the concern about environmental issues and perceived behavioral control are the perspectives that Vietnamese customers would take into account when they intent to green consumption. Moreover, another objective was to examine the relationship between the allowance or wages and the customers' willingness to spend on green products.

The research findings presented an excellent consumer awareness of environmental issues and green consumption. It also showed a positive motivation and attitude of consumers to improve to more sustainable consumption patterns and their willingness to contribute to the sustainability living style as an individual.

This research set out to create a descriptive model incorporating the following variables: perceived behavioral control, the concern of environmental issues, and behavioral intention, and actual behavior.

The results suggest that Vietnamese consumers' buying decisions of green products are associated with environmental consciousness and perceived behavioral control. Perceived behavioral control and behavioral intention are significantly positively related to each other. On the other hand, even the concern of environmental issues impacts the buying decisions of green products; it was not that significant. The writer assumed that a positive environmental attitude does not necessarily interpret to a green product buying decision unless it is supported by a strapping individual commitment towards the environment. The impact of environmental consciousness may indicate the importance of individual commitment towards ensuring a better environment in shaping green consumption in Vietnam. Thus, the findings suggest that green product buying decision among consumers in Vietnam is associated with customers' perceived behavioral control and environmental consciousness.

Regarding the relationship between the allowance or wages and the customers' willingness to spend on green products, contrary to expectation, it seems that products with great concern and practices offer a higher price, and customers are unwilling to pay extra money for the product. It is found that even though customers

have a higher salary or allowance, they would not choose to pay green products at a higher price. The result also suggested that consumers' low price-sensitivity may be associated with the buying decision of green products.

Findings from this research can support companies to take necessary actions, particularly in green products price, which may culminate in an increase in the purchase of green products among Vietnamese consumers. For example, companies planning to produce green products into the market will have to ensure that such products are accessible to the consumers and marketed at a relatively moderate price to ensure consumers buying interest.

5.2 Limitations and Suggestions for Further Research

This study is subject to limitations. First, this research only investigated 358 consumers in Hanoi city; thus, the representation for Vietnamese customers was not high. In order for the research results to be more scientifically representative, the sample group needs to be more significant to have higher reliability. Further research needs to examine the consumption habits and lifestyle characteristics of consumers to analyze more factors affecting the intention and habits of green consumption, and to create a sustainable lifestyle for Vietnamese consumers. Second, it could be argued that the high proportion of participants falling into the 18-30-year-old group and resident in northern and capital city of Vietnam, which means the sample group may over-centralized. In future research, this could be adjusted by more thoroughly distribution across age groups and residents across the country. Last but not least, environmental consciousness is a diverse and subtly nuanced concept. Customers may have their particular concern within environmental awareness that could affect perceived their perceived behavioral control of green consumption behavior, which may, in turn, result in differing levels of behavioral intention. Future studies could attempt to analyze more on their opinions regarding environmental protection in order to explain differences in green consumption behavior.

REFERENCES

- Ajzen, I., 1991. The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), pp.179-211.
- Aydin, H. 2016, "Some Determinants of Green Consumption Behavior: A Study on Green Consumers", *Journal of Environmental Management & Tourism*, vol. 7, no. 4, pp. 609-618.
- Boztepe, A., 2012. Green marketing and its impact on consumer buying behavior. *European Journal of Economic & Political Studies*, 5(1).
- Chan, R.Y.K. (2001), Determinants of Chinese consumers' green purchase behavior. *Psychology & Marketing*, 18(4), pp. 389–413.
- Cherian, J. and Jacob, J., 2012. Green marketing: A study of consumers' attitude towards environment friendly products. *Asian social science*, 8(12), p.117.
- Conway-Branch, C. 2018, *Are Green Products Affordable for Low-Income Ethnic Consumers?*, Northcentral University
- Connolly, J & Prothero, Andrea. (2008). Green Consumption. *Journal of Consumer Culture*. 8. 117.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. London: Sage.
- DiPietro, R.B. and Gregory, S., 2012. Customer perceptions regarding green restaurant practices: a comparison between fast food and upscale casual restaurants. *FIU Hospitality Review*, 30(1), pp.1-22.
- Durif, F., Boivin, C. and Julien, C., 2010. In search of a green product definition. *Innovative Marketing*, 6(1), pp.25-33.
- Gershoff, A.D. and Frels, J.K., 2015. What makes it green? The role of centrality of green attributes in evaluations of the greenness of products. *Journal of Marketing*, 79(1), pp.97-110.
- Glaser, B. G., & Strauss, A. (1967). *The discovery grounded theory: strategies for qualitative inquiry*. Aldin, Chicago.
- Handayani, W. (2017). Green Consumerism : an Eco-Friendly Behaviour Form Through The Green Product Consumption and Green Marketing. *Sinergi : Jurnal Ilmiah Ilmu Manajemen*. 7. 10.25139/sng.v7i2.364.
- Hartmann, P. and Apaolaza-Ibáñez, V., 2012. Consumer attitude and purchase intention toward green energy brands: The roles of psychological benefits and environmental concern. *Journal of business Research*, 65(9), pp.1254-1263.

Jackson, Tim. (2005). *Motivating Sustainable Consumption: A Review of Evidence on Consumer Behaviour and Behavioural Change*. Sustainable Development Research Network. 15.

K. Hammarberg, M. Kirkman, S. de Lacey, *Qualitative research methods: when to use them and how to judge them*, *Human Reproduction*, Volume 31, Issue 3, March 2016, Pages 498–501

Kaufmann, H.R., Panni, M.F.A.K. and Orphanidou, Y., 2012. Factors affecting consumers' green purchasing behavior: An integrated conceptual framework. *Amfiteatru Economic Journal*, 14(31), pp.50-69.

Kim, Y., 2011. Understanding green purchase: The influence of collectivism, personal values and environmental attitudes, and the moderating effect of perceived consumer effectiveness.

Kumar, P. and Ghodeswar, B. (2015), "Factors affecting consumers' green product purchase decisions", *Marketing Intelligence & Planning*, Vol. 33 No. 3, pp. 330-347.

Laroche, Michel & Bergeron, Jasmin & Barbaro-Forleo, Guido. (2001). Targeting Consumers Who Are Willing to Pay More for Environmentally Friendly Products. *Journal of Consumer Marketing*. 18. 503-520. 10.1108/EUM0000000006155.

Li, Y., Keh, H.T. & Wang, X. 2019, "Powering Sustainable Consumption: The Roles of Green Consumption Values and Power Distance Belief: JBE JBE", *Journal of Business Ethics*, , pp. 1-18.

Maniatis, P., 2016. Investigating factors influencing consumer decision-making while choosing green products. *Journal of Cleaner Production*, 132, pp.215-228.

McLeod, S. A. (2019, August 03). Sampling methods. *Simply Psychology*. <https://www.simplypsychology.org/sampling.html>

Ngô, T. and Phạm, T., 2019. Thúc Đẩy Tiêu Dùng Xanh Của Các Hộ Gia Đình Việt Nam Hiện Nay. [online] *TapChiTaiChinh*. Available at: <<http://tapchitaichinh.vn/nghien-cuu-trao-doi/thuc-day-tieu-dung-xanh-cua-cac-ho-gia-dinh-viet-nam-hien-nay-302162.html>> [Accessed 4 April 2020].

Nielsen.com. 2015. NTD Việt Tiếp Tục Quan Tâm Đến Các Nhãn Hàng Có Cam Kết Về Phát Triển Bền Vững. [online] Available at: <<https://www.nielsen.com/vn/vi/insights/article/2015/csr-vietnam-2015/#>> [Accessed 8 April 2020].

Peattie, K., 2010. Green consumption: behavior and norms. *Annual review of environment and resources*, 35, pp.195-228.

Statistics How To. 2016. Beta Weight: Definition, Uses - Statistics How To. [online] Available at: <<https://www.statisticshowto.com/beta-weight/>> [Accessed 23 April 2020].

Sekaran, U. and Bougie, R., 2016. Research methods for business: A skill building approach. John Wiley & Sons.

Suki, N.M., 2013. Green Awareness Effects On Consumers' purchasing Decision: Some Insights From Malaysia. *International Journal of Asia-Pacific Studies*, 9(2).

Susilorini, M.I.R., Hardjasaputra, H., Tudjono, S., Hapsari, G., Wahyu, S.R., Hadikusumo, G. and Sucipto, J., 2014. The advantage of natural polymer modified mortar with seaweed: green construction material innovation for sustainable concrete. *Procedia Engineering*, 95, pp.419-425.

Tan, C.N.L., Ojo, A.O. and Thurasamy, R., 2019. Determinants of green product buying decision among young consumers in Malaysia. *Young Consumers*.

Tekade, A.B. and Sastikar, S.S., 2015. Present Green Marketing: Importance and challenges in Customer satisfaction. *International Journal for Administration in Management, Commerce and Economics*,(3), pp.308-312.

The Nielsen Global Survey (2015), "Sustainability continues to gain momentum among Malaysian consumers", available at: www.nielsen.com/my/en/insights/news/2015/sustainability-continues-gaining-momentum-among-malaysians.html [Accessed 8 April 2020].

Worldometers.info. n.d. Vietnam Demographics 2020 (Population, Age, Sex, Trends) - Worldometer. [online] Available at: <https://www.worldometers.info/demographics/vietnam-demographics/#sources> [Accessed 4 April 2020].

Wu, S.I. and Chen, J.Y., 2014. A model of green consumption behavior constructed by the theory of planned behavior. *International Journal of Marketing Studies*, 6(5), p.119.

APPENDICES

APPENDIX 1. The frequency distributions table from statistics IBM PSPP.

Respondents' Demographic Background

1. What is your gender?

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	137	38.3	38.3	38.3
	Female	221	61.7	61.7	100.0
	Total	358	100.0	100.0	

2. What is your age?

Age Group					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 18	22	6.1	6.1	6.1
	> 60	5	1.4	1.4	7.5
	18 - 30	271	75.7	75.7	83.2
	31 - 60	60	16.8	16.8	100.0
	Total	358	100.0	100.0	

3. What is your current occupational status?

Occupational Status					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Government employees and officials	32	8.9	8.9	8.9
	Private enterprise	62	17.3	17.3	26.3
	Highschool student	26	7.3	7.3	33.5
	Housewife / Retired	28	7.8	7.8	41.3
	University student	210	58.7	58.7	100.0
	Total	358	100.0	100.0	

4. How much is your monthly allowance/salary?

Monthly Allowance/Salary					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 115 EURO	175	48.9	48.9	48.9
	115-275 EURO	80	22.3	22.3	71.2
	275-585 EURO	72	20.1	20.1	91.3
	> 585 EURO	31	8.7	8.7	100.0
	Total	358	100.0	100.0	

5. Who are you currently living with?

Currently Living With					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	With friends	48	13.4	13.4	13.4
	With relatives	270	75.4	75.4	88.8
	By myself	40	11.2	11.2	100.0
	Total	358	100.0	100.0	

6. Have you heard the term "green consumption" and "green product" before?

Have heard the term "green consumption" and "green product"

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	328	91.6	91.6	91.6
	no	30	8.4	8.4	100.0
Total		358	100.0	100.0	

Respondents' Personal Perspective

7. Respondents' opinion on the following statements: 8, 9, 10 and 11.

	8. I believe that "green consumption" is essential in protecting the environment	9. Environment issues should be the prior concern	10. Environmental pollution is a problem for the whole community	11. I am interested in finding solutions for environment issues
Strongly Disagree	4.5%	4.5%	4.7%	4.5%
Disagree	0.3%	0.6%	0.0%	0.6%
Neutral	3.9%	6.7%	1.4%	8.1%
Agree	45.3%	41.9%	30.2%	45.3%
Strongly Agree	46.1%	46.4%	63.7%	41.6%

8. Respondents' opinion on the following statements: 12, 13 and 14.

	12. I feel uncomfortable when looking for green products replacing common products	13. The fact that people around motivates me to consume green products	14. The mass media (newspapers, radio, TV, internet ...) now give a lot of information about green products
Strongly Disagree	9.2%	3.9%	2.8%
Disagree	20.9%	7.0%	5.6%
Neutral	43.9%	21.5%	36.9%
Agree	21.5%	49.7%	45.3%
Strongly Agree	4.5%	17.9%	9.5%

9. Respondents' opinion on the following statements: 15, 16 and 17.

	15. I have reduced or have limited use of plastic bags, plastic containers and have replaced them with eco-friendly products such as cloth or paper	16. I am/My family are willing to buy green products for individuals and the family	17. I/My family will encourage relatives/friends to consume green products
Strongly Disagree	1.7%	1.7%	1.7%
Disagree	3.1%	2.0%	2.5%
Neutral	25.1%	22.1%	17.6%
Agree	46.1%	50.3%	53.4%
Strongly Agree	24.0%	24.0%	24.9%

Respondents' Personal Spending

10. Have you ever purchased green products?

18. Have you ever purchased green products?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	328	91.6	91.6	91.6
	no	30	8.4	8.4	100.0
Total		358	100.0	100.0	

If answer No:

11a. Do you intend to consume green product?

	No	Will consider	Definitely
19. Do you intend to consume green?	0.0%	46.7%	53.3%

11b. Do you feel that you can afford green products?

	yes	no
20. Do you feel that you can afford green products?	60.0%	40.0%

11c. How much are you willing to pay for each purchase?

	< 4 EURO	4-20 EURO	20-40 EURO	> 40 EURO
21. How much are you willing to pay for each purchase?	63.3%	20.0%	16.7%	0.0%

If answer Yes:

11a. Do you feel that you can afford green products?

	yes	no
19. Do you feel that you can afford green products?	78.7%	21.3%

11b. How often do you purchase green products (in 1 year)?

	Rarely (1-3 times)	Sometimes (3-6 times)	Often (above 6 times)
20. How often do you purchase green products (in 1 year)?	21.6%	52.4%	25.9%

11c. How much are you willing to pay for each purchase?

	< 4 EURO	4-20 EURO	20-40 EURO	> 40 EURO
21. How much are you willing to pay for each purchase?	29.9%	58.8%	8.8%	2.4%

11d. How satisfied are you with your experience of purchasing green products?

	Very Unsatisfied	Unsatisfied	Neutral	Satisfied	Very Satisfied
22. How satisfied are you with your experience of purchasing green products?	0.6%	1.2%	29.6%	52.4%	16.2%


APPENDIX 2. Questionnaire.

1. Demographic Background

1. What is your gender? *

Female

Male

Other: _____ 

2. What is your age? *

< 18

18 - 30

31 - 60

> 60

3. What is your current occupational status? *

- Highschool student
- University student
- Government employees and officials
- Private enterprise
- Housewife / Retired
- Other: _____

4. How much is your monthly allowance/salary? *

1 EURO ~ 25.800 VND

- < 3 million VND (~ 115 euro)
- 3-7 million VND (~ 115 - 275 euro)
- 7-15 million VND (~ 275 - 585 euro)
- > 15 million VND (~ 585 euro)
- Other: _____

5. Who are you currently living with? *

- Alone
- Relatives
- Friends
- Other: _____

6. Have you heard the term "green consumption" and "green product" before? *

- Yes
- No

2. Personal Perspective

Please choose the most suitable answers to the following statements.

A. Environment Awareness *

Mark only one answer per role.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
8. I believe that "green consumption" is essential in protecting the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Environment issues should be the prior concern	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Environmental pollution is a problem for the whole community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I am interested in finding solutions for environment issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

B. Individual Behavior *

Mark only one answer per role.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
12. I feel uncomfortable when looking for green products replacing common products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. The fact that people around motivates me to consume green products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. The mass media (newspapers, radio, TV, internet ...) now give a lot of information about green products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. I have reduced or have limited use of plastic bags, plastic containers and have replaced them with eco-friendly products such as cloth or paper	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. I am/My family are willing to buy green products for individuals and the family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. I/My family will encourage relatives/friends to consume green products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. Have you ever purchased green products? *

- Yes
- No

3. Personal Spending

19. Do you feel that you can afford green products? *

- Yes
- No

20. How often do you purchase green products (in 1 year)? *

- Rarely (1-3 times)
- Sometimes (3-6 times)
- Often (above 6 times)

21. How much are you willing to pay for each purchase? *

1 EURO ~ 25.800 VND

- < 100.000 VND (~ 4 EURO)
- 100.000 - 500.000 VND (~ 4 - 20 EURO)
- 500.000 - 1.000.000 VND (~ 20 - 40 EURO)
- > 1.000.000 VND (~ 40 EURO)

22. How satisfied are you with your experience of purchasing green products? *

1 Very unsatisfied - 2 Unsatisfied - 3 Neutral - 4 Satisfied - 5 Very satisfied

- | | | | | | | |
|------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|
| | 1 | 2 | 3 | 4 | 5 | |
| Very unsatisfied | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Very satisfied |

3. Personal Spending

19. Do you intend to consume green? *

- Absolutely
- Will consider
- No

20. Do you feel that you can afford green products? *

- Yes
- No

21. How much are you willing to pay for each purchase? *

1 EURO ~ 25.800 VND

- < 100.000 VND (~ 4 EURO)
- 100.000 - 500.000 VND (~ 4 - 20 EURO)
- 500.000 - 1.000.000 VND (~ 20 - 40 EURO)
- > 1.000.000 VND (~ 40 EURO)