

SUSTAINABLE SHOPPER: LINKING ESG WITH
SHOPPING CARTS

JULIA LOOK HUI SIAN

BACHELOR OF INTERNATIONAL BUSINESS (HONS)

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF ACCOUNTANCY AND MANAGEMENT
DEPARTMENT OF INTERNATIONAL BUSINESS

DECEMBER 2024

SUSTAINABLE SHOPPER: LINKING ESG WITH SHOPPING CARTS

BY

JULIA LOOK HUI SIAN

A final year project submitted in partial fulfilment of the
requirement for the degree of

BACHELOR OF INTERNATIONAL BUSINESS (HONS)

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF ACCOUNTANCY AND MANAGEMENT
DEPARTMENT OF INTERNATIONAL BUSINESS

DECEMBER 2024

© 2024 Julia Look Hui Sian. All rights reserved.

This final year project report is submitted in partial fulfillment of the requirements for the degree of Bachelor of International Business (Honours) at Universiti Tunku Abdul Rahman (UTAR). This final year project report represents the work of the author, except where due acknowledgment has been made in the text. No part of this final year project report may be reproduced, stored, or transmitted in any form or by any means, whether electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the author or UTAR, in accordance with UTAR's Intellectual Property Policy.

DECLARATION

I hereby declare that:

- (1) This undergraduate FYP is the end result of my own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.
- (2) No portion of this FYP has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.
- (3) Sole contribution has been made by me in completing the FYP.
- (4) The word count of this research report is 10078.

ACKNOWLEDGEMENT

All the way from deciding the topic until completion of this research, I have faced challenges and even have the highest stress level in my 21 years of life. Through completion of this project, I did realize that doing a research project is not an easy task for me. This has also allowed me to admire and respectful for people and students that are doing their master and doctorate degree.

I am very fortunate to have Mr. Abdullah as my supervisor. His advice and support that given to me has made me to be persistent in finishing this final year project. When facing some challenges, I forced myself to continue and complete it so that I would not leave it unfinished which might affect my result.

I would also want to thank for my friends. Since all of us are students, we know each other better than anyone else. For example, feeling of anxiety and depression that we had in our mind. Even so, we have come across it through supporting each other's.

Last, I would like to thank for my family members. They have supported and encouraged me patiently. Without them, my educational journey might become more challenging and harder to achieve. Hope that completion of this research would not disappoint them.

TABLE OF CONTENTS

	Page
Copyright page	ii
Declaration	iii
Acknowledgement	iv
Table of contents	v
List of Tables	viii
List of Figures	ix
List of Abbreviations	x
Preface	xi
Abstract	xii
CHAPTER 1 INTRODUCTION	1
1.1 Research Background	1
1.2 Research Problem	2
1.3 Research Objectives & Research Questions	3
1.4 Research Significance	4
CHAPTER 2 LITERATURE REVIEW	6
2.1 Underlying Theories	6
2.2 Review of Variables	8
2.2.1 Consumer Behavior	8
2.2.2 Perceived Environment Importance	9
2.2.3 Perceived Social Importance	10
2.2.4 Perceived Governance Importance	11
2.2.5 Attitude	13
2.2.6 Subjective Norms	14
2.2.7 Perceived Behavioral Control	15
2.3 Proposed Theoretical / Conceptual Framework	17
2.4 Hypothesis Development	17
CHAPTER 3 METHODOLOGY	20

3.1 Research Design	20
3.2 Sampling Design	20
3.3 Data Collection Methods	21
3.4 Proposed Data Analysis Tools	22
CHAPTER 4 DATA ANALYSIS	26
4.0 Introduction	26
4.1 Descriptive Analysis	27
4.1.1 Gender	27
4.1.2 Races	28
4.1.3 Current Academic Level	29
4.1.4 Type of Funding	30
4.2 Descriptive Analysis	31
4.2.1 Perceived Environment Importance	31
4.2.2 Perceived Social Importance	32
4.2.3 Perceived Governance Importance	33
4.2.4 Attitude	34
4.2.5 Subjective Norms	34
4.2.6 Perceived Behavioral Control	35
4.2.7 Perceived Green Consumer Behavior	36
4.3 Scale Measurement	37
4.4 Inferential Analysis	38
4.4.1 Pearson Correlation Analysis	38
4.4.2 Multiple Regression Analysis	39
4.4.2.1 R Square	39
4.4.2.2 ANOVA.....	39
4.4.2.3 Coefficient	40
CHAPTER 5 DISCUSSION, CONCLUSION AND IMPLICATIONS	42
5.1 Discussions of Major Findings	42
5.2 Implications	46

SUSTAINABLE SHOPPER: LINKING ESG WITH SHOPPING CARTS

5.3 Limitations	47
5.4 Recommendations for Future Research	48
5.5 Conclusion	48
References	49
Appendices	57

LIST OF TABLES

	Page
Table 4.1: Gender	27
Table 4.2: Races	28
Table 4.3: Current Academic Level	29
Table 4.4: Type of Funding	30
Table 4.5: Perceived Environment Importance	31
Table 4.6: Perceived Social Importance	32
Table 4.7: Perceived Governance Importance	33
Table 4.8: Attitude	34
Table 4.9: Subjective Norms	34
Table 4.10: Perceived Behavioral Control	35
Table 4.11: Perceived Green Consumer Behavior	36
Table 4.12: Reliability Analysis	37
Table 4.13: Pearson Correlation Analysis	38
Table 4.14: Model Summary	39
Table 4.15: ANOVA	39
Table 4.16: Coefficient	40
Table 5.1: Summary of Result	42

LIST OF FIGURES

	Page
Figure 2.1: Areas that used TPB	7
Figure 3.1: Rule of Thumb for Cronbach's Alpha	23
Figure 3.2: Scatter Plots	24
Figure 3.3: Rule of Thumb for Multiple Regression	24
Figure 4.1: Gender	27
Figure 4.2: Races	28
Figure 4.3: Current Academic Level	29
Figure 4.4: Type of Funding	30

LIST OF ABBREVIATIONS

ESG	Environment, Social, Governance
TPB	Theory of Planned Behavior
H1	Hypothesis 1
H2	Hypothesis 2
H3	Hypothesis 3
H4	Hypothesis 4
H5	Hypothesis 5
H6	Hypothesis 6
IV	Independent Variables
DV	Dependent Variables

PREFACE

Environmental issue has affected our daily lives. For example, global warming, floods, climate change, air pollution and so on. These problems have affected our health. This is why, most of the businesses have started to contribute to environmental protection.

Environment, Social and Governance (ESG) has become more crucial and important for all the brands. Some countries might even force the companies to fulfill their responsibilities in ESG. It becomes a basic requirement if the brands want to operate their businesses. Hence, it is important to explore how the ESG would affect perceived green consumer behavior.

ABSTRACT

This research is aimed to investigate the relationship between factors of ESG and theory of planned behavior (TPB) on perceived green consumer behavior. This study has focused on university students that pursuing their education in Malaysia. A total of 258 students have been collected, but 249 responses are the valid respondents. Survey questionnaire has been distributed through convenience and snowball sampling. Apart from that, questionnaire has been posted and distributed through social media to reach a large audience.

The independent variables that consisted in this research would be perceived environment importance, perceived social importance, perceived governance importance, attitude, subjective norms and perceived behavior control. While the dependent variable would be perceived green consumer behavior. Analytical techniques that have been used to analyze the data are descriptive analysis, inferential analysis, correlation analysis and multiple regression analysis. As a results, all the independent variables are having positive relationship with the dependent variable. In which, subjective norms are the variable that can affect students' behavior positively and significantly. This research has been wrapped with discussion, implications, limitations and suggestion for the future studies.

Keywords: ESG, TPB, perceived green consumer behavior, university students, green products

CHAPTER 1: RESEARCH OVERVIEW

1.1 Research Background

University students like to consume with clothes, gadgets, and variety of goods. However, there are also problems happening with the industry especially the clothing and fashion industry. If the industry continues to develop without planning carefully, it will lead to increment of 26% of world carbon budget and 2 Celsius degrees in global warming by 2050 (Mirza, 2024).

Consumer behavior refers to how the market make decisions in what they buy with the consideration of their needs and wants, and their actions toward the products, services and even a company. The decision-making process might be affected by numerous reasons like social influences and cultural factors.

Environmental, Social and Governance (ESG) has become a trend among businesses and consumers. Billion dollars have been flowed into investment vehicle and lending facilities that are promoting environmental and social goals (Houston et al., 2024). ESG is a framework provided to evaluate whether a company or a brand is responsible in sustainability and ethical in their business operation. Businesses should make sure that they are operating their businesses, producing products and services that are align with society's value since customers have become more concern on the environmental effects and ethical standard of a particular brand that they are supporting (Tripopsakul & Puriwat, 2022). For example, lots of individuals have demonstrated their commitment in humanity aspect through participation in charity actively (Nugroho et al., 2024). The statements are enough to prove that humanity and environmental have become a focus to the market in recent years. The responsible consumers are considering the source of raw materials, environmental impact during production, employees' working conditions, disposal and recycling after product use, health benefits and other aspects (Budrin et al., 2024). Which mean, market that are having and supporting ESG mindset will be very concern about a brand's ESG performance.

Then only they will consider whether they would want to purchase for the brands' goods and services or not.

Theory of planned behavior (TPB) has been used to predict the consumers' behavior in various areas especially in the sustainability industry. TPB contains 3 factors which are attitudes, subjective norms and perceived behavioral control. The 3 aspects are contributing to shape consumers' behavioral intention and lead to their conducts. When a person is feeling favorable toward a behavior, they are most likely going to copy that behavior. Many of the businesses have used TPB to predict their consumers' behavior successfully.

In short, most of the consumers are concerning about ESG. If a product or a brand is founded to practice ESG, it can help to attract consumers and even market that are concerning about environmental, sustainability and humanity. Besides, consumer behavior might be affected due to TPB. The different perspectives that consumers have toward a behavior, will lead to different buying intention. Which also leads to different consuming behavior.

1.2 Research Problem

Importance level of the ESG factors created a question and a doubt to researcher and companies. Among all the three aspects, which aspects will be concerned the most by the consumers. It is because businesses and consumers might have different perceived value toward each of the aspects in ESG. For example, to businesses, they might concern and focusing more on environmental and governance factors; however, to consumers, they might have different opinions where they might think that social factors is the most important. A business will gain their sales and revenue through their customers. If a brand is operating their business according to the brand 's opinion solely, they might neglect the needs of their market. In which, it might cause them lack of loyal customers.

Consumer behaviors are hard to predict. People's attitudes are always changing (Verplanken & Orbell, 2021). In which, the beliefs of consumers toward

environmental, sustainability and humanity can be changed. In this case, it will also affect the behavior in consuming as a consumer. For example, if they are having positive beliefs on buying environmental products can help to reduce environmental pollution, then it will create a positive attitude in purchasing an ESG related product. Not only that, but people might tend to purchase for a goods because of pressure from others. It has affected the way of consumer making their choices and decisions in their purchase. Perceived behavioral control will be affected by self-efficacy (Liu et al, 2020). Self-efficacy means the degree of an individual's confidence on themselves when doing a behavior. When people are having a high self-efficacy, it means that they are confident in doing and completing an activity. Through evaluation of confidence level on themselves, it might also lead to different behavior in consuming goods. In essence, when consumers are having different TPB value, it leads to different consumer behavior. It is also a concern whether which reason will affect the buying behavior the most.

1.3 Research Objectives & Research Questions

1.3.1 Research Objectives

Below are the research objectives.

1. To examine the positive relationship between perceived environment importance and perceived green consumer behavior.
2. To examine the positive relationship between perceived social importance and perceived green consumer behavior.
3. To examine the positive relationship between perceived governance importance and perceived green consumer behavior.
4. To examine the positive relationship between attitude and perceived green consumer behavior.
5. To examine the positive relationship between subjective norms and perceived green consumer behavior.
6. To examine the positive relationship between perceived behavioral intentions and perceived green consumer behavior.

1.3.2 Research Questions

Below are the research questions.

1. Is there a positive relationship between perceived environment importance and perceived green consumer behavior?
2. Is there a positive relationship between perceived social importance and perceived green consumer behavior?
3. Is there a positive relationship between perceived governance importance and perceived green consumer behavior?
4. Is there a positive relationship between attitude and perceived green consumer behavior?
5. Is there a positive relationship between subjective norms and perceived green consumer behavior?
6. Is there a positive relationship between perceived behavioral intentions and perceived green consumer behavior?

1.4 Research Significance

Companies can get a deeper understanding on their market, then able to operate or fulfil their responsibilities in ESG according to their consumers' ideas. For example, if the consumers are having the highest concern in terms of environmental factors, then the company can be more concentrate and focus on the environmental aspects rather than focusing on the other 2 elements. Besides, a brand or business can also determine the design of their productions and products according to the results gotten from this research. In which, the products can meet the consumers' preference and affect their buying behavior and loyalty toward the brand. Next, through this research, businesses can understand how their markets are being influenced among the 3 aspects within TPB, and aspect that influence consumer

behavior the most. Then they can tailor their marketing communication strategies. As a result, they can attract new market.

Previous research is mostly done on the effect of ESG on consumer behavior without considering and taking into the aspects of TPB. This research might contribute to a new insight. TPB is used and identify on how the market or consumer's intention being affected and influenced, while ESG is about the practice done by businesses. It has studied about the two theories on consumer behavior at the same time. Despite that, this research can help in providing a deeper understanding on how the students' behavior during purchasing. Within this study, university students will be the target respondents. In which it can provide a better insight about consuming behavior of the university students with the consideration of sustainability and environmental. Subsequently, university students are representing youthful populations. In which, from the previous studies, researchers might not concentrate on this population. However, this research can help to test and refine the ESG and TPB theories among the youths.

CHAPTER 2: LITERATURE REVIEW

2.1 Underlying Theories

One of the concept that being used within this research is theory of ESG (Environment, Social, Governance). The topic of ESG started to gain lot of attention from public, investors, firms and academics. According to Rau & Yu (2023), large companies such as Intel and Google have built strategies to correspond with United Nations Sustainable Development Goals. For example, they invested hundreds of million dollars in helping others without requiring any other form of return. Due to the companies are focusing on this area, it also provided chances to academic in doing research on ESG over the past two decades.

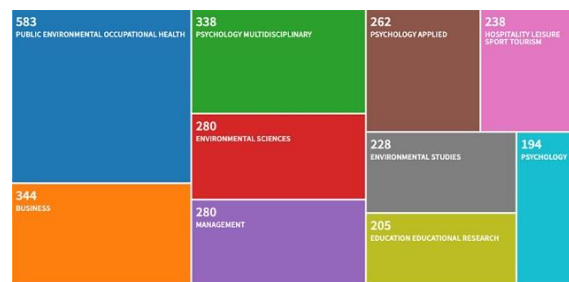
Within the ESG, it contains three main factors and variables, which are environment, social and governance. Environment refers to the impact toward environment. For instance, the company's waste management and deforestation practices. While social, it refers to how good the company cope with social issues like employees, customers, communities and human rights. Governance is about the internal controls of the company. Effectiveness of leadership, decision-making, management structures will be evaluated in the component of governance. Through evaluation on each of the aspects of ESG, the investors will use it to make investment decision, while the customers are usually purchasing the goods that responsible in social and sustainable. Companies that comply with ESG practices usually are having better performance. ESG practices will be measured through some metrics and reporting frameworks like sustainability report. Companies with high score in ESG metrics are gaining more investors and funds. In which, it can help to improve their financial performance and their impact toward environment, society and economy (HSBC Business Go, n.d.).

To compare ESG with other similar theory such as CSR (Corporate social responsibility), they are being used interchangeably in lot of studies. However, they are different term and theory. According to Rau & Yu (2023), ESG are more reflecting on the concerns of investors in making decisions, while CSR is reflecting

on the role of companies in fulfilling their responsibilities toward society. CSR is a self-regulating business model. In which the companies can determine how they want to contribute to the society. While ESG is a common and basic standard where the stakeholders able to identify whether the company or a brand is doing good in fulfilling their role toward society and environment.

Next, the TPB (Theory of planned behavior) is being used in this study. TPB has been proposed by Ajzen in 1985. TPB has been used in various areas such as health sciences, environmental science, business and management and educational research. Within TPB, it contains three kinds of variables which are attitude, subjective norms and perceived behavioral control. Attitude means the positive and negative evaluation in performing a particular behavior, subjective norms stand for the pressure gotten from surrounding when performing, and perceived behavioral control is the self- confidence in perform successfully (Bosnjak et al., 2020).

Figure 2.1: Areas that used TPB



Adapted from: Bosnjak, M., Ajzen, I., & Schmidt, P. (2020). The theory of planned behavior: Selected recent advances and applications. *Europe's Journal of Psychology*, 16(3), 352–356. <https://doi.org/10.5964/ejop.v16i3.3107>

The three components within TPB will influence consumers' intention toward their behavior. For instance, previous study like integrating of TPB and Value-Belief Norm (VBN) Theory on garbage classification (Huang et al., 2023). The research has gotten a result of TPB has more influence on communities' intentions than the VBN theory. In which, communities are classifying garbage due to the variables of TPB. This can show that communities can be influenced by TPB easily when conducting an activity.

Theory of consumer behavior is a topic that contains plentiful of topics. One of it will be decision-making process. Most of the consumers tend to purchase due to problems that they have met in their life. This has made them realize on their needs and wants. Of course, there are also consumers that have a habit of purchasing without planning, or we called it as impulse buying. This will happen when they exposed to provocative stimuli (Kimiagari & Malafe, 2021). After recognizing of their needs and wants, they will search for information. Buyers can search for information through internal and external search. Internal search includes their past experiences and knowledge, external search involves asking around with their family and friends, and even referring to the online search and review. Then, evaluation of alternatives will be completed. At this step, consumers will list out all their preferred options, and evaluate it. After that, they will decide whether they want to purchase or not. Decision making process is then end with the post-purchase behavior. At this step, it involves the customers' experience when using the products. It will decide whether the buyers will continue to buy the product and lead to loyalty.

2.2 Review of Variables

2.2.1 Consumer Behavior

Young consumers are considered as desired market in consuming environmental-friendly products; however, few research found that there is unwillingness among the consumers to purchase environmental-friendly goods (Taufique & Islam, 2020). Thus, it is important to understand the market also the factors that can trigger their green consumption behavior. Previous study on consumer behavior in sustainable area is not considering sociodemographic characteristics as the important factors that might influence consumer behavior in purchasing green products. The study of Witek & Kuzniar (2021) showed there is no relationship between consumers' education and consuming green products, but other studies like Marvi et al. (2020) has claimed in an opposite way (Barbu et al., 2022). Apart from that, gender and personal financial situation is important and can

influence the consumer to purchase green products (Ham et al., 2021). There is also a study claiming that the higher level of education might have more knowledge about environmental issues, and lead to consume of green products (Wang et al., 2019).

2.2.2 Perceived environment importance

The factor of environment among ESG has gained the highest level of awareness among the consumers (Lee & Rhee, 2023). Which mean, out of the three factors, consumers are concerning on the environment the most. At the same time, they will have high expectation on a brand's environmental practices. When the brand does not meet their expectations, it affects the decision-making process of the buyer. According to Lee & Rhee (2023), even though the customers aware of the environment the most, it does not have positive impact on brand image. This scenario happen can be due to the greenwashing activity. Greenwashing means that a company is providing a fake information on how their products and company practicing environmental protection. Consumers are aware of the marketing messages with doubt, especially when the advertisement contain a message of 'green', they are still suspicious of it (Snigdha, 2022). This statement can prove that the consumers are having an increment awareness of the credibility of green. As a result, factor of environment does not have a positive relationship on brand image due to the increment of awareness. According to the research of Lee & Rhee (2023), brand image forms a positive relationship with brand loyalty. Therefore, environment factor does not increase the brand loyalty among consumers, and the probability of choosing a brand also not be affected by the brand's environmental practices. Apart from that, previous study from Koh et al. (2022) also indicate that environment does not have positive relationship to brand image, which also not affect the attitude and purchase intention of consumers. However, there are also studies that claimed environment practices have a positive relationship with consumer behavior. Respondents from Indonesia and

Taiwan think that environmental factors can positively affect their behavior in consuming process (Nugroho et al., 2024). Apart from the Indonesians and Taiwanese respondents, consumers from Thailand also think that environment factor have positive relationship with brand trust and their engagement. It is because environmental practices done by a brand able to make customers feel of emotional attachment, which lead to the buyers have positive though on them and make them willing to engage with the brand (Tripopsakul & Puriwat, 2022). Not only that, but environment is also forming a positive relationship with customers' long-term orientation (Wan, 2023). Environment practices can help in producing a product that sustainable in ethical way. In which, it has become one of the considerations when purchasing a good.

2.2.3 Perceived social importance

Company or brand that comply with ESG would need to responsible to the social too. The “Social” in the context of ESG includes variety of issues that are related with human rights, labor, community and employees. In simpler way to explain, it is about taking care of the society and stakeholders of a brand. The importance of social is acknowledged widely, but social risk is still happening. For example, health risk, gender inequality and education risk (Semet, 2020). However, there are some brands that contributed to reducing the social risk like Unilever. Unilever has fulfilled its role in social responsibility. For instance, Unilever has carried out Unilever Sustainable Living Plan in 2010. Unilever planned to improve health and well-being of more than one billion people before 2020 through producing goods that can improve hygiene, nutrition and healthy skin and hair. Not only that, but they also increased inclusive growth for millions of parties by increase income sources, skills and opportunities for Unilever farmers, suppliers, distributors, employees and customers (Kusuma et al., 2024).

According to the context of Stakeholder Theory, organizations will realize their stakeholders' interests especially the society through taking care for their welfare. As an action to response to it, most of the organizations will practice lots of selfless activities like donating to needy people (Zahari et al, 2020). Apart from that, according to Zahari et al. (2020), fulfilling social responsibility can influence customers' behavior since they think that the money that they have spent on purchasing company's products was being used for a good purpose. It also makes the market to have positive perception toward their brand. In which, it can help in improving the brand's reputation and image. Other than that, social factor can lead to increment in brand trust, and become an important factor in word of mouth (Bae et al., 2023). Which mean, when an organization is doing good in fulfilling their role toward the society, it can help in improving the customers' trust. As a result, the customers are willing to become a loyal consumer and members of the brand, which can help in building a long-term relationship. Furthermore, consumers prefer to have a close connection with retailers that are socially responsible (Dang et al., 2020). People tend to purchase goods that are aligning with their value. This is due to the products that they bought can represent their identity. Therefore, consumers that are concerned about society well-being, tend to purchase goods that are also responsible to the social.

2.2.4 Perceived governance importance

Governance in ESG means the rules and regulations to control the organization or company. Lot of companies choose to set their policies based on ESG. In which, they consider the factors of environmental and social in their rules and regulations. Through this, it can help the companies to attract the precious resources and lead to generate profit in long-term. This has been assumed as "good for business". However, adopting these policies may occur a high cost in production and governance. This can be due to the cost of addressing complex social and environmental problems

need high investment to design and implement the sustainable practices. In which, this will require more cost and expensive. Therefore, governance through ESG policies is always a conscious decision instead of “win-win” decision. It will occur a short-term opportunity cost (higher cost, and low profit), but long-term benefits like improved brand image, stakeholders’ trust and sustainable growth (Monteiro et al., 2021).

According to Monteiro et al. (2021), governance that based on ESG should adopt transparency. The rate of high-profile misconduct can be reduced by 24.8% if the managers’ report their corporate accountability activities (Tsang et al., 2023). When the managers of a company report on their activities, it provides information clearly and openly to the public. As a result, the employees and managers would need to behave wisely while operating their companies. At the same time, it has reduced the risk of misconduct that happened among the managers.

Consumer trust can be influenced critically by governance and transparency. For instance, Vietnamese consumers are demanding to the products and companies that are complying transparency in their operations and reporting (Tai, 2024). It can be due to the trust that built in the consumers. When the companies apply transparency, it can be perceived as trustworthy. It makes the consumers feel more confidence to purchase the company’s products since they believe that the company is less likely to engage with illegal activities. Trust can help in building long-term relationship like loyalty. When the trust is built, automatically they will purchase to the goods for a longer period. Apart from that, governance can affect the customer attitudes toward the companies and the products positively. Based on previous study, customers rely on the governance initiatives like transparency, compliance, governance structure and capital structure in their buying decisions (Chow & Ho, 2024). Not only that, due to the crises and unexpected incidents happened too frequently, it makes customers to emphasize and concern more with the governance pillar. For instance, a series of global financial crises has destroyed customers’ trust in financial institutions and made them to realize of the importance on corporate governance and their related initiatives (Berkman & Lu, 2020).

2.2.5 Attitude

Factor of attitude in TPB means the feeling of individual toward a behavior. Attitude is formed based on knowledge. When a person is educated with the knowledge, they can identify whether the behavior is good or not. In which, it can lead to a positive or negative attitude toward a behavior. If it is positive, then it is more likely that they will perform the action. Otherwise, they will not perform the action or activity. It can be proved through the statement of environmental knowledge is the foundation in producing positive environmental attitudes, and environmental attitudes can affect environmental behavior significantly (Liu et al., 2020). Apart from that, green attitude has shown a positive connection with green buying behavior (Amoako et al., 2020). Individuals that having a strong attitude toward green tend to concern more on environmental benefits when purchasing a product. For instance, purchasing products that made from sustainable and environmental-friendly materials and packaged in eco-friendly ways. A positive green attitude makes the consumers to purchasing green products since it aligns with consumers' environmental value and belief. This can also be proved through previous research, which consumers of eco-friendly hotels in Yunnan Province are having a positive attitude generally. The awareness toward environmental has been the most influential factors in attitude, with majority of the respondents believe in the hotel's environmental measures can impact their choice positively (Gui & Abdullah, 2024).

Even so, there is also study shows that environmental attitudes and knowledge does not impact on their environmental behavior intention (Correia et al., 2021). As a result, attitude not able to affect on the customer's behavior. This can be due to three reasons which are sincerity and awareness of the attitude, the strength of the attitude and habit and behavior (Verplanken & Orbell, 2021). According to Verplanken & Orbell (2021), for the first reason (sincerity and awareness), it means that people might not be

honest when reporting and responding to their attitudes or change their attitudes quickly. This can be due to social desirability bias. In which, they try to build attitudes that are favorable to the society. For example, an individual might claim that they have supported in the charity, even though they did not do it, since it is considered as the “good” and “positive” thing to say to the public. Strength of the attitude shows that when the users repeat with the same experience, their attitude will become more stable. Then, the link between attitude and behavior is more strengthening. In short, using a product with high frequency can make their attitude more impactful. Next, habit will be formed when people keep repeating a behavior. Then, it will be hard for the individual to affect their behavior through attitude.

2.2.6 Subjective norms

Subjective norms in TPB are representing the social influence of an individual in performing or stay away from a particular activity or behavior. It is based on how much that an individual believes on their surroundings especially important people that appear in their life. For example, family members, close friends, colleagues and partners. These people will become reference to the consumers while performing a behavior. If they approve or agree, then the individual is most likely to implement the behavior. Or else, they will not perform the actions. The research of Roh et al. (2022) have indicated that subjective norms can affect purchase intention significantly. It can be due to several reasons, one of it can be social reassurance and pressure from cultural and social. Social reassurance means that people tend to compare their evaluations with another (Zollo et al., 2021). Consumers rely on the experiences and information that shared from others and judge the action and behavior. This can be interpreted as social proof. According to Zollo et al. (2021), social proof considered as important tools in influencing decisions especially when the information comes from reliable sources, it provides high confidence to the people to let them follow and perform the behavior or the choices that they have made. For example,

when the sustainable-concerned consumers feel unsure with the products' eco-friendliness, through reading the positive reviews and comments, they will feel encouraged and comfortable to make decision.

Previous study stated that subjective norms have the lowest effect and no significant effect on purchase intention. In which, it also refers to subjective norms does not affect the buying intention and decision significantly. It can be due to subjective norms is treated as pressure from other people (Hasan & Suciarto, 2020). The statement indicates that the intention formed does not originate from themselves, instead they are formed from other or external. Then, it means that the choices made is not based on their interest and is not their own choices. Apart from that, earlier study indicated in another way round, which is subjective norms have contributed to the largest portion of variance in green customer citizenship behaviors (Tonder et al., 2023). This shows that the influence of other is the most crucial factor in performing green customer citizenship behaviors. Or in simpler way to explain, consumers are behaving in particular ways is because they have been influenced by what their surrounding expects them to do.

2.2.7 Perceived behavioral control

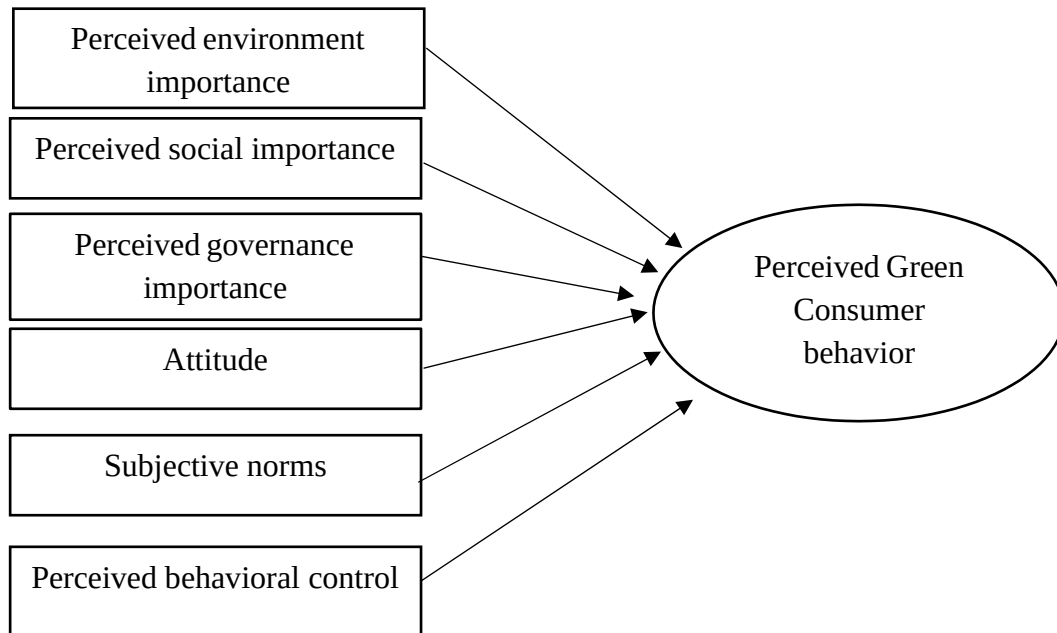
Perceived behavioral control is mainly about how easy or difficult the consumers assess the behavior under the consideration of their experience and expected difficulties. If people perceived the behavior is difficult to implement, then they are less likely to engage in the activity. However, if they perceived the behavior is simple to implement, then they are more likely to implement the behavior. It means that perceived behavioral control is focusing on the consumers' perception toward some conditions and lead them in decision-making and implementing their choice. Perceived behavioral control is formed by two key components. Which are self-efficacy and perceived barriers and facilitators. Self-efficacy is the confidence level of an individual on themselves. It consists of two

components, which are whether they believe that they are able to perform the action, and whether the action can lead to expected effect (Miller et al., 2022). This statement shows that self-confidence is the important factor in affecting self-efficacy. Experience, motivation and reinforcement are the key elements in building self-confidence (Malureanu et al., 2021). For example, when the consumer experienced success in a behavior, it can help to boost the confidence in themselves. Not only that, if a person is prepared with motivation, they feel motivated and confident in behaving. According to Malureanu et al. (2021), self-confidence can increase self-efficacy. Which means that when a person is having high self-confidence, it also increases self-efficacy. Miller et al. (2022) stated that self-efficacy can strengthen behavioral intentions. When consumers have high self-efficacy, it can help in building up the intentions to implement the activity. As a result, it increases the potential for people to behave. Apart from that, perceived behavioral control and behavioral intention can influence behavior positively and significantly (Sultan et al., 2020).

When a company or a brand is providing enough information and action about their environmental-friendly products, it can increase the confidence of the consumers. Then, lead to high perceived behavioral control. At the same time, it will help in increasing the purchasing intention of the consumers. For example, providing actionable information on organic food labels can increase behavioral intention, and supporting market's perceived behavioral control (Aitken et al., 2020).

2.3 Proposed Theoretical / Conceptual Framework

Below is the framework of this research.



Within the framework, it contains a total of 7 variables. Independent variables will be the perceived environment, perceived social, perceived governance, attitude, subjective norms and perceived behavioral control. Perceived environment, social and governance are variables that derived from ESG concept. Attitude, subjective norms and perceived behavioral control are derived from TPB. While for the consumer behavior is the dependent variable. The independent variables tend to influence and affect the dependent variable. In other words, changes in independent variables can be used to observe and aware of the changes in dependent variables.

2.4 Hypothesis Development

Hypothesis 1 (H1): There is positive relationship between perceived environment importance and perceived green consumer behavior.

Through the past study, wide of them indicated that environment factor in ESG is having significant relationship on consumer behavior. For example, research from Jia et al. (2023) also has shown that customers are more likely to shape relationship

with the hotels if the hotels promote their sustainability effort in their marketing. This is because promoting sustainability can help in improving the brand image and help to attract consumers that concern on eco-friendly.

Hypothesis 2 (H2): There is positive relationship between perceived social importance and perceived green consumer behavior.

Previous study has indicated that the social dimension can significantly affect consumer behavior. After COVID-19, consumers expected that the brands are demonstrating social responsibility, and value their brands that align with social value (Garcia-Salirrosas & Gordillo, 2021).

Hypothesis 3 (H3): There is positive relationship between perceived governance importance and perceived green consumer behavior.

Past research has shown that governance can support brand image and brand attitude. Green Public Procurement (GPP) plays a crucial role in shaping consumer behavior in sustainability (Bucea-Manea-Tonis et al., 2020). Therefore, this study will investigate on the positive relationship between governance and consumer behavior.

Hypothesis 4 (H4): There is positive relationship between attitudes and perceived green consumer behavior.

The attitudes of consumers will affect the intention of their behavior. For instance, the Indians consumers are convinced by the marketers' green claims and transform their eco-friendly intention into the actual purchasing of green products (Kaur et al., 2022). The statement shows that when the consumers are having green attitude, then their intention on brand's sustainability practices will be concerned. At last, it will affect their purchasing behavior.

Hypothesis 5 (H5): There is positive relationship between subjective norms and perceived green consumer behavior.

Previous study has used subjective norms as a mediator on green purchase intentions among young generation that work under different categories and sectors, and the result showed the relationship between subjective norms and behavior is varies (Xie & Madni, 2023). Therefore, university students will be investigated and to identify whether subjective norms can affect their behavior.

Hypothesis 6 (H6): There is positive relationship between perceived behavioral control and perceived green consumer behavior.

Most of the studies have indicated positive and significant relationship between perceived behavioral control on consumer behavior. A study showed that perceived behavioral control is having direct effect on behavior intention, and the intention can directly affect their behavior; perceived behavioral control is also having indirect effects on behavior (Ates, 2020).

CHAPTER 3: METHODOLOGY

3.1 Research design

This research is done to explore the relationship between the independent variables on dependent variables. The independent variables will be the factors of ESG and TPB, while the dependent variable will be consumer behavior. The study will determine whether the ESG and TPB variables can affect or change the behavior of consumers. Therefore, this research is established in a cause-and-effect relationship and will be done as causal research. Next, this research also will be done in quantitative way. In short, the relationship between the variables and consumer behavior can be evaluated arithmetically through quantitative research.

Apart from that, using quantitative approach in this research is suitable for causal research. It is because causal research requires the researcher to test the hypothesis through measurable information and statistical analysis. This can help the researcher to know and be aware of the strengths and weaknesses, and significance relationship of the hypothesis.

3.2 Sampling design

The target respondents for this research will be university students in Malaysia. Most of the previous research has researched various categories of respondents within their study. In which, they did not focus on a particular target group. Thus, it provides an opportunity for this study in understanding the behavior of tertiary students while consuming. Not only that, but students are also easy to be approached and assessed for academic research. It is convenient for researchers to gather and collect data and information. University students are assumed to be young adults. When taking them as

the target respondents, it allows businesses to understand the future market. It is due to young adults are the future buyers. It can let the brand to prepare for themselves for the future market.

The sampling frame for this study would be the list of all tertiary students in Malaysia. Within the list, it will contain student ID, universities, faculty and course, year of study, age and gender. This frame can help in obtaining an accurate data through random sampling and ensure the sample can represent university student population. However, due to the limitations of privacy regulations and management restrictions, it is unachievable for this research. Therefore, convenience and snowball sampling methods will be applied to this study as an alternative sampling method.

For the convenience sampling method, online and social media will be utilized. A google form will be created and distributed through online. Then, the form also will be share on the social media. This can help the survey questionnaire to be distributed to more people. The social media used will be Instagram, since it is a popular platform among the students. As for snowball sampling, the respondents will be asked to help in sharing the survey links with their classmates and friends. This can help to obtain more respondents, and the data collected will be more accurate. The target respondent will be 200. However, a total of 258 respondents has been collected, but 249 are the effective responses.

3.3 Data collection methods

Primary data will be used in this research. Which mean, the data and information of the target respondents will be collected by the researcher themselves. As mentioned above, the data will be collected through convenience and snowball sampling. Then, the data will be used to answer the research questions and hypotheses.

Before collecting the data, some preliminary steps will be done. Firstly, understanding the journal articles that can be found online. This can help to identify the variables for

this study. Then, identify the questions for each of the variables. The questions are referring to the previous studies. After drafted the question, it will be checked by consultations. This can make sure that the questionnaire is suitable and effective for this research.

Within the questionnaire, a simple introduction of this study will be provided, and approval will be asked from the respondents. Apart from questions about the variables, demographics information will be asked. This can help to eliminate the data that does not meet requirements. For example, respondents that are having high school and pre-university qualifications will be eliminated from this study. All the questions except the demographic part will be asked in Likert-scale form. In which, the respondents will answer the questions based on their agreement on that aspect. Next, 7-point Likert scale is used in this research. This can make sure that all the data is answered in more detail way. This questionnaire will take approximately 10 to 15 minutes. The information gotten from this survey will be kept confidential. In which, right of the data will only be deserved by the researcher. Not only that, but ethical clearance will also be submitted to UTAR (Universiti Tunku Abdul Rahman) coordinator. This will make sure that the research is being done with integrity, honesty and fairness.

3.4 Proposed data analysis tool

Computer program that will be used to analyze the data is Microsoft Excel. This program will be used to visualize the data, and make sure that the data is being recorded tidily.

In addition, descriptive analysis will be done on the data collected from respondents. Descriptive analysis allows the data being described, demonstrated and summarized explicitly. It is a technique where help to identify the trend and pattern of the data. The components used for descriptive analysis will be the measures of central tendency, which include mean, median and mode. It can be performed through tables or graph.

Furthermore, the data will be analyzed through frequency analysis. Frequency analysis can be done by software like SPSS. The software will generate a frequency table, which will provide a meaningful insight. When the frequency is high, it indicates greater occurrence. In other way round, low frequency means that it is having less prevalence. This will help to summarize and organize the data via presenting how repeatedly each of the value appears. Then, it also helps to identify the mode among the data.

Next, reliability test will be used in this research. It is used to measure the reliability or internal consistency of the variables, and Cronbach's Alpha will be used to test the reliability. According to the rule of thumb, if the score is above 0.7, then it will be acceptable. Which also indicate that it is consistent and reliable. Otherwise, it will not be accepted and get a result below 0.6.

Figure 3.1: Rule of Thumb for Cronbach's Alpha

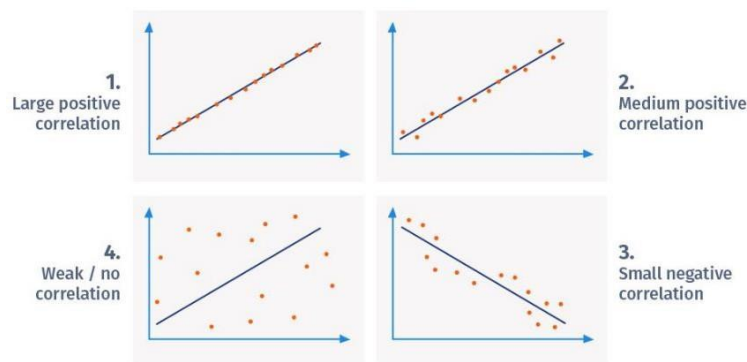
Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Adapted from: Glen, S. (2023). *Cronbach's Alpha: Simple Definition, Use and Interpretation*. Statistics How To. <https://www.statisticshowto.com/probability-and-statistics/statistics-definitions/cronbachs-alpha-spss/>

Then, inferential analysis will be conducted within the study. Inferential analysis means that taking or using sample to estimate the characteristics of population. This can help to understand a population and consider how would they change in the future. It also means that it can help to make estimation about the population, which are the university students in Malaysia.

To complete the inferential analysis, correlation analysis will be done. It can help to identify the relationship between independent variables and dependent variable. The relationship will be shown through the sign of correlation coefficients like positive and negative. If the result shown is negative, it indicates negative correlation. Which mean when a variable is increasing, the other variable will decrease and conversely. Correlation analysis can be done numerically. It can be calculated by SPSS. Not only that, it can also be represented graphically like scatter plots.

Figure 3.2: Scatter Plots



Adapted from: QuestionPro. (n.d.). *Correlation analysis | Analyze correlation between two variables* | QuestionPro. [Www.questionpro.com. https://www.questionpro.com/features/correlation-analysis.html](https://www.questionpro.com/features/correlation-analysis.html)

Besides, multiple regression is used in inferential analysis. Multiple regression helps to identify the strengths of relationship between the variables. Which mean, it will help to decide among the independent variables, which is the one that can influence dependent variable the most. This can be done through a software like SPSS. Referring to the rule of thumb, when the relationship is strong, it can indicate that the relationship between the variables is significant, and vice versa.

Figure 3.3: Rule of Thumb for Multiple Regression

<u>Size of the correlation</u>	<u>Coefficient General Interpretation</u>
± 0.8 to ± 1.0	Very strong relationship
± 0.6 to ± 0.8	Strong relationship
± 0.4 to ± 0.6	Moderate relationship
± 0.2 to ± 0.4	Weak relationship
± 0.0 to ± 0.2	Weak or no relationship

Adapted from: *Rule of thumb for interpreting the size of a correlation coefficient.* (n.d).
ResearchGate. https://www.researchgate.net/figure/Rule-of-Thumb-for-Interpreting-the-Size-of-a-Correlation-Coefficient_tbl1_342730478

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

Descriptive analysis and inferential analysis will be done within this chapter. It provides an overview of the survey results including respondents' demographics and their behaviors as consumers. Perceived environment importance, perceived social importance, perceived governance importance, attitudes, subjective norm, perceived behavioral control, perceived green consumer behavior and demographic will be analyzed and presented.

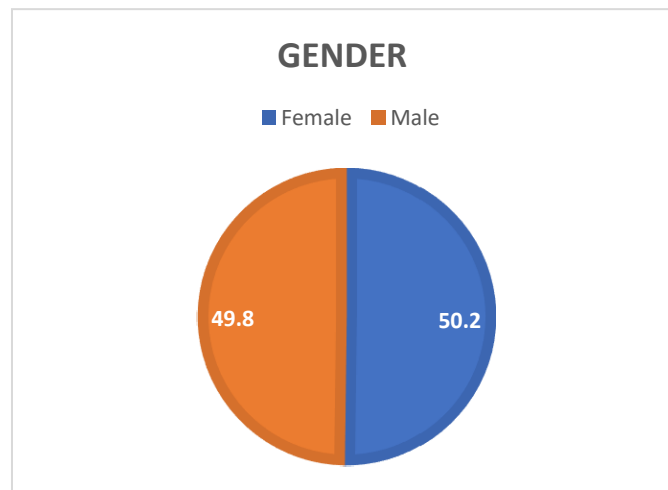
4.1 Descriptive Analysis (Demographic)

4.1.1 Gender

Table 4.1: Gender

Gender			
Valid		Frequency	Percent
	Female	125	50.2
	Male	124	49.8
	Total	249	100

Figure 4.1: Gender



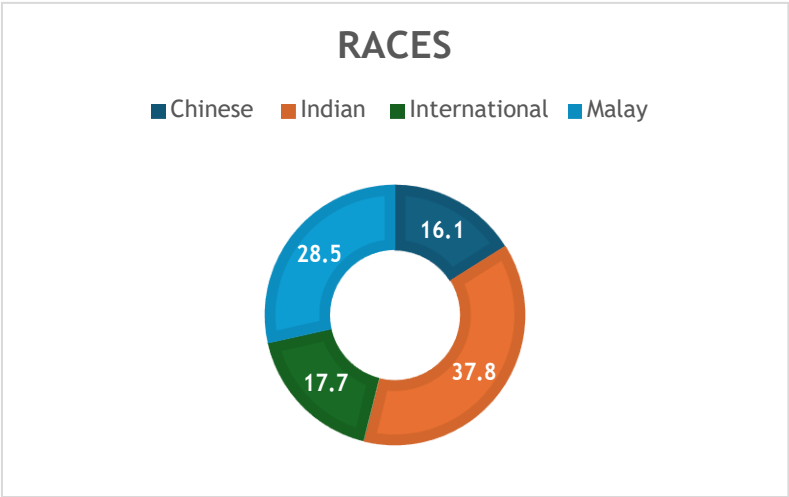
The pie chart above has shown the percentage of gender among the 249 respondents. It shows that 49.8% from the respondents are male, and 50.2% of respondents are female. This can help in indicating that this questionnaire and research are free from gender bias, and it illustrates that the male and female university students are likely to engage in consuming behavior.

4.1.2 Races

Table 4.2: Races

Races			
Valid		Frequency	Percent
	Chinese	40	16.1
	Indian	94	37.8
	International	44	17.7
	Malay	71	28.5
	Total	249	100

Figure 4.2: Races



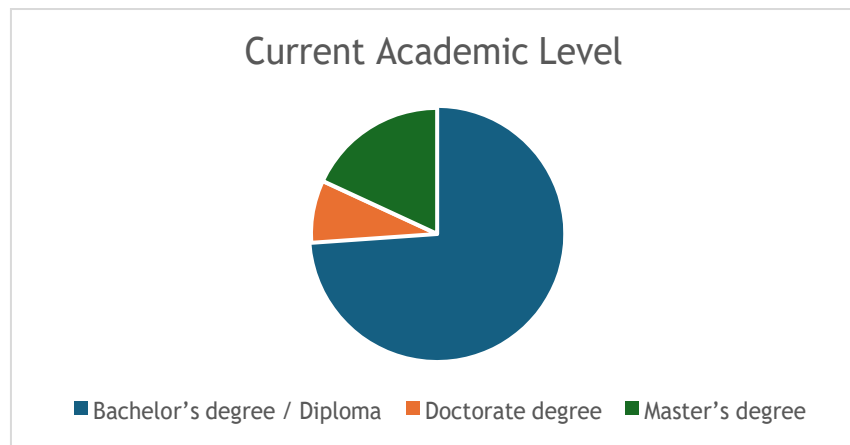
Out of 249 respondents, most of them (38%) are Indian. While 16.1% are Chinese, 28.5% are Malay, and 17.7% are foreigner. Respondents with different skin can help to provide a great and precise insight in this research. It also can avoid the result of this research being discriminate toward different races.

4.1.3 Current Academic Level

Table 4.3: Current Academic Level

Current Academic Level			
Valid		Frequency	Percent
	Bachelor's degree / Diploma	184	73.9
	Doctorate degree	20	8
	Master's degree	45	18.1
	Total	249	100

Figure 4.3: Current Academic Level



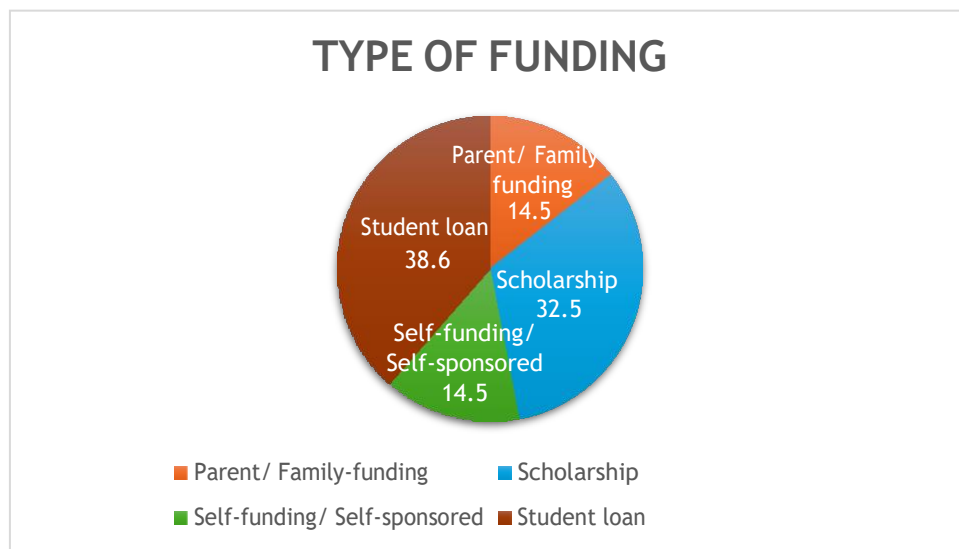
According to the chart above, it indicates that a total of 73.9% respondents are pursuing their degree and diploma. Subsequently, master's degree (18.1%) and doctorate's degree the least (8%). This result means that most of the responses were from degree level of university students. It means that the result from this research is mostly the result of degree students' consuming behavior.

4.1.4 Type of Funding

Table 4.4: Type of Funding

Type of Funding			
Valid		Frequency	Percent
	Parent/ Family-funding	36	14.5
	Scholarship	81	32.5
	Self-funding/ Self-sponsored	36	14.5
	Student loan	96	38.6
	Total	249	100

Figure 4.4: Type of Funding



Based on the chart above, most of the respondents (38.6%) are taking student loan as their fund. Then, 32.5% of respondents are having their scholarship, and 29% of the respondents is getting their family-funding and self-funding. This can show that most of the students or respondents are relying on others in order to continue their study. The respondents are most likely need to repay back their fund in the future, which it might shift their consuming behavior in the future.

4.2 Descriptive Analysis (Variables)

4.2.1 Perceived Environment Importance

Table 4.5: Perceived Environment Importance

		Statistics				
		PE1	PE2	PE3	PE4	PE5
N	Valid	249	249	249	249	249
	Missing	0	0	0	0	0
Mean		4.74	4.81	4.89	4.91	4.95
Median		5.00	5.00	6.00	5.00	5.00
Mode		6	6	6	6	6
Std. Deviation		1.775	1.774	1.914	1.730	1.734
Minimum		1	1	1	1	1
Maximum		7	7	7	7	7

Based on the table above, it shows that the respondents are leaning on slightly agree (4.74 to 4.95) toward the perceived environment importance averagely. It means that generally, they are agreeing that environmental aspect is important to them. The median for this variable is 5. This can indicate that at least half of the respondents chose to slightly agree with the aspect. Apart from that, most of the respondents are agree (6) that they purchased and used products that are eco-friendly. Besides, they tend to purchase the products from the brands that respond to environmental protection and activities. However, the result shows that there is a standard deviation from 1.73 to 1.914. It means there is diverse and different perspectives among the respondents.

4.2.2 Perceived Social Importance

Table 4.6: Perceived Social Importance

		Statistics				
		PS1	PS2	PS3	PS4	PS5
N	Valid	249	249	249	249	249
	Missing	0	0	0	0	0
Mean		4.93	4.96	4.93	4.90	5.05
Median		5.00	5.00	5.00	5.00	6.00
Mode		6	6	6	6	6
Std. Deviation		1.735	1.626	1.675	1.773	1.675
Minimum		1	1	1	1	1
Maximum		7	7	7	7	7

The table above has shown that the university students are above neutral to slightly agree with the score from 4.9 to 5.05 on the social importance aspect averagely. At the same time, the result shows that minimum half of the students slightly agree that the social responsibility of the brand and company is important for them. It can be proven through the score of medians, which is 5 that indicate slightly agree. Following, score of 6 (agree) has become the mode in this result. It means that large portion of students purchased their goods that are produced and sold by the company that emphasize on social well-being. Even though there is a large portion of respondents agree with the social aspect, it still indicate that there are students that have different view and opinion toward it. It can be shown through the standard deviation of 1.626 to 1.773. Which mean, part of the students might not take the social aspect into their consideration when purchasing the goods and services.

4.2.3 Perceived Governance Importance

Table 4.7: Perceived Governance Importance

		Statistics				
		PG1	PG2	PG3	PG4	PG5
N	Valid	249	249	249	249	249
	Missing	0	0	0	0	0
Mean		5.19	5.14	5.12	5.11	5.18
Median		6.00	6.00	6.00	6.00	6.00
Mode		7	6	6	6	7
Std. Deviation		1.789	1.742	1.697	1.619	1.813
Minimum		1	1	1	1	1
Maximum		7	7	7	7	7

Respondents' perceived importance of governance of a brand is slightly agree (5.2) averagely. It indicates that the university students are more to agree and think that the governance of a company and brand is important to them when purchasing a product. The middle value within the aspect of perceived governance importance is 6 (agree). It proves that more than half respondents are agreeing and considering the governance aspect when they are consuming and purchasing. Most of them have chosen to agree (6) and strongly agree (7) for this aspect. The standard deviation is at the range of 1.619 to 1.813. It proves that the respondents might response and have a different perspective even though they are all university students.

4.2.4 Attitudes Aspect

Table 4.8: Attitudes Aspect

		Statistics				
		AA1	AA2	AA3	AA4	AA5
N	Valid	249	249	249	249	249
	Missing	0	0	0	0	0
Mean		4.78	4.94	4.80	4.84	5.07
Median		5.00	5.00	5.00	5.00	6.00
Mode		5	6	5	6	7
Std. Deviation		1.754	1.702	1.702	1.726	1.803
Minimum		1	1	1	1	1
Maximum		7	7	7	7	7

If look at average, respondents have been above neutral (4.78) to slightly agree (5.07) in terms of attitudes toward environment and green products. At least half university students are slightly agreeing (5) and agreeing (6) to have positive attitude toward green products and positive mind set in protecting the environment. Large portion of the students have chosen 5 (slightly agree), 6 (agree) and 7 (strongly agree) in this aspect. However, the result shows that it has a standard deviation which is score of 1.702 to 1.803. It indicates that students are having diverse opinion about purchasing green products and protecting environment.

4.2.5 Subjective Norms Aspect

Table 4.9: Subjective Norms Aspect

		Statistics				
		SA1	SA2	SA3	SA4	SA5
N	Valid	249	249	249	249	249
	Missing	0	0	0	0	0
Mean		4.87	4.59	4.86	4.85	4.63
Median		5.00	5.00	5.00	5.00	5.00
Mode		6	6	6	6	6
Std. Deviation		1.719	1.785	1.735	1.703	1.810
Minimum		1	1	1	1	1
Maximum		7	7	7	7	7

According to the table above, the result shows that respondents are having 4.59 to 4.87 (above neutral) when it comes to subjective norms in average. At least half of the respondents are somewhat agreeing that people surrounding them is using green

products and concern on environmental issues. This can be proved through the results of 5 (slightly agree) as score for median. Not only that, but the university respondents are also agreeing (6) that people that they know is considerate about environmental issue and choose to purchase and use the green products. But there is a sign of standard deviation from the result (1.703 to 1.81). This can explain that portion of people surrounding respondents are less likely to use environmentally friendly products and concern on environmental issues.

4.2.6 Perceived Behavioral Control Aspect

Table 4.10: Perceived Behavioral Control Aspect

		Statistics				
		PBC1	PBC2	PBC3	PBC4	PBC5
N	Valid	249	249	249	249	249
	Missing	0	0	0	0	0
Mean		4.68	5.19	5.20	4.80	4.69
Median		5.00	6.00	6.00	5.00	5.00
Mode		6	6	6	6	5
Std. Deviation		1.805	1.615	1.702	1.661	1.793
Minimum		1	1	1	1	1
Maximum		7	7	7	7	7

Based on the table above, generally the respondents are having a beyond neutral (4.68 to 4.8) and agree (5.19 to 5.2) level on this aspect kind of respond toward this aspect. Similarly, half of the respondents are slightly agreeing (5) and agreeing (6) that they are confident enough to use and buy green products. Next, the score that being selected the most for each of the components under this aspect is 5 (slightly agree) and 6 (agree). Which mean large portion of university students are assured in purchasing the products. Still, there are also several respondents who feel that purchasing environmental-friendly goods is quite difficult and hard for them. This can be proven through the score of standard deviation (1.615 to 1.805).

4.2.7 Perceived Green Consumer Behavior

Table 4.11: Perceived Green Consumer Behavior

		Statistics				
		CB1	CB2	CB3	CB4	CB5
N	Valid	249	249	249	249	249
	Missing	0	0	0	0	0
Mean		4.39	4.41	4.77	4.63	4.37
Median		5.00	5.00	5.00	5.00	5.00
Mode		6	6	6 ^a	6	6
Std. Deviation		1.640	1.636	1.782	1.727	1.890
Minimum		1	1	1	1	1
Maximum		7	7	7	7	7

a. Multiple modes exist. The smallest value is shown

The mean score for perceived green consumer behavior variable is above neutral (4.37 to 4.77). It means that the consumers are having a positive attitude toward the products generally but does not have a very strong confidence and certainty on it. As for the median, it has scores of 5 (slightly agree). This has indicated that at least half of the students are having little commitment on their behavior. From the point of view of mode, most of the respondents agree (6) this aspect. Not only that, for the item of CB3, result shows that the university students are also strongly agree (7) on positivity feelings toward the products. It means that they are having high level of acceptance toward the products and brands. Despite that, standard deviation of 1.636 to 1.89 represents different view of the students while using the products.

4.3 Scale Measurement

Table 4.12: Reliability Analysis

Variables	N of Item	Cronbach's Alpha
Perceived Environment Importance	5	0.919
Perceived Social Importance	5	0.894
Perceived Governance Importance	5	0.891
Attitudes	5	0.905
Subjective Norms	5	0.91
Perceived Behavioral Control	5	0.86
Perceived Green Consumer Behavior	5	0.891

Cronbach's alpha has been tested for each of the variables to check internal consistency for the variables. According to rule of thumb by George and Mallery (2003), when the Cronbach's alpha is more than 0.9, it means that the internal consistency is excellent. Based on the result gotten, Cronbach's alpha for the perceived environment importance, attitudes and subjective norms are more than 0.9. This indicates that the items within each of the variables are consistent internally and can help to measure the variables effectively. Then, Cronbach's alpha for the other independent variables such as perceived social importance, perceived governance importance and perceived behavioral control is more than 8. This indicates that the internal consistency of the variables is consider as good. In which, it stands for the respondents are answering it in a consistent way. While for the dependent variable which is perceived green consumer behavior, it is having a score of 0.891 which show that the items within are effectively measure the variable.

4.4 Inferential Analysis

4.4.1 Pearson Correlation Analysis

Table 4.13: Pearson Correlation Analysis

		Correlations						
		IV1	IV2	IV3	IV4	IV5	IV6	DV
IV1	Pearson Correlation	1	.544**	.446**	.417**	.494**	.418**	.399**
	Sig. (2-tailed)		<.001	<.001	<.001	<.001	<.001	<.001
	N	249	249	249	249	249	249	249
IV2	Pearson Correlation	.544**	1	.491**	.553**	.452**	.494**	.399**
	Sig. (2-tailed)	<.001		<.001	<.001	<.001	<.001	<.001
	N	249	249	249	249	249	249	249
IV3	Pearson Correlation	.446**	.491**	1	.475**	.455**	.415**	.396**
	Sig. (2-tailed)	<.001	<.001		<.001	<.001	<.001	<.001
	N	249	249	249	249	249	249	249
IV4	Pearson Correlation	.417**	.553**	.475**	1	.571**	.446**	.455**
	Sig. (2-tailed)	<.001	<.001	<.001		<.001	<.001	<.001
	N	249	249	249	249	249	249	249
IV5	Pearson Correlation	.494**	.452**	.455**	.571**	1	.442**	.473**
	Sig. (2-tailed)	<.001	<.001	<.001	<.001		<.001	<.001
	N	249	249	249	249	249	249	249
IV6	Pearson Correlation	.418**	.494**	.415**	.446**	.442**	1	.329**
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001		<.001
	N	249	249	249	249	249	249	249
DV	Pearson Correlation	.399**	.399**	.396**	.455**	.473**	.329**	1
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001	<.001	
	N	249	249	249	249	249	249	249

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

Pearson Correlation Analysis has been done to identify relationships between the two variables. Based on the rule of thumb, if the correlation is between 0.3 to 0.5, it indicates that the relationship between two variables is weak to moderate positive relationship. It means that, increasing in one variable might lead to increment of the other variable, but it cannot affect the variable individually by themselves. Which mean, they might need to consider other variables or factors and influenced it. For example, the relationship between IV1 (Perceived Environment Importance) and DV (Perceived Green Consumer Behavior). If the consumers found out that the brand is fulfilling their environmental practices, they might feel impressed with the brand. But they will not purchase their products solely based on the completion of environmental practices. The scenario goes the same way for the other variables' relationship. While for the relationship that between 0.5 to 0.7 is moderate relationship. It means that the variables can influenced each other stronger than the variables within weak relationships. However, it cannot affect the other variable solely by themselves. This has happened between IV1 and IV2 (Perceived Social Importance), IV2 and IV4 (Attitudes) and IV4 and IV5 (Subjective Norms).

4.4.4 Multiple Regression Analysis

4.4.4.1 R square

Table 4.14: Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.559	0.313	0.296	1.2169

Based on the table, 0.559 as the R represents moderate relationship between the independent variables (Perceived Environment Importance, Perceived Social Importance, Perceived Governance Importance, Attitudes, Subjective Norms and Perceived Behavioral Control) and dependent variable (Perceived Green Consumer Behavior). In this case, when the predictors increase, dependent variable would grow. Despite that, this also shows that the six variables do not strong enough to influence university students' consuming behavior. Then, the R Square of 0.313 shows that the regression model will explain 31.3% of variances in consumer behavior. Next, the result also captures that the estimation made by this regression will be diverse about 1.22 units averagely from the actual value.

4.4.4.2 ANOVA

Table 4.15: ANOVA

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	162.975	6	27.163	18.343	<.001 ^b
	Residual	358.356	242	1.481		
	Total	521.331	248			

a. Dependent Variable: DV

b. Predictors: (Constant), IV6, IV3, IV1, IV4, IV5, IV2

Table above has shown the result of ANOVA for regression and residual. For regression part, it contained sum of square of 162.975, with 6 degrees of freedom.

This can show that 162.975 of variability in this model able to contribute to relationship between the input variables and measured variable. Then, it also contains 27.163 of mean square which contributes to the 18.343 of the F-statistic. Apart from that, the significant p-value is <0.001 (less than 0.1). This indicates that the regression model is statistically significant.

Next, the table specifies that the model is containing 358.356 of SSE. It shows the variation within the dependent variable that is not able to explain by the model. Averagely, 1.481 of variation will not be explained by this model.

To conclude, when the SSR (162.975) is lower than SSE (358.356), it means that the model does not fit with the data well. Which it also shows that there are other crucial factors that can affect the behavior of consumers. However, this model is still significant since it has a significant value that less than 0.05.

4.4.4.3 Coefficient

Table 4.16: Coefficient

Coefficients ^a								
Model	Unstandardized Coefficients			Standardized Coefficients Beta	t	Sig.	Collinearity Statistics	
	B	Std. Error					Tolerance	VIF
1	(Constant)	1.056	.361		2.927	.004		
	IV1	.110	.064	.117	1.711	.088	.604	1.654
	IV2	.072	.075	.071	.964	.336	.524	1.908
	IV3	.116	.067	.116	1.748	.082	.643	1.555
	IV4	.174	.071	.177	2.444	.015	.540	1.850
	IV5	.212	.068	.220	3.101	.002	.566	1.767
	IV6	.022	.069	.021	.320	.749	.664	1.507

a. Dependent Variable: DV

Based on the table, the 'Constant' is showing a value of 1.056. This signifies when the perceived environment importance, perceived social importance, perceived governance importance, attitudes, subjective norms and perceived behavioral control are absent, the forecasted value on purchasing behavior of consumers will be 1.056. This unchanging value can significantly influence the dependent variable. It can be proven that the significant of 0.004 which is less than 0.05.

About the independent variables, each of them is having their own unstandardized coefficients. 0.11 for perceived environmental importance, 0.072 for perceived social importance, 0.116 for perceived governance importance, 0.174 for attitudes, 0.212 for subjective norms, and 0.022 for perceived behavioral control. All the values reveal the change on consumer behavior when each unit change in the independent variables while holding the other variables constant.

Next, standardized beta coefficients are enabling researchers to identify strengths and directions of the relationship between predictors and measured variables. It also allows researchers to identify which of the independent variable that can influence dependent variable the most. Hence, from the result provided, it can be understood that IV5 (Subjective norms) is the variable that can influence consumer behavior the most comparing to other variables since it has the highest beta value (0.22).

Also, the independent variables are having t value of 1.711, 0.964, 1.748, 2.444, 3.101 and 0.32 respectively with the p values. If the p values are more than 0.1, it indicates that the independent variable does not have significant relationship statistically with the dependent variable. This has been applied on, IV2 (Perceived social importance), and IV6 (Perceived behavioral control). Oppositely, the IV1 (Perceived environment importance), IV3 (Perceived governance importance), IV4 (Attitudes) and IV5 (Subjective norms) is having 0.15 and 0.002 as their p value. Since they are having significant values that below 0.1 and 0.05, which signifies that the relationship between independent variables and dependent variables is statistically significant.

CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS

5.1 Discussions of Major Findings

Table 5.1: Summary of Result

Hypothesis	Value Score	Decision
H1: There is positive relationship between perceived environment importance and perceived green consumer behavior.	$\beta = 0.117$ $P (0.088) < 0.1$	Supported
H2: There is positive relationship between perceived social importance and perceived green consumer behavior.	$\beta = 0.071$ $P (0.336) > 0.05$	Supported
H3: There is positive relationship between perceived governance importance and perceived green consumer behavior.	$\beta = 0.116$ $P (0.082) < 0.1$	Supported
H4: There is positive relationship between attitudes and perceived green consumer behavior.	$\beta = 0.177$ $P (0.015) < 0.05$	Supported
H5: There is positive relationship between subjective norms and perceived green consumer behavior.	$\beta = 0.22$ $P (0.002) < 0.05$	Supported
H6: There is positive relationship between perceived behavioral control and perceived green consumer behavior.	$\beta = 0.021$ $P (0.749) > 0.1$	Supported

5.1.1 Relationship of perceived environment importance and perceived green consumer behavior

A significant positive relationship has been found between perceived environment importance and consumer behavior. This result is similar with the previous study from Hasan et al. (2024). The reason behind is due to

environmental consciousness has increased among the individuals who are aware of notable biological and environmental changes in this era (Hasan et al., 2024). For instance, climate change, biodiversity loss and floods. These scenarios have happened more frequently than before which has affected our daily life. As a result, people are concerning about environmental responsibility that have done by a brand before they decided to purchase for a good. Apart from that, this result is also the same with previous study that has done by Boufounou et al. (2023). The study has done similarly with this research, which is rating scale questions about ESG indicators on customer satisfaction. However, study from Boufounou et al. (2023) is researching more on employed consumers instead of students. This might show that even though students might have limited income, but it might not affect their behavior when it comes to consumption and purchasing.

5.1.2 Relationship of perceived social importance and perceived green consumer behavior

Result shows that perceived social importance is having positive relationship with consumer behavior. In which, it is similar with previous studies' results. Whoever that take social responsibility crucially, will invest on their employees to improve employees' engagement and productivity, then lead to high turnover rates, low cost, low recruitment cost and greater business efficiency, which also lead to better financial performance (Isadora & Carlos, 2023). When university students choose to purchase from a brand that fulfill social responsibility, it can indicate that they are expecting to being invested and treated equally by their future employer. Besides, a previous study from Nugroho et al. (2024) has investigated the connection between ESG, CSR and consumer behavior in two different countries. The result showed that the social attribute is having positive impact on consumer behavior for Indonesia and Taiwan. In which, similarly with this study which has investigated on students with different backgrounds and cultures,

it can show that differences among the consumers and societies might not affect their perceptions on social attribute.

5.1.3 Relationship of perceived governance importance and perceived green consumer behavior

A significant positive relationship can be found between perceived governance importance and consumer behavior. When the consumers view a regulatory authority is legitimate, they will accept the recommendations made by the regulators (Wood et al., 2023). It means that, when the consumers are trusting the regulators, then they tend to purchase from a brand that has followed the rules and regulations made by those regulators. At the same time, it also indicates that most of the businesses in Malaysia has followed the regulators' guidelines and help to build the trust between consumers toward a brand. Result gotten from this research is consistent with previous studies like Lee (2024). The study suggested that governance pillar can positively influence South Korean consumers' psychological distance. In which, governance can shorten the psychological distance. Then, affect their purchase intention positively. However, there is differences between the Lee study with this research. Lee study is targeting various ages from 20s to 50s, and he has used different statistical tools which is SPSS and Smart PLS. In which, it might increase the possibilities of getting different results.

5.1.4 Relationship of attitude and perceived green consumer behavior

Significant positive relationship can also be found between attitude and consumer behavior. This has aligned the result with past studies. It has happened due to people tend to behave in a way that align with their thinking. For example, people in China that concerned on their well-being started to

consider health and organic element when they purchased for foods (Roh et al., 2022). This can help to explain that why would the attitude toward green products can positively affect their consuming behaviors. When the consumers feel positive in using green products, it will increase the possibilities of consumers purchase for green products and even loyal toward the products. Apart from that, previous study from Dang et al. (2023) also showing the similar result. In which, the attitude can positively affect consumers' behavior. But the area investigated is different with this research, they have investigated the attitude on online purchasing. Even so, it can be assumed that attitude can affect consumers' behavior positively.

5.1.5 Relationship of subjective norms and perceived green consumer behavior

Subjective norms and consumer behavior is having significant positive relationship. This result indicates that consumers will be influenced by their surroundings when make decision in their consumption. Simultaneously, if they are surrounded by people who are engaging themselves into environmentally friendly products consumption, it will also affect the respondents to consume green products. Despite that, previous research from Xie & Madni (2023) concluded that the mediating role of subjective norms on young people's intention to purchase green products is different based on occupational categories. This statement indicates that students with different education level, or different professional might lead to different results. Some of them might get influenced by others easily, some of them might not.

5.1.6 Relationship of perceived behavioral control and perceived green consumer behavior

Result of positive relationship between perceived behavioral control and consumer behavior has been shown in this study. This scenario shows that

the consumers are confident enough to purchase of green products. They face less barriers while consuming the goods. In which, it makes the consuming behavior become easier to them. Previous research that has been done by Aslan (2023) has a result that contradict with this study. Positive relationship between perceived behavioral control toward purchase intention in Turkey did not support by the study. Even so, Aslan's study has been done through Structural Equation Modelling (SEM) which will counted for latent variables and mediators, and suitable for complex research. As a result, it might affect the result of study, and lead to various results.

5.2 Implications of the Study

5.2.1 Practical implications for policy makers and/or practitioners

This study can help the businesses to design a suitable business strategy. They able to understand how the variables would affect their markets' behavior. Then, according to the needs of their customers, outline and apply the strategies to meet their customers' expectations. As a result, it can help to improve their brand awareness and customers' loyalties. Next, this study could help the practitioners to have better customer engagement. Through this research, they able to understand their customers' psychological. This would help them prepare for better ways to increase their customers' willingness to engage with their brands. At last, these would lead the brands to have a suitable competitive advantage. Understand the customers' preferences, then behave in their favor way. It can help to attract targeted customers attention, also enhance trust between customers to the brands.

5.2.2 Theoretical implications from academic perspectives

Most of the studies done is focusing either ESG theory or TPB solely on consumer behavior. In which, the studies might not capture the two theories at the same time. This also led to the researchers does not know among the variables ESG concept and TPB theory, which of the variable can affect buyers' behavior the most. Hence, this study has provided a new insight through combining both concept and theory and identifying pillar that has highest influence on user behavior. This would provide an inspiration for the future researchers in improving the existing theoretical model. Especially for theory that has been used and introduced for long time ago, can be improved and refined with modern theory. Apart from that, cross-functional insight can be contributed through this research. This study has connected the theory from different fields like TPB from psychological field, while ESG is from environmental studies, social studies and governance studies.

5.3 Limitations of the Study

One of the limitations of this study is larger portions of bachelor's degree and diploma students. This might lead to the results gotten are representing the degree and diploma students instead of representing all the students that studying in Malaysia universities.

Then, cross-sectional study has been conducted in this research. Cross-sectional study only able to capture the consumers' behavior for current periods of time. Especially for TPB that considered under psychological area, using cross-sectional study might not be able to track their changes in thinking and behavior.

Despite that, the limitations would not diminish the significance of findings. Instead, would provide a new direction for future researchers.

5.4 Recommendations for Future Research

Future researchers can try to collect more respondents. In Malaysia, university students in 2024 are estimated to be 1 million (*Number of University Students in Malaysia: A 2024 Overview*, n.d.). 200 responses are enough in providing accuracy under most of the assumptions and parameters of a research project (Van Bennekom, 2018). Even so, 200 samples used to estimate 1 million university students' behaviour might be less accurate. Hence, higher numbers of respondents are suggested to get a more accurate result.

Qualitative research will be suggested for future study. This can help in providing a deeper and accurate insight about their behaviour while consuming. It is due to consumption behaviour will involve complex decision-making processes. Therefore, through quantitative solely might not be able to capture the exact motivation which will affect their buying decisions.

Next, longitudinal study is encouraged for the future researchers. This enables them to do experimental research on the consumers. At the same time, it also allowed them to understand and record the changes happening between the consumers.

5.5 Conclusion

To conclude, among the Malaysia university students, subjective norms is having the highest influence on their buying behaviour. This can indicate that people surrounding will affect their decisions while purchasing and consuming. In which, it also shows that persons around them should behave well to make sure that the university students are being influenced positively.

This research has provided some benefits and contribution practically and theoretically. However, there are also limitations while completing this study. Hence, some recommendations have been suggested to the future researchers to make sure that all the research done is meaningful and insightful to societies.

REFERENCES

- Aitken, R., Watkins, L., Williams, J., & Kean, A. (2020). The positive role of labelling on consumers' perceived behavioural control and intention to purchase organic food. *Journal of Cleaner Production*, 255, 120334. <https://doi.org/10.1016/j.jclepro.2020.120334>
- Amoako, G. K., Dzogbenuku, R. K., & Abubakari, A. (2020). Do green knowledge and attitude influence the youth's green purchasing? Theory of planned behavior. *International Journal of Productivity and Performance Management*, 69(8), 1609–1626. <https://doi.org/10.1108/ijppm-12-2019-0595>
- Aslan, H. (2023). The influence of halal awareness, halal certificate, subjective norms, perceived behavioral control, attitude and trust on purchase intention of culinary products among Muslim costumers in Turkey. *International Journal of Gastronomy and Food Science*, 32, 100726. <https://doi.org/10.1016/j.ijgfs.2023.100726>
- Ateş, H. (2020). Merging Theory of Planned Behavior and Value Identity Personal norm model to explain pro-environmental behaviors. *Sustainable Production and Consumption*, 24, 169–180. <https://doi.org/10.1016/j.spc.2020.07.006>
- Bae, G., Lee, S., & Luan, B. (2023). The impact of ESG on brand trust and word of mouth in food and beverage companies: Focusing on Jeju Island tourists. *Sustainability*, 15(3), 2348. <https://doi.org/10.3390/su15032348>
- Barbu, A., Catană, Ș., Deselnicu, D. C., Cioca, L., & Ioanid, A. (2022). Factors Influencing Consumer Behavior toward Green Products: A Systematic Literature Review. *International Journal of Environmental Research and Public Health*, 19(24), 16568. <https://doi.org/10.3390/ijerph192416568>

- Berkman, H., Li, M., & Lu, H. (2020). Trust and the value of CSR during the global financial crisis. *Accounting and Finance*, 61(3), 4955–4965. <https://doi.org/10.1111/acfi.12721>
- Bosnjak, M., Ajzen, I., & Schmidt, P. (2020). The theory of planned behavior: Selected recent advances and applications. *Europe's Journal of Psychology*, 16(3), 352–356. <https://doi.org/10.5964/ejop.v16i3.3107>
- Boufounou, P., Moustairas, I., Toudas, K., & Malesios, C. (2023). ESGs and customer choice: Some empirical evidence. *Circular Economy and Sustainability*, 3(4), 1841–1874. <https://doi.org/10.1007/s43615-023-00251-8>
- Bucea-Manea-Țoniș, R., Martins, O. M. D., Ilic, D., Belous, M., Bucea-Manea-Țoniș, R., Braicu, C., & Simion, V. (2020). Green and Sustainable Public Procurement—An Instrument for Nudging Consumer Behavior. A Case Study on Romanian Green Public Agriculture across Different Sectors of Activity. *Sustainability*, 13(1), 12. <https://doi.org/10.3390/su13010012>
- Budrin, A., Soldatova, A., Vorobeva, A., & Korytova, V. (2024). Responsible consumption in the context of ESG transformation of the economy. *E3S Web of Conferences*, 531, 05029. <https://doi.org/10.1051/e3sconf/202453105029>
- Chow, M. Y. C., & Ho, S. P. S. (2024). Investigating the effect of ESG on retail banks' customer equity. *Journal of Financial Services Marketing*. <https://doi.org/10.1057/s41264-024-00271-x>
- Correia, E., Sousa, S., Viseu, C., & Leite, J. (2021). Using the theory of planned behavior to understand the students' pro-environmental behavior: a case-study in a Portuguese HEI. *International Journal of Sustainability in Higher Education*, 23(5), 1070–1089. <https://doi.org/10.1108/ijshe-05-2021-0201>

- Dang, V. T., Nguyen, N., & Pervan, S. (2020). Retailer corporate social responsibility and consumer citizenship behavior: The mediating roles of perceived consumer effectiveness and consumer trust. *Journal of Retailing and Consumer Services*, 55, 102082. <https://doi.org/10.1016/j.jretconser.2020.102082>
- Dang, H. L., Bao, N. V., & Cho, Y. (2023). Consumer Behavior towards E-Commerce in the Post-COVID-19 Pandemic: Implications for Relationship Marketing and Environment. *Asian Journal of Business Environment*, 13(1), 9-19. <http://www.ajbe.or.kr/>
- García-Salirrosas, E. E., & Gordillo, J. M. (2021). Brand personality as a consistency factor in the pillars of CSR management in the new normal. *Journal of Open Innovation Technology Market and Complexity*, 7(2), 134. <https://doi.org/10.3390/joitmc7020134>
- Gui, Q., & Abdul Rashid Abdullah. (2024). Consumer Attitudes and Behavior towards Eco-Friendly Hotels in Yunnan Province: An Analysis Using TPB Framework. *Frontiers in Business, Economics and Management*, 15(1), 106-111. <https://doi.org/10.54097/ph0eb189>
- Ham, C., Chung, U. C., Kim, W. J., Lee, S. Y., & Oh, S. (2021). Greener than Others? Exploring Generational Differences in Green Purchase Intent. *International Journal of Market Research*, 64(3), 376–396. <https://doi.org/10.1177/14707853211034108>
- Hasan, H. N., & Suciarto, S. (2020). The influence of attitude, subjective norm and perceived behavioral control towards organic food purchase intention. *Journal of Management and Business Environment (JMBE)*, 1(2), 132.
- Hasan, M. B., Verma, R., Sharma, D., Moghalles, S. A., & Hasan, S. a. S. (2024). The impact of environmental, social, and governance (ESG) practices on customer behavior towards the brand in light of digital transformation:

- perceptions of university students. *Cogent Business & Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2371063>
- Houston, J. F., Lin, C., Shan, H., & Shen, M. (2024). How Does ESG Shape Consumption? *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4243071>
- HSBC Business Go*. (n.d.). <https://www.businessgo.hsbc.com/en/article/what-is-the-e-in-esg->
- Huang, J., Jing, Y., Zhang, L., Huang, Z., & Chen, Q. (2023). Integrating Theory of Planned Behavior and Value-Belief-Norm Theory to Explain Residents' Intention on Garbage Classification. *Journal of Education, Humanities and Social Sciences*, 24, 9-17. <https://doi.org/10.54097/pnjyk833>
- Isadora, S. M., & Carlos, I. J. R. (2023). *The role of the Countries' Institutional Quality on the relationship between Companies' Environmental, Social, and Governance (ESG) and Financial Performance*. DIVA. <https://www.diva-portal.org/smash/record.jsf?pid=diva2%3A1765132&dsid=7553>
- Jia, T., Iqbal, S., Ayub, A., Fatima, T., & Rasool, Z. (2023). Promoting Responsible Sustainable Consumer Behavior through Sustainability Marketing: The Boundary Effects of Corporate Social Responsibility and Brand Image. *Sustainability*, 15(7), 6092. <https://doi.org/10.3390/su15076092>
- Kaur, B., Gangwar, V. P., & Dash, G. (2022). Green Marketing Strategies, Environmental Attitude, and Green Buying Intention: A Multi-Group Analysis in an Emerging Economy context. *Sustainability*, 14(10), 6107. <https://doi.org/10.3390/su14106107>
- Kimiagari, S., & Malafe, N. S. A. (2021). The role of cognitive and affective responses in the relationship between internal and external stimuli on online impulse buying behavior. *Journal of Retailing and Consumer Services*, 61, 102567. <https://doi.org/10.1016/j.jretconser.2021.102567>
- Koh, H., Burnasheva, R., & Suh, Y. G. (2022). Perceived ESG (Environmental, Social, Governance) and consumers' responses: the mediating role of brand credibility, brand image, and perceived quality. *Sustainability*, 14(8), 4515. <https://doi.org/10.3390/su14084515>

- Kusuma, E., Barus, I., & Pranawukir, I. (2024). THE STRATEGY OF UNILEVER'S CORPORATE SOCIAL RESPONSIBILITY 6.0 IN BUILDING CORPORATE PERSONAL BRANDING. *Moestopo International Review on Social Humanities and Sciences*, 4(1), 55–66. <https://doi.org/10.32509/mirshus.v4i1.68>
- Lee, H. J. (2024). Does corporate ESG, an essential factor for overcoming the climate crisis, affect sustainability: The effects of psychological distance and purchase intention. *Business Strategy and the Environment*. <https://doi.org/10.1002/bse.3945>
- Lee, H. J., & Rhee, T. (2023). How does corporate ESG management affect consumers' brand choice? *Sustainability*, 15(8), 6795. <https://doi.org/10.3390/su15086795>
- Liu, M. T., Liu, Y., & Mo, Z. (2020). Moral norm is the key. *Asia Pacific Journal of Marketing and Logistics*, 32(8), 1823–1841. <https://doi.org/10.1108/apjml-05-2019-0285>
- Liu, P., Teng, M., & Han, C. (2020). How does environmental knowledge translate into pro-environmental behaviors?: The mediating role of environmental attitudes and behavioral intentions. *The Science of the Total Environment*, 728, 138126. <https://doi.org/10.1016/j.scitotenv.2020.138126>
- Malureanu, A., Panisoara, G., & Lazar, I. (2021). The Relationship between Self-Confidence, Self-Efficacy, Grit, Usefulness, and Ease of Use of eLearning Platforms in Corporate Training during the COVID-19 Pandemic. *Sustainability*, 13(12), 6633. <https://doi.org/10.3390/su13126633>
- Miller, L. B., Rice, R. E., Gustafson, A., & Goldberg, M. H. (2022). Relationships among environmental attitudes, environmental efficacy, and Pro-Environmental behaviors across and within 11 countries. *Environment and Behavior*, 54(7–8), 1063–1096. <https://doi.org/10.1177/00139165221131002>
- Mirza, Z. (2024, June 6). The fashion industry's 'urgent need' for sustainable practices. *ESG Dive*. <https://www.esgdive.com/news/sustainability-leaders-say-urgent-need-for-fashion-industry-to-change-methods/718248/#:~:text=If%20the%20fashion%20industry%20continues%20on%20its,2050%2C%20according%20to%20the%20Ellen%20MacArthur%20Foundation.>

- Monteiro, G. F. A., Miranda, B. V., Rodrigues, V. P., & Saes, M. S. M. (2021). ESG: disentangling the governance pillar. *RAUSP Management Journal*, 56(4), 482–487. <https://doi.org/10.1108/rausp-06-2021-0121>
- Nugroho, D. P. D., Hsu, Y., Hartauer, C., & Hartauer, A. (2024). Investigating the Interconnection between Environmental, Social, and Governance (ESG), and Corporate Social Responsibility (CSR) Strategies: An Examination of the Influence on Consumer Behavior. *Sustainability*, 16(2), 614. <https://doi.org/10.3390/su16020614>
- Number of university students in Malaysia: a 2024 overview.* (n.d.-b). <https://en.your-uni.com/blog/number-of-university-students-in-malaysia>
- Rau, P. R., & Yu, T. (2023). A survey on ESG: investors, institutions and firms. *China Finance Review International*. <https://doi.org/10.1108/cfri-12-2022-0260>
- Roh, T., Seok, J., & Kim, Y. (2022). Unveiling ways to reach organic purchase: Green perceived value, perceived knowledge, attitude, subjective norm, and trust. *Journal of Retailing and Consumer Services*, 67, 102988. <https://doi.org/10.1016/j.jretconser.2022.102988>
- Semet, R. (2020). The social issue of ESG analysis. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3838372>
- Snigdha, R. (2022). A STUDY ON CONSUMERS' AWARENESS OF GREENWASHING AND ITS IMPACT ON THEIR PURCHASE BEHAVIOR. https://www.researchgate.net/publication/362595760_A_STUDY_ON_CONSUMERS'_AWARENESS_OF_GREENWASHING_AND_ITS_IMPACT_ON_THEIR_PURCHASE_BEHAVIOUR
- Sultan, P., Tarafder, T., Pearson, D., & Henryks, J. (2020). Intention-behaviour gap and perceived behavioural control-behaviour gap in theory of planned behaviour: moderating roles of communication, satisfaction and trust in organic food consumption. *Food Quality and Preference*, 81, 103838. <https://doi.org/10.1016/j.foodqual.2019.103838>
- Tai, V. P. (2024). General consumer perceptions and their impact on corporate social responsibility (CSR) and environmental, social, and governance (ESG) in Vietnam. *International Journal of Multidisciplinary Research and Growth*

Evaluation, 5(3), 912–920. <https://doi.org/10.54660/ijmrge.2024.5.3.912-920>

Taufique, K. M. R., & Islam, S. (2021). Green marketing in emerging Asia: antecedents of green consumer behavior among younger millennials. *Journal of Asia Business Studies*, 15(4), 541–558. <https://doi.org/10.1108/jabs-03-2020-0094>

Tonder, V., E., Fullerton, S., De Beer, L., & Saunders, S. (2023). Social and personal factors influencing green customer citizenship behaviours: The role of subjective norm, internal values and attitudes. *Journal of Retailing and Consumer Services*, 71, 103190. <https://doi.org/10.1016/j.jretconser.2022.103190>

Tripopsakul, S., & Puriwat, W. (2022). Understanding the impact of ESG on brand trust and customer engagement. *Journal of Human Earth and Future*, 3(4), 430–440. <https://doi.org/10.28991/hef-2022-03-04-03>

Tsang, A., Frost, T., & Cao, H. (2023). Environmental, Social, and Governance (ESG) disclosure: A literature review. *The British Accounting Review*, 55(1), 101149. <https://doi.org/10.1016/j.bar.2022.101149>

Verplanken, B., & Orbell, S. (2021). Attitudes, habits, and behavior change. *Annual Review of Psychology*, 73(1), 327–352. <https://doi.org/10.1146/annurev-psych-020821-011744>

Wan, J. S. (2023). A Case Study on the Relationship between Organizational Culture, Knowledge Sharing and Job Performance of Bank Employees. *Journal of Logistics Informatics and Service Science*. <https://doi.org/10.33168/jliss.2023.0209>

Wang, B., Li, J., Sun, A., Wang, Y., & Wu, D. (2019). Residents' green Purchasing Intentions in a Developing-Country context: Integrating PLS-SEM and MGA methods. *Sustainability*, 12(1), 30. <https://doi.org/10.3390/su12010030>

Wood, M., Wood, C., Styring, P., Jones, C. R., Smith, J. K., Day, M., Chakraborty, R., & Mensah, G. (2023). Perceptions of accountability and trust in the regulatory governance of wood burning stove sustainability: Survey evidence from the post-Brexit UK. *Energy Policy*, 177, 113549. <https://doi.org/10.1016/j.enpol.2023.113549>

- Xie, S., & Madni, G. R. (2023). Impact of Social Media on Young Generation's Green Consumption Behavior through Subjective Norms and Perceived Green Value. *Sustainability*, 15(4), 3739. <https://doi.org/10.3390/su15043739>
- Xu, Y., Du, J., Khan, M. a. S., Jin, S., Altaf, M., Anwar, F., & Sharif, I. (2022). Effects of subjective norms and environmental mechanism on green purchase behavior: An extended model of theory of planned Behavior. *Frontiers in Environmental Science*, 10. <https://doi.org/10.3389/fenvs.2022.779629>
- Zahari, A. R., Esa, E., Rajadurai, J., Azizan, N. A., & Tamyez, P. F. M. (2020). The effect of corporate social responsibility practices on brand equity: An examination of Malaysia's top 100 brands. *Journal of Asian Finance Economics and Business*, 7(2), 271–280. <https://doi.org/10.13106/jafeb.2020.vol7.no2.271>
- Zollo, L., Carranza, R., Faraoni, M., Díaz, E., & Martín-Consuegra, D. (2021). What influences consumers' intention to purchase organic personal care products? The role of social reassurance. *Journal of Retailing and Consumer Services*, 60, 102432. <https://doi.org/10.1016/j.jretconser.2020.102432>

SUSTAINABLE SHOPPER: LINKING ESG WITH SHOPPING CARTS

1. Gender

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	125	50.2	50.2	50.2
	Male	124	49.8	49.8	100.0
	Total	249	100.0	100.0	

2. Races

Races					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Chinese	40	16.1	16.1	16.1
	Indian	94	37.8	37.8	53.8
	International	44	17.7	17.7	71.5
	Malay	71	28.5	28.5	100.0
	Total	249	100.0	100.0	

3. Current academic level

Current academic level					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelor's degree / Diploma	184	73.9	73.9	73.9
	Doctorate degree	20	8.0	8.0	81.9
	Master's degree	45	18.1	18.1	100.0
	Total	249	100.0	100.0	

4. Type of funding

Type of funding					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Parents / Family-funding	36	14.5	14.5	14.5
	Scholarship	81	32.5	32.5	47.0
	Self-funding / Self-sponsored	36	14.5	14.5	61.4
	Student loan	96	38.6	38.6	100.0
	Total	249	100.0	100.0	

5. Perceived environment importance

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.919	.920	5

6. Perceived social importance

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.894	.895	5

7. Perceived governance importance

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.891	.892	5

8. Attitude

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.905	.905	5

9. Subjective Norms

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.910	.910	5

10. Perceived behavioral control

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.860	.860	5

11. Perceived green consumer behavior

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.891	.892	5

12. Model summary

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.559 ^a	.313	.296	1.2169	1.997

a. Predictors: (Constant), IV6, IV3, IV1, IV4, IV5, IV2

b. Dependent Variable: DV

Perceived environment importance

The products that I purchased seems to be eco-friendly production and consumption in terms of energy.	Wan (2023), Tripopsakul & Puriwat (2022)
The brand of the products that I purchased seems to be doing well in responding to environmental management, like environmental protection activities and compliance with environmental laws.	
The products that I purchased seems to be good in sustainable production and consumption, like recycling and using eco-friendly materials.	
The brand of the products that I purchased takes effort to reduce or get rid of negative environmental consequences.	
The brand of the products that I purchased has minimized in resources usage without endangering the environment.	

Perceived social importance

Brand of the products that I purchased respect culture, traditions, and social norms.	Boufounou et al. (2023), Tripopsakul & Puriwat (2022)
Brand of the products that I purchased enhances societal well-being and people's quality of life over the long term.	
Brand of the products that I purchased supports in the growth of society and economy.	
Brand of the products that I purchased supports charities that work in improving the lives of disadvantaged people.	
Brand of the products that I purchased implements policies for the security of personal and confidential data.	

SUSTAINABLE SHOPPER: LINKING ESG WITH SHOPPING CARTS

Perceived governance importance

Brand of the products that I purchased strictly adheres to law when operating their business.	Boufounou et al. (2023), Tripopsakul & Puriwat (2022)
Brand of the products that I purchased is focusing on fulfilling its obligations to its partners and stockholders.	
Brand of the products that I purchased has ethical standards policy that takes precedence over financial performance.	
Brand of the products that I purchased goes out of its way in avoiding and preventing corruption in its dealings with the country.	
Brand of the products that I purchased discloses data about its environmental protection and social development objectives.	

Attitude

I feel positive on green products.	Wang et al. (2019), Liu et al. (2020)
Green products are good for environment.	
I like the idea of purchasing green products.	
I will not do something that will harm the environment.	
We will face environmental disaster if we are not taking care of environment.	

Subjective norms

People that are important to me feel that I should purchase green products.	Wang et al. (2019), Taufique & Islam (2021), Liu et al. (2020)
People that I know buy green products.	
People that I know are concerned about issues related to the environment.	
People that I know think that it is important to buy green products.	
Most of the people that I know is not using high energy consuming products.	

Perceived behavioral control

To me, buying green products is easy.	Xu et al. (2022), Liu et al. (2020)
Whether or not I buy green products is up to me.	
Whether or not I buy green products is under my control.	
I am confident in using environmentally friendly goods that can bring long-term benefit.	
I am confident in overcoming the barriers that will prevent me from using environmentally friendly products.	

Perceived green consumer behavior

I am passionate about using the green products.	Tripopsakul & Puriwat (2022)
I am proud using the green products.	
I feel encouraged about the green products.	
I can continue using the green products.	
I have used the green products for a long period of time.	

Demographics

Gender

- Male
- Female

Races

- Chinese
- Indian
- International
- Malay

Current academic level

- STPM/ A-level/ Foundation
- Bachelor's degree / Diploma
- Doctorate degree
- Master's degree

Type of funding

- Self-funding/ Self-sponsored
- Student loan
- Scholarship
- Parents/ Family-funding