THE INFLUENCE OF ECO-FRIENDLY MARKETING STRATEGIES ON CONSUMER BEHAVIOR IN PURCHASING GREEN PRODUCTS: A CASE STUDY AMONG GENERATION Z UNDERGRADUATES

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NURUL ANIS ADLINA BINTI ABDULLAH KHAYAL VELEE A/P S. RAVINDRAN MUHAMMAD AFIZZUDIN BIN OTHMAN VIK SHONG THAM A/L EH SOOK

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The Influence of Eco-Friendly Marketing Strategies on Consumer Behavior in Purchasing Green Products: A Case Study Among Generation Z Undergraduates

by

Nurul Anis Adlina Binti Abdullah Khayal Velee A/P S. Ravindran Muhammad Afizzudin Bin Othman Vik Shong Tham A/L Eh Sook

A thesis submitted in fulfillment of the requirements for the degree of Entrepreneurship (Commerce) with Honours

Faculty of Entrepreneurship and Business

UNIVERSITI MALAYSIA KELANTAN

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Date: 4 FEBRUARY 2024

SIGNATURE NAME: VIK SHONG THAM A/L EH SOOK



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Sincerely,

Group 51

TABLE OF CONTENT

	ITEMS	PAGES
Cover Page		-
Blan	k page	-
Title	Page	-
Thes	is Declaration	-
Ackr	nowledgment	i
Table	e Of Content	ii-iii
List	of Figures	iv
List	of Tables	iv
List	of Formulas	iv
Abst	rak	v
Abst	ract	vi
_		
CHA	APTER 1: INTRODUCTION	1
1.1	Background of the study	1
1.2	Problem Statement	2-4
1.3	Research Question	5
1.4	Research Objectives	5
1.5	Scope of the Study	6
1.6	Significance of Study	7
1.7	Definition of Term	7-9
1.8	Organization of the Thesis	9-10
	APTER 2: LITERATURE REVIEW	TT
2.1	Introduction	11
2.2	Underpinning Theory	11-14
2.3	Previous Studies	14-19
2.4	Hypotheses Statement	20-21
2.5	Conceptual Framework	21-22
2.6	Summary/ Conclusion	22
	PTER 3: RESEARCH METHODS	
3.1	Introduction	23
3.2	Research Design	24-25
3.3	Data Collection Methods	25-27
3.4	Study Population	27
3.5	Sample size	27-28

3.6	Sampling Techniques	30-31
3.7	Research Instrument Development	31-33
3.8	Measurement of the Variables	34-36
3.9	Procedure for Data Analysis	36-40
3.10	Summary / Conclusion	41-42
CHA	APTER 4: DATA ANALYSIS AND FINDINGS	
4.1	Introduction	43
4.2	Preliminary Analysis	43
4.3	Demographic Profile of Respondents	44-46
4.4	Descriptive Analysis	47-30
4.5	Validity and Reliability Test	52
4.6	Normality Test	52-55
4.7	Hypotheses Testing	56
	4.7.1 Hypothesis 1	56-57
	4.7.2 Hypothesis 2	57
	4.7.3 Hypothesis 3	58
4.8	Summary / Conclusion	60
CHA	APTER 5: DISCUSSION AND CONCLUSION	
5.1	Introduction	61
5.2	Key Findings	61-66
5.3	Discussion	63
	5.3.1 Hypothesis 1	63-64
	5.3.2 Hypothesis 2	64-65
	5.3.3 Hypothesis 3	65
5.4	Implications of the Study	66-67
5.5	Limitations of the Study	67-68
5.6	Recommendations/ Suggestion for Future Research	68
	Overall Conclusion of the Study	69-70
5.7	•	
5.7	MATAVCI	Α
	ERENCES	71-72
REF	MAIAVCI	71-72 73-82
REF	ERENCES	

List Of Figures

Number	Name of Figure	Pages
1.1	Total of plastic waste per day in Malaysia	3
2.1	The Theory of Planned Behaviour Model	10
2.2	Conceptual Framework	18
3.1	Krejcie and Morgan Sampling Method	21

List Of Tables

Number	Name of Table	Pages
3.1	Five-point Likert scale, ranging from strongly disagree to strongly agree	25
3.2	Questionnaire draft on the distribution of variables	25
3.3	Likert scale classification	27
3.4	The Cronbach's Alpha benchmarks.	28
3.5	The rule of thumb of the correlation coefficient	30

List of Appendices

Appendix	Name of Appendices	Pages
Appendix A	Draft of Questionnaire	34-43
Appendix B	Gantt Chart	44-45

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ABSTRAK

Tujuan kajian penyelidikan ini adalah untuk menyiasat pengaruh strategi pemasaran mesra alam terhadap gelagat pengguna dalam pembelian produk hijau. Kajian ini dijalankan dalam kalangan pelajar prasiswazah termasuk generasi Z. Bagi tujuan kajian ini, metodologi kajian kuantitatif aka<mark>n digunaka</mark>n, dan soal selidik tinjauan akan digunakan untuk mengumpul data daripada sampel pelajar universiti di Malaysia yang berumur 18 hingga 27 tahun. Strategi pemasaran mesra alam ialah perniagaan yang mampan di mana tanggungjawab sosial digabungkan dengan kelestarian alam sekitar. Hal ini penting bagi syarikat di platform ini untuk berdaya saing antara satu sama lain. Persekitaran perniagaan menjadi tumpuan utama dalam pemasaran hijau dimana ia menjadi kaedah promosi dalam perniagaan. Bagi memenuhi syarat pemasaran hijau, bukti-bukti diperlukan untuk disahkan bahawa produk dan perhidmatan tersebut adalah mesra alam. Strategi pemasaran dalam skop mesra alam perlu diambil serius bagi membendung pencemaran dalam pelbagai aspek di dunia ini. Oleh itu, kajian ini dihasilkan bagi mendapatkan pandangan dan tinjauan di kalangan generasi Z pelajar sarjana muda yang lebih terdedah serta tahap kefahaman mereka terhadap alam semulajadi juga lebih tinggi. Bagi tujuan kajian ini, metodologi kajian kuantitatif akan digunakan, dan soal selidik tinjauan akan digunakan untuk mengumpul data daripada pelajar sarjana muda dari universiti yang terpilih di Malaysia. Beberapa kemungkinan pemacu penerimaan akan dinilai melalui penggunaan soal selidik. Adalah dijangkakan bahawa hasil kajian ini akan memberikan gambaran yang ketara tentang tahap pengar<mark>uh pemasar</mark>an mesra alam dapat memberi kesan kepada tingkah laku pelanggan dalam pembelian produk mesra alam. Penemuan ini bukan sahaja akan memberi sumbangan kepada badan pengetahuan semasa mengenai mesra alam, tetapi ia juga akan menjadi panduan praktikal untuk kementerian sumber asli, alam sekitar dan perubahan iklim yang ingin menambah baik kajian mereka dan menarik pangkalan pelanggan yang lebih besar. Kajian ini juga akan menyediakan rangka kerja untuk kajian masa depan dalam subjek geografi manusia, membuka pintu untuk pemeriksaan lanjut kriteria kebolehterimaan dan kemungkinan penambahbaikan dalam strategi pemasaran mesra alam. Di samping itu, penyelidikan ini akan memberi asas kepada pelajar masa depan.

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ABSTRACT

The purpose of this research study is to investigate the influence of environmentally friendly marketing strategies on consumer behavior in purchasing green products. This study was conducted among undergraduate students including generation Z. For the purpose of this study, a quantitative research methodology will be used, and a survey questionnaire will be used to collect data from a sample of university students in Malaysia aged 18 to 27 years. An ecofriendly marketing strategy is a sustainable business where social responsibility is combined with environmental sustainability. This is important for companies on this platform to be competitive with each other. The business environment is the main focus in green marketing where it becomes a promotional method in business. In order to meet the requirements of green marketing, evidence is required to confirm that the products and services are environmentally friendly. Marketing strategies in an environmentally friendly scope need to be taken seriously to curb pollution in various aspects of the world. Therefore, this study was produced to obtain views and surveys among generation Z undergraduate students who are more exposed and their level of understanding of nature is also higher. For the purposes of this study, a quantitative research methodology will be used, and a survey questionnaire will be used to collect data from undergraduate students from selected universities in Malaysia. Several possible drivers of acceptance will be assessed through the use of questionnaires. It is expected that the results of this study will provide a significant picture of the level of influence of environmentally friendly marketing can affect the behavior of customers in the purchase of environmentally friendly products. The findings will not only contribute to the current body of knowledge on environmental friendliness, but it will also serve as a practical guide for ministries of natural resources, environment and climate change that wish to improve their studies and attract a larger customer base. This study will also provide a framework for future studies in the subject of human geography, opening the door for further examination of acceptability criteria and possible improvements in environmentally friendly marketing strategies. In addition, this research will provide a foundation for future students.

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CHAPTER 1

INTRODUCTION

1.1 Background of the study

Recently, the importance of implementing eco-friendly behaviors has become more obvious in a variety of industries. Particularly in the area of marketing, there has been a paradigm shift towards sustainability as companies look at eco-friendly ways to satisfy customer demands. The purpose of the research is to investigate how customer behavior in purchasing green products is affected by environmentally friendly marketing tactics in the setting of generation Z undergraduates. Companies are starting to change the way they view consumer wants by creating products that are friendly to the environment and changing marketing strategies that lead to environmental sustainability, known as the green marketing strategy. The objectives of implementing the green marketing strategy include supporting efforts to face the issue of climate change and supporting sustainable marketing performance (Anonymous, 2000).

Eco-friendly sector is critical to protecting the environment and building resilience, and sustainable and environmental packaging is a new invention that aims to strike a balance between the environmental growths of the economy (Lavuri, 2022; Martinho et al., 2015). This understanding of ecological problems requires sincere solutions like green manufacturing, the use of technology that emits no harmful gasses or solid wastes, and the promotion of sustainable products and services (Mehraj et al., 2023). Furthermore, promoting the concept of reusing and recycling can reduce the emission of harmful gasses or solid waste produced during the production of new products. As such, recycling decreases the number of greenhouse gasses released while solid harmful waste decays in landfills.(Alamsyah et al., 2018)

1.2 Problem Statement

The production of green products and the desire for eco-friendly everyday goods and behaviors are now disappearing among people around the world. This study was conducted to obtain answers among the generation Z undergraduates' group on environmentally friendly marketing that influences the purchasing behavior of customers. The world is now getting closer to the brink of danger where many people, especially entrepreneurs, are not aware of the environment which is now causing global warming.

In 2022, a scientist or icon of the North Pole ice Dr. Sharifah Mazlina Syed Abdul Kadir has conducted a survey in the North Pole and Antarctica where she found a lot of polar ice melting and she expects a climate apocalypse in 2040. This statement is also confirmed by world scientists including from Russia and the United States. (Dr. Azlinariah Abdullah, 2022). Therefore, this issue needs to be taken seriously to slow down the occurrence of such events by conducting research so that the public is more aware of the importance of greenhouses and the use of environmentally friendly products that can prevent global warming in the world (Batubara, 2021).

In addition, the cause of the melting of the ice blocks in the Poles is caused by global warming, which is caused by chemicals and domestic waste which is the main factor and clearly affects the thinning of the ozone layer. The following has also caused many people to install and use air conditioners that release. This situation further accelerates the depletion of the ozone layer where the release of Chlorofluorocarbon (CFC) gas occurs from the use of air conditioners that act as cooling agents. However, the results of scientific studies have found that this use can affect human life and is now being phased out through the Montreal Protocol. This incident can

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be contained if environmentally friendly marketing strategies are highlighted, and every agency plays an important role.

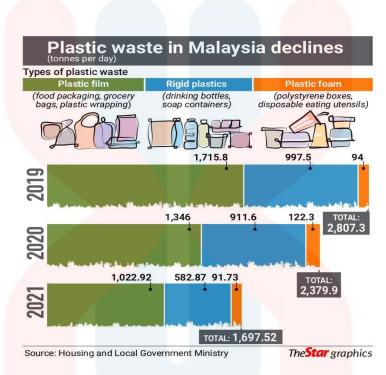


Figure 1.1: Total of plastic waste per day in Malaysia

There is a growing demand for sustainable behavior in generation Z undergraduates, but little is known about how environmentally friendly marketing methods influence customer behavior in purchasing green products in this context. Although there is an active debate around the world about sustainable marketing, there is a lack of real research that explores the specific factors and barriers that Malaysian higher education institutions face in conducting research on environmentally friendly marketing strategies that influence customer behavior in purchasing green products.

The upfront cost of sustainability research and development in eco-friendly marketing has become the first problem. After awareness of eco-friendly marketing among consumers behavior in purchasing green products can increased rapidly many companies changed their

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marketing methods to follow this trend. The main focus in eco-friendly marketing is through product packaging (Chen et al., 2021). Companies consider changing their packaging to environmentally friendly packaging. However, the cost of sustainability research and development is a challenging factor for companies, especially small and medium enterprises (SMEs). The lack of experts in this field and the lack of technology cause certain companies to use dangerous materials for packaging such as polystyrene which can affect the environment (Afroz et al., 2017).

Next is the ongoing cost of using environmentally friendly materials. As mentioned earlier, lack of technology is one of the challenging factors in this field. This also causes other factors which are ongoing costs. Traditional packaging that uses insoluble materials such as plastic is very easy to make and requires low manufacturing costs. However, after considering changing the packaging to be more environmentally friendly, certain companies had to increase their spending on packaging such as using soluble materials such as paper and others (Bandara et al., 2022). In addition, companies also need to purchase new technologies that can produce green packaging as well.

Last but not least is the misleading advertising around green efforts. After environmental awareness increased among Malaysians, some irresponsible companies took it for granted. There is false advertising and misleading information has been spread that can influence consumers. For example, BMW cars received a bad reputation after the company sent false advertisements about their electric car products. The company claims the product is 'zero emission' and safe for the environment. However, after further research, the American Society of Anesthesiologists (ASA) concluded that it was a false advertisement.

1.3 Research Question

In this research, researchers will be focusing on few questions which are:

- 1. To what extent is the relationship between sustainability messaging and customer behavior towards the purchase decision-making process in evaluating each daily use product among Gen Z undergraduates.
- 2. How will the customer respond (customer behavior) in the Gen Z undergraduates if the supply of green products has a high percentage in the market.
- 3. To what extent the promotion of environmentally friendly products can change the behavior of customers among Gen Z undergraduates in making decisions to use and buy goods that do not affect the environment.

1.4 Research Objectives

To achieve the main purpose of this study, there are three research objectives to be carried out in this research. The main objectives of this research study are:

- 1. Identify the level of sustainability messaging that can affect customer behaviour in purchasing green products in terms of eco-friendly marketing strategies.
- 2. To investigate the offer of green products that influence customer behaviour in purchasing green products in terms of eco-friendly marketing strategies.
- 3. To measure to what extent the promotion of eco-friendly products can influence customer behaviour in purchasing green products in terms of eco-friendly marketing strategies.

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1.5 Scope of the Study

The scope of the study are focuses on the influence of eco-friendly marketing strategies on consumer behavior in purchasing green products among generation Z undergraduates. This study aims to examine how marketing strategies that promote eco-friendly products or services affect the purchasing decisions and behaviors of the generation Z student's undergraduates. It may involve investigating various aspects such as the sustainability messaging of eco-friendly marketing, the offer of green products can affect the decision-making process that also can influence customer behavior in purchasing green product, the impact of eco-friendly marketing on their purchasing behavior, and their attitudes towards sustainability and environmental responsibility (Reddy et al., 2023). The study may also explore the effectiveness of different eco-friendly marketing strategies in influencing consumer behavior among the generation Z undergraduates.

After that, a questionnaire survey will also be administered to get information from the opinions of the respondents. Using a series of standardized questions, a questionnaire survey is a technique for gathering statistical data about the traits, opinions, or actions of a population. The majority of data used in this quantitative study comes from websites, journal references, previous research, literature reviews, and also the results of research conducted on respondents (Roopa & Rani, 2012). In addition, collecting, evaluating and interpreting data will be a slightly complicated procedure and require time and research in compiling and translating the data from the findings of the study (Roopa & Rani, 2012). This is to produce a complete thesis with the validity and reliability of the study where it can be used by future researchers.

1.6 Significance of Study

The findings of this study are important to better understand eco-friendly marketing strategies for universities students. In this chapter, the researcher discusses the expected results and the importance of this study. Several parties will benefit from this study. The parties are as below:

1.6.1 Researchers

This study provides insight for future research to better understand eco-friendly marketing strategies and the importance of eco-friendly marketing strategies among generation Z undergraduates. It will help researchers for the purpose of carrying out studies on the factors that affect eco-friendly marketing strategies.

1.6.2 Students

The results of this study provide a better understanding to students to gain more knowledge and experience about the importance of eco-friendly marketing strategies among student's generation Z undergraduates.

1.7 Definition of Term

The definition of terms of this research are eco-friendly, sustainability marketing, consumer behavior, purchase intent and greenwashing.

1.7.1 Eco-friendly marketing:

Eco-friendly marketing is a tool used to encourage the promotion of goods or services, which mainly seeks to safeguard the environment from social, political, and economic activities. It emphasizes sustainable production methods, reduced environmental impact,

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and positive contributions to the planet. (Cynthia Milagros Apaza-Panca, Lucy Anamelva Flores Quevedo, Luz María Carranza Reyes, 2023). Eco-friendly marketing involves promoting products or services with a focus on their environmental benefits. It emphasizes sustainable production methods, reduced environmental impact, and positive contributions to the planet. This type of marketing often highlights features such as recyclability, energy efficiency, use of renewable resources, reduced carbon footprint, or overall environmental friendliness of the product or service (Alamsyah et al., 2018). The aim is to appeal to consumers who prioritize environmental concerns by offering them more sustainable choices and creating awareness about the positive impact these choices can have on the environment (Reddy et al., 2023).

1.7.2 Sustainability marketing:

Sustainable marketing is a purpose-driven practice that works to orientate businesses, brands and society towards a sustainable future, influencing appropriate awareness, aspiration, adoption and action across economic and sociocultural systems by taking necessary accountability for its impacts and opportunities (Charlie Thompson, 2023).

1.7.3 Consumer behavior in purchasing green products.:

Consumer behavior in purchasing green products is a process through which an identifiable group of consumers actually make buying decisions. Any study of consumer buying behavior must also include the forces that influence them in making their decisions in their final choice of a brand at a given time, place, and price (Charles Doyle, 2016)

1.7.4 Purchase Intent:

Purchase intention is defined because of the client's likelihood of buying a product or a service within the forthcoming, and it is straightforwardly associated with the consumer perspective (Makudza, Mugarisanwa, & Siziba, 2020)

1.7.5 Greenwashing:

Greenwashing is the act of mis- leading consumers regarding the environmental practices of a company or the environmental performance and pos- itive communication about environmental performance (Sebastião Vieira de Freitas Netto, Marcos Felipe Falcão Sobral, Ana Regina Bezerra Ribeiro, Ana Regina Bezerra Ribeiro, Gleibson Robert da Luz Soares, 2020)

1.8 Organization of the Proposal/Thesis

This research investigates the profound influence of eco-friendly marketing strategies on consumer behavior in purchasing green products in among Gen Z undergraduates. By probing the complexities of this relationship, Chapter 1 aims to address key questions regarding the impact of eco-friendly marketing on the choices and behaviors of individuals in the educational sphere. Establishing clear research objectives and delineating the study's scope, this work aims to offer insights into the implications for educational institutions and marketers in aligning practices with consumer expectations. This chapter defines crucial terms and presents a roadmap for the thesis, offering a comprehensive structure for exploration.

Chapter 2 navigates a comprehensive literature review, underpinning the study with existing theories and prior research, culminating in a conceptual framework that guides the

investigation. The methodology chapter, Chapter 3, meticulously details the research design, data collection methods, sampling techniques, and instrument development, laying the groundwork for robust data analysis. This analysis, presented in a dedicated chapter 4, encompasses preliminary and demographic analysis, validity and reliability tests, Spearman correlation analysis, and hypothesis testing, ultimately drawing conclusions based on the derived findings.

In the last chapter, all the research findings come together and are thoroughly talked about in terms of what they mean for both the higher education environment and eco-friendly marketing strategies. Acknowledging study limitations, chapter 5 proposes recommendations for future research endeavors, emphasizing the significance of the study in the broader landscape of sustainable marketing practices in higher education. This structured approach ensures a coherent flow, rationale, methodology, analysis, and implications of the research, presenting a comprehensive exploration of the influence of eco-friendly marketing strategies on consumer behavior in higher education environments.

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CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

In this chapter, the researcher will explain the literature review that will refer to several parts such as underpinning theory, previous study, hypothesis statement and conceptual framework. This procedure can help the researcher answer the research question convincingly and finally produce authentic information regarding the topic of interest in this study. This study is also about the variables that influence environmentally friendly marketing strategies on customer behavior among generation Z undergraduates studied in this chapter.

To provide a broad understanding of this study, especially for younger readers, this section opens with a detailed overview of consumer behavior towards environmentally friendly marketing. In order to provide an understanding of the main underlying theory in the research and an example of the research structure of the study, the second part will analyze the theoretical approach of the Theory of Planned Behaviors (TPB) and other important factors. This chapter will look at how IV and DV relate to each other. We developed a research hypothesis for this study based on the research framework.

2.2 Underpinning Theory

2.2.1 Theory of Planned Behavior (TPB)

A coherent and methodical collection of concepts or ideas that seek to solve basic issues with reality, knowledge, ethics, and other philosophical subjects is referred to as philosophical theory.

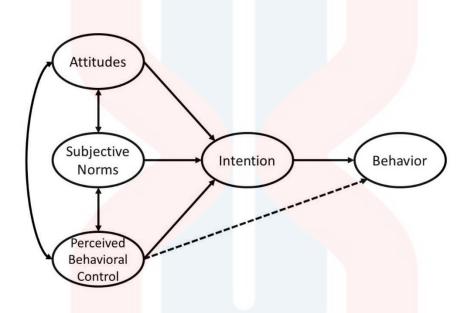
For the purpose of predicting and altering behavior, particularly that which is connected to influence in purchasing, the theory of planned behavior (Ajzen, 1991; Greaves et al., 2013) has been extensively utilized.

Investigating complicated concepts and comprehending and evaluating abstract emotions can both be facilitated by the framework that philosophical theory can offer. It may also be categorized as a component of other philosophical fields, including ethics (the philosophy of morality), metaphysics (the study of the nature of reality), and epistemology (the study of knowledge)(Asare, 2015; Conner & Armitage, 1998). Philosophers and scholars can use this concept to explore and debate the key questions pertaining to human existence and knowledge.

Originally known as the Theory of Reasoned Action, the Theory of Planned Behaviors activity (TPB) was developed in 1980 to forecast a person's intention to participate in a specific activity at a specific time and location. According to Wayne W. LaMorte (2022) with the help of this theory, all behaviors that individuals may control through self-regulation should be explained. Behavioral intention is a fundamental element of this paradigm. Attitudes regarding the likelihood that an action will result in an expected consequence and subjective assessments of the advantages and disadvantages of those outcomes impact behavioral intents (Asare, 2015).

A wide range of health-related behaviors and intents, such as drinking, smoking, using healthcare facilities, breastfeeding, and substance abuse, have all been well predicted and explained by the TPB. According to TPB, the capacity (behavioral control) and motivation (intention) are both necessary for behavior to be achieved (Ajzen, 2020). It makes a distinction between three categories of beliefs: control, normative, and behavioral. The TPB is made up of six constructs that together show how much control an individual actually has over their actions.

According to (Wayne W. La Morte. 2022) behavioral intention is the term used to describe the motivating elements that impact a certain conduct; the more strongly one intends to carry out a behavior, the more likely one is to carry out the activity(Godin & Kok, 1996).



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Figure 2.1: The Theory of Planned Behavior model adapted from Ajzen 2005

The Theory of Planned activity's limitations stem from the assumption that an individual has the means and chance to carry out the intended activity, independent of intention. It ignores other elements, such fear, threat, emotions, or prior experiences, that influence behavior's aim and motive. Even when normative variables are taken into consideration, environmental or economic elements that may impact an individual's intention to engage in a certain activity are still overlooked (Ajzen, 2020). It does not presuppose that behavior may vary over time, but rather that it is the outcome of a linear decision-making process. While the concept of perceived

behavioral control is a valuable contribution to the theory, it does not address the concept of actual behavioral control.

2.3 Previous Studies

According to AT Kearney's report suggests that consumers are willing to pay more for environmentally friendly brands across categories such as automobiles, apparel, personal care, and fresh and packaged foods. In conformance to it, millennials and Gen Z are the most willing to pay among other cohorts for green brands (Mukherjee et al., 2019). These studies have significantly enriched our understanding of how marketing strategies centered around ecofriendly and sustainable practices influence consumer behavior and, consequently, their purchase intentions. Through rigorous methodologies such as PLS-SEM and bivariate correlations, these articles delve into the determinants of consumers' intentions to make green purchase decisions, emphasizing the role of factors like environmental concern, perceived benefits, perceived quality, price awareness, and brand image. The studies contribute to the discourse on sustainability marketing by addressing the complexities of consumer attitudes, preferences, and decision-making processes, while also shedding light on the challenges posed by greenwashing tactics in the marketplace.

2.3.1 Eco-friendly marketing

Based on Deepak Jaiswal's report establishes a strong link on eco-friendly marketing because it validates key constructs such as eco-label and environmental advertisements, offering insights for targeted marketing strategies aligned with consumer preferences. It underscores the positive influence of eco-labels on changing consumer perceptions, emphasizing their role in communicating both product quality and

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environmental friendliness (Harjadi & Gunardi, 2022). The study introduces consumer perceived quality as a mediator, highlighting the need for a holistic eco-friendly marketing approach beyond labeling to shape positive consumer experiences (Pookulangara et al., 2011). Despite challenges in understanding green branding and eco-labelling, the study emphasizes consumers' prioritization of minimizing environmental impact. It underscores the significance of clear communication and education in eco-friendly marketing to empower consumers in making environmentally conscious choices.

2.3.2 Sustainability marketing

Our understanding of sustainability marketing is significantly enhanced by the research conducted by Md. Nekmahmud and Maria Fekete-Farkas (2020), analyzing "Why Not Green Marketing? Determinants of Consumers' Intention to Green Purchase Decision in a New Developing Nation," which examines the factors influencing green purchase decisions among young, educated consumers in Bangladesh. The research reveals the importance of pricing strategies in sustainability marketing for developing markets, as consumers in Bangladesh express a willingness to pay more for eco-labeled green products (Afroz et al., 2017). The study also highlights the role of forward-looking perceptions, linking consumers' future estimation of green marketing (GFE) to their purchasing decisions.

Also, the research conducted by Almendra Fuenzalida Polanco (2018) analyzing
The Relation Between Consumer Green Behavior, Sustainable Packaging, and Brand
Image in the Purchase of Ecological Wines delves into the relationship between
consumer behavior, sustainable packaging, and brand image within the context of

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purchasing ecological wines. The research underscores the significance of sustainable packaging elements, particularly recycled materials, in influencing the purchase intention for ecological wine (Mehraj et al., 2023). This aligns with core principles of sustainability marketing, emphasizing the importance of eco-friendly packaging to attract environmentally conscious consumers. The study challenges assumptions about the direct impact of green consumer attitudes on the purchase intention for ecological wines, revealing that the alcoholic beverage category may not be a top priority for environmentally conscious consumers (Alamsyah et al., 2021). Moreover, it confirms the significant impact of wine brand image on the purchase intention for ecological wines, underlining the crucial role of brand identity in promoting environmentally conscious products.

2.3.3 Consumer Behaviour in Purchasing Green Products

The research journey into consumer behavior in the realm of eco-friendly products conducted by D P Alamsyah, R Aryanto, Indriana, V F Widjaja and H Rohaeni (2021) analysing The Strategy of Eco-friendly Products with Green Consumer Behaviour: Development of Green Trust Model unfolds through the exploration of eco-friendly product strategies and their impact, with a specific focus on green consumer behavior. The researchers meticulously developed and tested a green trust model, aiming to unravel the complex relationships between key factors that shape consumer choices. As the study unfolds, it becomes evident that eco-labels, serving as tangible indicators of environmentally friendly attributes, wield a substantial influence on crucial aspects of consumer behavior—perceived quality and green trust.

These eco-labels act as signals to consumers, not only reflecting the quality of a product but also signifying its environmental friendliness. In line with prior research, the article highlights the pivotal role played by eco-labels in shaping consumer perceptions, linking their impact to broader consumer behavior patterns. Essentially, the findings underscore that consumers are inclined to trust and choose eco-friendly products when they perceive them to possess high quality (Lorek, 2015). Eco-labels emerge as significant elements in shaping this perception, emphasizing their role in steering consumer behavior towards environmentally conscious choices.

In parallel, Sun et al. (2019), Shiel et al. (2020), Wang, et al., (2020), and Zavala and Theodoropoulou (2018) recently found that age has a significant influence on green consumers' behavior. This research examines factors such as gender, educational qualifications, and income, the study enriches our understanding of how diverse consumer segments respond to green marketing practices. Together, these articles contribute to a holistic understanding of consumer behavior, providing valuable insights for businesses seeking effective and sustainable marketing strategies in the realm of ecofriendly products (Afroz et al., 2017).

2.3.4 Purchase Intent

In an article by Md. Nekmahmud and Maria Fekete-Farkas, the focus of the research is on young, educated consumers in Bangladesh, unraveling the determinants that shape their decisions to purchase eco-friendly products. The study establishes a comprehensive model, revealing that environmental concern, perceived benefits, and willingness to pay play pivotal roles in influencing green purchase intentions. These

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findings emphasize the significance of consumer attitudes, perceived quality, and economic considerations in shaping the intent to make eco-conscious choices. Furthermore, the research explores the mediation of factors such as consumer perceived quality, shedding light on the nuanced relationship between eco-labels, perceived quality, and the ultimate green trust that influences purchase decisions. In this way, Article 5 expands our understanding of how consumer behavior is intricately connected to perceived quality, environmental concern, and the mediating role of perceived quality in influencing green purchase intentions.

On the other hand, according to the research by Dyah Sugandini (2020) analysing Green Supply Chain Management and Green Marketing Strategy on Green Purchase Intention: SMEs Cases the study delves into the realm of Small and Medium Enterprises (SMEs), examining the interplay between Green Supply Chain Management (GSCM), Green Marketing Strategy, and Green Purchase Intention. This research, focusing on SME cases, unveils the positive influence of green purchasing practices on the adoption of green marketing strategies. The study highlights how SMEs, particularly those engaged in crafts such as batik, knitting, and leatherwork, align their practices with environmentally friendly principles.

The findings resonate with the idea that the decision to purchase green raw materials significantly impacts the success of a company's green marketing strategy, emphasizing the pivotal role of the purchasing function. Additionally, collaboration between SMEs and consumers, termed green consumer cooperation, emerges as a driving force behind the establishment of effective green marketing strategies. The success of these strategies, in turn, contributes to increasing consumers' intentions to purchase green

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products. Both articles collectively underscore the multifaceted nature of factors shaping purchase intentions, encompassing environmental concern, perceived benefits, willingness to pay, green supply chain practices, and collaborative efforts between SMEs and consumers.

Greenwashing:

In research conducted by Mohd Harun bin Shahudin, Mohd Ab Malek bin Md Shah, Sulaiman bin Mahzan titled "Modeling Greenwashing Behavior in Malaysian Firms: Roles of Organizational and Individual Drivers" addresses the escalating issue of greenwashing in Malaysia, where despite limited media coverage, instances have drawn attention from environmental advocate groups. The research focuses on the dearth of academic literature on Malaysian greenwashing and aims to develop a comprehensive framework by exploring both organizational and individual drivers of greenwashing behavior.

Greenwashing, misleading claims about environmental practices or product benefits, poses significant consequences, affecting consumer confidence, investor trust, and potentially leading to legal challenges. The study's research delves into the determinants of greenwashing, the contributions of organizational and individual drivers, and the interplay between these factors. The significance of the research lies in providing a foundational framework for future studies, offering insights for marketing communication practitioners on the risks of greenwashing, and enhancing understanding of how this phenomenon impacts the reputation and long-term performance of Malaysian firms in the burgeoning eco-friendly market.

2.4 HYPOTHESIS STATEMENT

2.4.1 The Relationships Between Sustainability Messages and Customers Behavior in Purchasing Green Products.

Eco-friendly marketing strategies have a positive impact on consumer purchase intention. This hypothesis suggests that when companies adopt eco-friendly marketing strategies, such as promoting the environmental benefits of their products or using sustainable packaging, consumers are more likely to express an intention to purchase those products. This is based on the assumption that consumers are increasingly concerned about the environment and are more likely to support brands that align with their values.

H1: There is a significant relationship between sustainability messages and customer behavior in purchasing green products.

2.4.2 The Relationships Between Offering Green Products and Customers Behavior in Purchasing Green Products.

Eco-friendly marketing strategies positively influence brand loyalty. This hypothesis proposes that when companies incorporate eco-friendly practices into their marketing efforts, it enhances brand loyalty among consumers. White and Black (2017) discussed the impact of regulations on marketing practices, emphasizing the need for businesses to comply with environmental standards and communicate their adherence to consumers. By demonstrating a commitment to sustainability, companies can build trust and credibility with their target audience, leading to increased loyalty and repeat purchases.

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H2: There is significant relationship between Offering Green Products and Customers Behavior in Purchasing Green Products.

2.4.3 The Relationships Between Eco-friendly Products Promotion and Customers Behavior in Purchasing Green Products.

There is a significant relationship between Promotion of Eco-Friendly Products and Customer Behavior in Purchasing Green Products. This hypothesis suggests that when companies emphasize promotion to introduce green products, then consumers are more willing to get environmentally friendly green products. This is assuming that environmentally sustainable products have added value and are willing to get them at a cheaper price.

H3: The relationships between eco-friendly productsprootion and customers behavior in purchasing green products.

2.5 CONCEPTUAL FRAMEWORK

The researcher's summary of the literature on how to explain behavior is represented by a conceptual framework. As a result of their prior knowledge of the views of other researchers, and their observations of the research, it maps the activities learned during the study. Figure 2.1 shows the conceptual framework, which includes sustainability messaging, green product offerings, and eco-friendly product promotion as independent variables and also dependent variables is the consumer behavior.

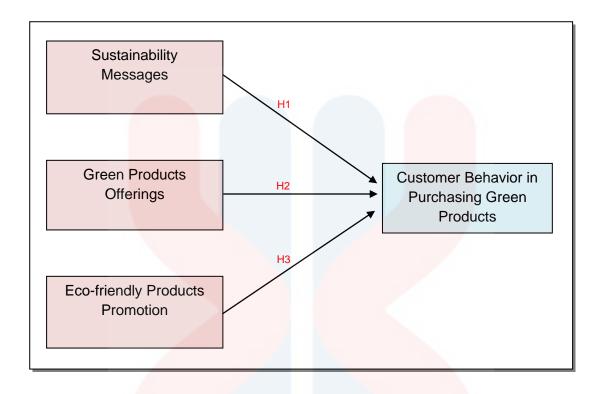


Figure 2.2: Conceptual Framework

2.6 Summary

In the nutshell, eco-friendly marketing has gained such a tremendous impact on the potential customers that care about nature ecosystems. As a matter of fact, due in large part to customer demand for sustainable practices and products as well as increased worldwide knowledge of environmental concerns, eco-friendly marketing has become a well-known commercial tactic. This topic that we've chosen allows us to do deeper research about eco-friendly marketing among university students. In fact, this research can help future researchers to develop a proper project related to this topic.

CHAPTER 3: RESEARCH METHODS

3.1 INTRODUCTION

Ordinal data are categorized under variables, and each category has a corresponding ranking algorithm. According to (Bandara et al., 2022), the gap between groups is not constant and is uncertain. It's unclear how ordinal data differs from other kinds of data. They are categorized, sorted, and even given names. Understanding the different accessible scales can help researchers apply data analysis techniques correctly. For instance, the investigator employed a Likert scale in sections B and C of the survey. A Likert scale including five levels strongly disagree, disagree, neutral, agree, and strongly agree was employed by the researcher. The questions will be completed by respondents based on their scale level. The Likert Scale Technique will be utilized in Parts B and C to examine the influence of environmentally friendly marketing strategies among generation Z undergraduates.

3.2 RESEARCH DESIGN

Research design is the organization of data gathering and analysis to integrate process, economics, and research objectives (Akhtar, 2016). For instance, a recent study (Analysis of Research Methodology and Research Methodology, 2022) reveals that research design is the organization of conditions for data collection and analysis with the goal of fusing research aims with economics and methodologies. In this study, Structural Equation Modeling (SEM) was utilized to collect and analyze primary data. A sound methodological strategy for addressing research problems is known as a research design. To accomplish the study's objectives and generate its hypotheses, a research design was employed.

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Every graduate's response is handled as a separate data source in this study. A self-administered questionnaire was sent using a random sample technique in order to gather primary data. This is carried out since it saves respondents time and is simple to understand. Because survey research is a quick, easy, and inexpensive way to get a lot of data, it is used in this study for information and data collecting. Typically, survey instruments consist of a questionnaire that respondents must fill out. Respondents can choose the location, pace, and end date of the survey using this method.

3.3 DATA COLLECTION METHODS

The data collection method can be divided into two categories: primary data collection methods and secondary data collection methods. For our group, we will use primary data collection. Data collection is the important part in this research paper. Data collection methods can be defined as processes to gather the information or resources for research purposes. It requires specific techniques in order to collect the data accordingly. Data collection that has been gathered will be determined by the person or any entity to reply to the related questions and the patterns.

In this part, the method that I consider using is Google Form survey. This method is the most suitable and the fastest method to reach out to the target respondents. Furthermore, Google Form is also the best way to reach the respondent especially among youngsters and teenagers in Malaysia. By creating Google Form questionnaires, respondents can easily answer a few questions anytime and anywhere that they want. In fact, Google Form also can decrease the spending for printing the questionnaire papers for respondents.

Google Form has been divided into three 3 sections respectively which are Section A, Section B, and Section C. For Section A, the questions have been asked only related to demographic. Demographics can be defined as characteristics of a certain population for example age, gender, race, and so on. Section B is about a dependent variable which is consumer behavior towards eco-friendly marketing. However, section C is divided into three parts because this study has 3 independent variables, namely sustainability messages in the first part, green product offerings in the second part and eco-friendly product promotion in the third part.

3.4 PRIMARY DATA

According to (Hox and Bocije 2005), primary methods of data collection is data. collected for the specific research problem at hand, using appropriate procedures that fit the research best, in which new data were added or personally collected to the existing store or collection of social knowledge, and the data and information could be collected using a variety of methods such as in-depth interviews, questionnaires with closed-ended questions, focus groups, observation, case studies, and so on. With this research, the researchers will collect data by close-ended question which is using google form as medium. The researchers choose to pick the respondents from undergraduates from universities all over Malaysia. The data collection will be conducted to 300 respondents from all of these universities.

3.5 STUDY POPULATION

The population can be defined as the population that the researcher intends to study and is relevant to the research topic. Simply put, a population is a large group of interesting people, events, or things that researchers want to investigate (Kumar et al. 2013), and each population is also known as an element. The population in this study entails undergraduates from public

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institutes from Kelantan and we particularly choose our population from 3 branches of Universiti Malaysia Kelantan (UMK), which is UMK City campus, Bachok campus and Jeli campus. The population of UMK undergraduates is about 15 000.

Table 3		aining Car	nple Size o	of a Vnow	n Ponulati	029			
N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384
Note: N	l is Popul	ation Size	; S is San	iple Size		Sou	rce: Krej	cie & Morgan	, 1970

Figure 3.1: Krejcie and Morgan Sampling Method

According to the Cambridge Dictionary website, population can be defined as the number of people living in a particular country, area, or town. In this section, study population indicates a certain method to analyze and predict the population and trend from collected data.

Population contains two (2) categories which are limited population and unlimited population. Limited population can be described as a certain population that can be easily

calculated and limited in scope. Meanwhile, an unlimited population can be described as a certain population that contains unknown numbers exactly. Furthermore, an unlimited population still can be used but it is difficult to conduct and complicated procedure.

In this part, the calculation will be conducted by using Krejcie and Morgan Sampling Method. Based on the table of Krejcie and Morgan Sampling Method, the sample size is 382 and the population is 75000. By this figure, the number of respondents will be between 380 and 400 approximately.

3.6 SAMPLE SIZE

The term "sample size" pertains to the overall number of participants who act as a representative subset of the study's population. It denotes the total respondents involved in a study, and to ensure comprehensive representation of the entire population, this number is commonly subdivided into groups based on factors such as age, gender, and geography, as outlined by Frankline Kibuacha (2021).

Generation Z undergraduate respondents actively engaged in eco-friendly consumer practices or those who have embraced various eco-conscious behaviors will be recipients of the questionnaire for this study. The respondents were chosen because it was thought they would provide the optimal data for this study. The sample size for this study will be between 380 and 400 respondents-based students generation Z undergraduates. This is because we will be using simple random sampling to find the respondents based on the undergraduate's student's generation Z. These areas are near to us and affordable to reach. An accessible table was made by Krejcie and Morgan in 1970 to estimate the sample size for a specific population by (Syed

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Abdul Rehman Bukari, 2021). We used Krejcie and Morgan to establish sample size, hence the researcher had to manually calculate the sample size using their technique.

3.7 SAMPLING TECHNIQUES

3.7.1 Non-Probability Sample Technique

Non-probability sampling is a sampling strategy where samples are chosen by the researcher based on their assessment in a contrast to doing by random. It is a less strict approach. This sampling technique strongly relies on the researchers' knowledge, non-probability sampling also gives not every member of the population an equal opportunity of taking part in the study. There is a known chance that each person in the population will be chosen. When random probability sampling is not practicable owing to time or money constraints, researchers adopt this method.

This method has 4 types of sampling consecutive sampling, quota sampling, judgmental sampling, and snowball sampling. Besides, researchers can take respondents from undergraduates from universities all over Malaysia, to study the influence of ecofriendly marketing strategies on consumer behaviour among generation Z undergraduates.

3.7.2 Convenience Sampling Techniques

This study used non-probability sampling, which is used when the population is not well defined, or the population is big. The major justification for using this non-probability. sampling method is that it is less expensive and can frequently be contracted more quickly than the probability sample methodology (Micheal, 2011).

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For respondents who are conveniently accessible, a convenience sample is created. An alternate definition of convenience sampling is the data collected from members of the population who are freely reachable. The accessibility and efficiency of knowledge discovery are the main advantages of this sampling method. Convenience sampling is likely the best technique for quickly and effectively collecting basic data, and it is most frequently employed during the exploratory stage of a research study.

3.7.3 Research Instrument Development

Measuring tools are used as research equipment to collect data. According to Takona (2002), questionnaires and interviews should be employed in educational research since they are useful instruments for assessing elements like opinion, attitude, idea, composition, and so on. The questionnaire was employed in this study since it is relevant to the researcher's subject. To get the data they want, researchers must use the appropriate study instruments.

3.7.4 Survey Questionnaire

Since questionnaires are the most effective method for researchers to bring in a huge number of respondents, questionnaires will commonly be applied in this study to carry out the study's objectives and collect data. This study will apply an online survey. A researcher has share messages through WhatsApp code to undergraduates from various universities to complete the survey such as Google form. Direct information also increases data quality while decreasing data completion time. However, the cost of a questionnaire survey needs to be taken into factor because it can collect a lot more data

for less money than phone or face-to-face interviews. By requiring respondents to answer several different parts of questions, it can help achieve the study's objectives. Questions about independent and dependent variables were included in the questionnaire's content.

3.8 SAMPLING TECHNIQUES

Quantitative refers to the use of numerical data and statistical methods in research or analysis. It involves the measurement and quantification of variables or phenomena to obtain objective and measurable information. In quantitative research, data is collected through methods such as surveys, experiments, observations, or existing datasets, and is typically analyzed using statistical techniques. Quantitative research aims to provide a systematic and structured approach to studying and understanding various aspects of a subject. It focuses on gathering data that can be quantified and analyzed to identify patterns, relationships, or trends. Quantitative research allows researchers to test hypotheses, make comparisons, and generalize findings to larger populations. It provides a way to objectively measure and analyze data, enabling researchers to draw reliable and valid conclusions based on statistical evidence.

The sample strategy used in this investigation was cluster random sampling. The probability sampling technique includes cluster sampling. Every item in the population has an equal chance of being selected for the sample, which is the definition of the probability sampling technique. In contrast to stratified sampling, clustered samples, according to Sekaran and Bougie (2013), offer more variability within groups and more homogeneity between groups. With probability sampling, conclusions about the population as a whole can be drawn statistically from the sample's properties.

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Consequently, it will help to prevent bias and enable this research to draw robust statistical conclusions. It should be mentioned that cluster sampling offers better generalizability and subgroup representation in the sample than other sampling techniques. Furthermore, random samples from each of these groups were obtained and included in the final sample (Wilson, 2014). Clustered random sampling involves a number of steps, including one, two, and several stages. The sample strategy for this investigation was two-stage cluster random sampling. In a two-stage random cluster sampling procedure, the population is divided into groups, all group members are rotated to other groups, the necessary number of groups are chosen at random as sample subjects, and every group member (undergraduate) in each group is investigated. arbitrary. Ultimately, the ultimate sample is acquired in specific randomly chosen regions.

3.9 RESEARCH INSTRUMENT DEVELOPMENT

Measuring tools are used as research equipment to collect data. According to Takona (2002), questionnaires and interviews should be employed in educational research since they are useful instruments for assessing elements like opinion, attitude, idea, composition, and so on. The questionnaire was employed in this study since it is relevant to the researcher's subject. To get the data they want, researchers must use the appropriate study instruments.

3.9.1 Questionnaire Design

This empirical research is based on hypothesis testing. The literature provides evidence for the predictions made on the link between exogenous and endogenous factors, which are taken from previous research. From the data acquired via quantitative analysis, conclusions will be made. Nevertheless, participants in the research complete a self-reporting form alone and without supervision. We shall do a quantitative analysis of

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the data. Through the collection of numerical data, quantitative research makes generalizations about groups of people or events.

We investigated the hypothesis by conducting an online survey using the web-based tool Google Forms. Participants will see a consent message when they first start the form, and they will be asked to click "continue" to confirm that they want to participate. Second, the participants need to provide personal information about themselves, such as age, race, religion and so on. Finally, the participants will be given a series of questions that measure their perception of the message of sustainability, which is the level of public sensitivity towards environmentally friendly marketing, the offering of green products and the promotion of environmentally friendly products so that the public is more aware of the existence of these products (Krosnick, 2018). After answering each question, they can click Done to end the form.

A common research strategy in sociological study, according to Davis (1989), is the questionnaire technique, which enables the gathering of diverse data along a design route for structural analysis. The purpose of this survey is to determine how well generation Z students are influenced by environmentally friendly marketing techniques. On the other hand, surveys are self-reporting questionnaires that respondents complete on their own without guidance or accompaniment (Krosnick, 2018). The questionnaire was divided into three pieces, each of which had straightforward instructions. A five-point Likert scale, ranging from strongly disagree to strongly agree, is used to score these items.

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Table 3.1: Five-point Likert scale, ranging from strongly disagree to strongly agree.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

Table 3.2: Questionnaire draft on the distribution of variables

Section	Variables To Be Identified	Number of Item	Total of Item
A	Demographic Profile: A1- Gender A2- Ages A3- Races A4- University	1-4	4
В	Dependent Variables: Customer Behavior in Purchasing Green Products	1-5	5
С	Independent Variables: IV1: Sustainability messages IV2: Green Product Offerings IV3: Eco-friendly Product Promotion	1-5 1-5 1-5	5 5 5

3.10 MEASUREMENT OF THE VARIABLES

An approved set of equipment is used as a marker or object to measure the variable. Sustainability messages, green product offerings, and environmentally friendly product promotions are the variables measured in this research survey. Consumer behavior is the dependent variable in this survey for generation Z undergraduates in Malaysia.

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3.10.1 Nominal Level of Measurement

The nominal scale is the lowest scale among the available measurement scales. Statistically speaking, this scale has limited capabilities because it can only distinguish things or events from one another based on name or, more deeply, such as a predicate. The researcher used this scale in the first part of the questionnaire, which is in part A. This scale is usually used for non- numerical variables (quantitative) or situations where numbers do not carry any meaning that can affect the meaning conveyed. In the questionnaire prepared by the researcher, the scale for this measurement can help the researcher to classify the participants into a group such as a age group, gender, education, race and so on. This makes responses between categories easy for respondents to choose from. Referring to experts, this scale is suitable for use in this section because of the nature of the scale that gives the researcher some bases and categories of results, as discussed above. Therefore, this scale is grounded and insightful in this study.

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Exam	nle:	
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1. Race/Bangsa

Mala <mark>y</mark>	
Chinese	
Indian	
Native of Sabah/ Sarawak	
Others	
2. Gender/ Jantina	
Male/ Lelaki	
Female/ Perempuan	

3.10.2 Ordinal Level of Measurement

Ordinal data are categorized under variables, and each category has a corresponding ranking algorithm. According to (Bandara et al., 2022), the gap between groups is not constant and is uncertain. It's unclear how ordinal data differs from other kinds of data. They are categorized, sorted, and even given names. Understanding the different accessible scales can help researchers use data analysis techniques correctly. For instance, the investigator used a Likert scale in sections B and C of the survey. A Likert scale including five levels strongly disagree, disagree, neutral, agree, and strongly agree was used by the researcher. A Likert scale is often used to measure public opinion by asking how much they will agree with an issue or statement submitted on a questionnaire.

The questions will be completed by respondents based on their scale level. The Likert Scale Technique will be used in Parts B and C to investigate how consumer behavior in purchasing green products among generation Z students is impacted by environmentally friendly marketing techniques.

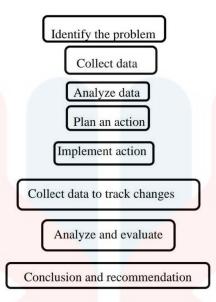
Table 3.3 Likert scale classification

1	Strongly Disagree		
2	Disagree		
3	Neutral		
4	Agree		
5	Strongly Agree		

3.11 PROCEDURE FOR DATA ANALYSIS

The research used descriptive data analysis as its method. This method of descriptive data analysis is one of the fundamental approaches to data analysis. Using the collected data more simply is this way. By compiling past data, the analysis that was applied can answer the question "what happened." Normally, it has the shape of a dashboard. The best research methods must be followed to obtain most of the information on this correctly and efficiently. The steps to complete the data analysis technique are listed below.

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3.11.1 Reliability Analysis

Cronbach's Alpha indicated a strong association among the variables, affirming their consistent interconnection. The reliability analysis was employed to establish the dependability of findings derived from data collection and examination. When the results consistently demonstrated reliability upon repetition of application, the questionnaire was deemed reliable, according to Samouel, Hair et al. (2003). Generally, a value exceeding 0.6 was recommended, signifying that the survey items consistently measured the anticipated construct development. The Cronbach's Alpha benchmarks are outlined in the table below for reference:

Cronbach's Alpha Formula is given as follows:

$$\alpha = \frac{N \cdot \bar{c}}{\bar{v} + (N-1) \cdot \bar{c}}$$

Where:

- N= the number of items.
- \bar{c} = average covariance between item-pairs.

• $\bar{\mathbf{v}} = \text{average varian.}$

Rule of Thumb for result.

Table 3.4: Cronbach's Alpha Reliability Level (α)

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

Source: Tavakol & Dennick (2011)

Table 3.4 shows the Cronbach Alpha from Tavakol and Dennick (2011), to determine whether the test items assess the same construct or are closely related, this research uses the interpretation of the Cronbach Alpha value that is closest to 1.00. therefore, Cronbach's alpha indicates strong reliability when its value approaches 1.00. In general, test answers that score more than 0.7 are usually fine.

3.11.2 Descriptive analysis

Descriptive statistics are used to logically introduce a quantitative picture. An overview of examples and estimates will be given. In addition to straightforward demarcation investigations, it gives a justification for each quantitative evaluation of

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different data. Researchers may gather multiple estimations or evaluate a significant population to measure in research investigations. Analysts can work on information measures with a clearer framework if they have access to interesting insights.

Frequency analysis is an essential component of descriptive statistics. Using SPSS programming, the frequency of segment profiles was decoded, and all the data was compiled into a table with frequencies and percentages. The analyst's objective to determine the degree of acknowledgment of each feature in this study is used to guide common inquiries. The researcher can then identify the components of this assessment that objective respondents accepted or discounted to produce normal values. This frequency distribution test will also be employed in section A, which is the respondent's demographic profile such as age, gender, race, place of study, familiarity with ecofriendly practices, and user of environmentally friendly products.

3.11.3 Spearman Correlation

In this study. Spearman correlation is the nonparametric version of the Pearson correlation. Spearman's correlation coefficient (p) measures the strength and direction of association between two ranked variables. Spearman correlation needs two variables that are either ordinal, interval or ratio. Although would normally hope to use Pearson correlation on interval or ratio data, the Spearman correlation can be used when the assumptions of the Pearson correlation are markedly violated. However, Spearman's correlation determines the strength and direction of the monotonic relationship between two variables rather than the strength and direction of the linear relationship between two

variables, which is what Pearson correlation determines. A perfect Spearman correlation of +1 or 1 occurs when each of the variables is a perfect monotone function of the other.

3.11.4 Multiple Regression Analysis

Multiple Linear Regressions (MLR) constitute a fundamental statistical tool widely employed by researchers. Building upon the foundations of simple linear regression, Multiple Linear Regression enables researchers to explore questions related to the influence of multiple independent variables on the variance in a single variable. When interpreting the outcomes of Multiple Linear Regression, researchers often turn to beta weights, as noted by Nimon, Gavrilova, and Roberts (2010), as well as Zientek, Carpraro, and Capraro (2008). This preference may stem from the convenience offered by most statistical packages, which automatically present results with coefficients ranked by magnitude.

In the context of our study titled "The Influence of Eco-Friendly Marketing Strategies on Consumer Behavior in Purchasing Green Products: A Case Study Among Generation Z Undergraduates," we leverage Multiple Linear Regression Analysis to examine the extent to which marketing strategies contribute to consumer behaviors. The application of Multiple Linear Regression analysis not only facilitates our investigation but also serves as a means to initiate discussions on the estimation of the simple linear regression model within the context of eco-friendly marketing strategies (Halinski & Feldt, 1970).

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Importantly, in Multiple Linear Regressions, the independence of variables safeguards against correlation, thereby averting the statistical phenomenon known as multicollinearity that arises from high correlations between independent variables. This consideration becomes especially pertinent when exploring the multifaceted relationships between eco-friendly marketing strategies, consumer behavior, and the preferences of Generation Z undergraduates.

Furthermore, as predictors are introduced into the model, the potential for multicollinearity or intercorrelation between variables increases, as highlighted by Zientek & Thompson (2006). This issue underscores the variety of approaches available to researchers' seeking insights into the role of predictors in Multiple Regression amid associations or correlations between variables within the eco-friendly marketing context. Each approach not only contributes distinct perspectives but also offers unique rank orderings of independent variables based on their contributions to the regression equation, shedding light on the intricate dynamics of consumer behavior among Generation Z undergraduates in the realm of eco-friendly marketing strategies.

3.12 SUMMARY/CONCLUSION

A comprehensive and in-depth explanation of the steps and techniques that will be employed throughout the research process is referred to as research methodology. Methodology describes how to collect and evaluate data in a systematic manner (Polit & Beck, 2004). The scope of the research and the procedures used in gathering the data and information needed for the study will be the main topics of this investigation. This section will outline and discuss the methodology utilized to gather the data and information that the researcher employed.

An extensive assessment and explanation of the research techniques employed in this study to round out this chapter. Data were gathered using quantitative research techniques, which were ideal for gathering information from a large number of target respondents. Through the distribution of questionnaires, we were able to gather data and solicit input from undergraduates in generation Z. A tiny percentage of the wider target population is represented by the sample size. Snowball sampling, quota sampling, judgmental sampling, and convenience sampling are the four primary methods utilized in data collection. This is how we get information from responders. Using the Snowball sampling approach, we disseminated online forms through private messaging and WhatsApp groups to participants in order to get their opinion.

There are three parts of the questionnaire which are demographics, independent factors and dependent variables. These questions use past studies. Both nominal and interval scales were used to measure the variables under investigation. There are three sections of the questionnaire that each deal with dependent factors, independent variables, and demographic data. These are both nominal and interval scale questions driven by previous studies and gauge variables. When this stage of the study ended, the researcher carefully examined each piece of information collected from the survey given to generation Z undergraduate students.

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CHAPTER 4

DATA ANALYSIS AND FINDINGS

4.1 INTRODUCTION

This section aims to analyze data from the collection and survey conducted on male and female students from generation Z. At the same time, this study also wants to provide clear information about the data that was examined using descriptive statistical analysis from the Statistic Package for the Social Science (SPSS) Version 27 where for the purpose of this investigation, descriptive analysis is used, which includes many methods such as frequency analysis, normality test, visualization, interpretation and Spearman correlation. In other words, the findings of the analysis will be explained in the form of data obtained from the questionnaire. Therefore, the hypothesis for this study that has been published in chapter 2 will be represented as acceptance or rejection in this chapter.

4.2 PRELIMINARY ANALYSIS

In this part of the initial analysis, all variables are required to undergo pilot testing to examine the extent to which society influences the awareness of environmentally friendly marketing and the actions that consumers need to take to overcome the problem statement in this study. A "pilot test" is a small-scale test done before the start of the actual main study. Typically, 20 to 30 respondents from the total number of respondents were used in conducting this pilot test. Pilot tests are also carried out to provide opportunities and find solutions to identify items that are still problematic before carrying out the main analysis and then provide an estimate of reliability values. In this pilot test, the researcher used Cronbach's Alpha to measure and evaluate the reliability of the variables.

4.3 DEMOGRAPHIC PROFILE OF RESPONDENTS

A total of 370 responses were received from the questionnaire distributed through social media platforms such as google form to generation Z undergraduates in Malaysia.

Table 4.1: Demographic Profile of Respondents

Res	sp <mark>ondent Pr</mark> ofile	Frequency	Percentage (%)
	18-20 years old	69	18.6
Age	21-23 years old	173	46.8
	24-26 years old	128	34.9
Gender	Male	165	44.6
	Female	205	55.4
	Malay	204	55.1
Race	Chinese	64	17.3
	Indian	55	14.9
	Native of Sabah and Sarawak	47	12.7
	Year 1	38	10.3
	Year 2	65	17.6
Year	Year 3	121	32.7
	Year 4	140	37.8
	Year 5	6	1.6
	UMK	126	34.1
Place of Study	UiTM	52	14.1
Times of Study	UPM	22	5.9
	UIAM	10	2.7

	UM	29	7.8
	UMT	27	7.3
	UUM	21	5.7
	UPSI	6	1.6
	USIM	10	2.7
	UNIKL	7	1.9
	UNISZA	22	5.9
	UMP	10	2.7
	UMS	9	2.4
	UNIMAP	10	2.7
	OTHER	9	2.4
Familiarity with	Very Unfamiliar	22	5.9
eco-friendly	Unfamiliar	5	1.4
practices	Neutral	41	11.1
	Familiar	157	42.4
	Very Familiar	145	39.2
Are you a user of	Yes	356	96.2
environmentally	No	14	3.8
friendly products?	MALA	SIA	

Table 4.1 provides a detail of the respondent profile and their classifications based on various criteria. In terms of age distribution, the majority of respondents fall into the 21-23 age group, accounting for 46.8% of the total. This is followed by the 24-26 age group, which represents 34.9% of the respondents. The 18-20 age group comprises 18.6% of the respondents. Regarding

gender distribution, the table shows that there is a slightly higher representation of female respondents, accounting for 55.4% of the total, compared to male respondents, who make up 44.6%.

In terms of race, the majority of respondents identified as Malay, representing 55.1% of the total. The Chinese and Indian communities are also represented, accounting for 17.3% and 14.9% of the respondents, respectively. Additionally, there are respondents from the Native of Sabah and Sarawak group, comprising 12.7% of the total.

The table also provides information on the respondents' year of study. The largest group consists of Year 4 students, representing 37.8% of the total. This is followed by Year 3 students, accounting for 32.7%. Year 2 students make up 17.6% of the respondents, while Year 1 and Year 5 students represent 10.3% and 1.6% respectively. In terms of the place of study, the University Malaysia Kelantan (UMK) has the highest representation, with 34.1% of the respondents studying there. Other universities such as UiTM, UPM, UIAM, UM, UMT, UUM, and various others are also represented in the table.

Lastly, the table provides insights into the respondents' familiarity with environmentally friendly products. The majority of respondents, 39.2%, claim to be very familiar with such products, while 42.2% consider themselves familiar. A smaller percentage, 11.1%, remain neutral, while only 1.4% claim to be unfamiliar or very unfamiliar with environmentally friendly products.

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4.4 DESCRIPTIVE ANALYSIS

For the descriptive analysis, the researcher comes out with an analysis by using the mean for every section of the dependent variable and independent variables. It is to find out the eco-friendly marketing strategies on consumer behaviors. From the analysis, the researcher compared the mean between the dependent variable and independent variable for every question. Then, the researcher will find out the answer of which strongly agreed with the respondent and strongly disagreed. The responses are scaled using the Likert Scale and where 1= Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, and 5=Strongly Agree

4.4.1 Independent Variable

1. Sustainability Messaging

Table 4.2: Descriptive Analysis of Sustainability Messaging

Indicator	Mean	Std. Deviation
I have seen many eco-friendly advertisements, whether on the internet or in reality.	4.34	.721
I am familiar with eco-friendly advertisement.	4.45	.763
The messages from eco-friendly advertisement are really persuasive.	4.36	.737
Environmentally friendly ads influence your purchase intentions.	4.32	.778

TThe information about eco-friendly advertisement		
	4.42	.692
helps me to know about the environment.		

Table 4.2 shows the descriptive analysis of sustainability messaging. The mean values collected from the respondents regarding sustainability messaging varied from 4.32 to 4.45. Therefore, this collectively underscores the positive impact of sustainable messaging strategies on the perceptions and behaviors of Gen Z undergraduates in ecofriendly marketing. This shows that respondents not only frequently encounter ecofriendly advertisements, both online and in real-world scenarios, but they also express a strong familiarity with such advertising initiatives.

2. Green Product Offerings

Table 4.3: Descriptive Analysis of Green Product Offerings

Indicator	Mean	Std. Deviation
There are many eco-friendly products in the market.	4.28	.749
Purchasing eco-friendly products helps me to reduce pollution.	4.43	.638
I always get eco-friendly cutlery when buying food or drinks.	4.42	.773
The quality of eco-friendly products is similar to others.	4.40	.798
My first option is eco-friendly products.	4.41	.702

Table 4.3 illustrates a positive trend in green product preferences among participants. They show a keen awareness of eco-friendly options, with a mean score of 4.28, signifying a broad acknowledgment of environmentally conscious products. Additionally, the strong belief that choosing eco-friendly products reduces pollution is evident in the high mean score of 4.43. These results indicate a clear connection between green product offerings and the preferences of the surveyed demographic, emphasizing a strong inclination towards eco-friendly consumer choices.

3. Eco-Friendly Product Promotion

Table 4.4: Descriptive Analysis of Eco-Friendly Product Promotion

Indicator	Mean	Std. Deviation
Eco-friendly products will be my choice if the products get a discount.	4.42	.668
Environmental awareness campaigns among the community can introduce more products that are safer for the environment.	4.39	.645
Various social media platforms such as TikTok and Instagram can publish advertisements to introduce various types of environmentally friendly daily goods to the community.	4.37	.707
Eco-friendly products such as straws, bottles and so on can be promoted in fast food restaurants because	4.44	.720

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they have a higher influence to buy.		
I use eco-friendly products such as shopping bags		
	4.38	.690
(tote bag) during grocery shopping.		

Table 4.4 shows the descriptive analysis of eco-friendly product promotion. The mean values regarding green product offerings varied from 4.37 to 4.44. The highest mean score of 4.44 highlights a robust positive inclination among participants, suggesting a substantial endorsement for the promotion of eco-friendly products in fast-food restaurants. This finding emphasizes the considerable impact of such promotions, indicating a high likelihood of influencing purchasing decisions positively. On the other hand, the rating of 4.37 for the promotion of eco-friendly products on various social media platforms is still indicative of a positive response. Participants express openness to these platforms as channels for promoting environmentally friendly daily goods, reflecting a generally favorable attitude toward eco-friendly product promotion through online media.

4.4.2 Dependent Variable

1. Customer Behavior in Purchasing Green products

Table 4.5: Descriptive Analysis of Customer Behavior

Indicator	Mean	Std. Deviation
I am willing to pay a premium for marketed eco-	4.08	.792

friendly products.		
The company's commitment to sustainability in its marketing strategy greatly influenced my loyalty to their eco-friendly products.	4.31	.669
I am likely to recommend a product to others based on eco-friendly marketing whose message really resonates with me.	4.47	.718
I regularly consider the environmental impact of products before making a purchase decision.	4.46	.721
The eco-friendliness of a brand significantly influences my overall satisfaction with a purchase.	4.38	.708

Table 4.5 shows the descriptive analysis of the dependent variable customer behavior in purchasing green products. The mean value that has been collected from the respondents regarding customer behavior has shown from 4.08 to 4.47. Participants showcase an exceptionally high likelihood of recommending products based on eco-friendly messages, earning the highest mean score of 4.47. This underscores the persuasive power of sustainable marketing in garnering advocacy and word-of-mouth promotion among the target demographic. On the flip side, while still maintaining a positive stance, the lowest mean score of 4.08 reflects a strong willingness to pay a premium for marketed eco-friendly products. These findings collectively illustrate a promising landscape for businesses integrating eco-conscious practices into their marketing approach, fostering loyalty and positive consumer behavior among Gen Z undergraduates.

4.5 VALIDITY AND RELIABILITY TEST

Table 4.6 Reliability Test Results

Variab <mark>les</mark>	Cronbach's Alpha	No of Items	Level of Reliability
Sustainability Messaging	0.864	5	Strong
Green Product Offering	0.845	5	Strong
Eco-friendly Product Promotion	0.817	5	Strong
Consumer Behaviour in Purchasing Green Products	0.865	5	Strong

Sources: Calculation using SPSS version 27

Table 4.6 shows the Cronbach alpha results for each variable, this was confirmed further. Starting with "Sustainability Messaging" it received a test score of $\alpha=0.864$, placing it in the "strong" level. With a score of $\alpha=0.845$, "Green Product Offering" is considered "strong." In addition, this variable also shows a strong level, namely, "Ecofriendly Product Promotion" $\alpha=0.817$, and lastly "Consumer Behavior" were $\alpha=0.865$. Therefore, the researcher can conclude that the questionnaire items are acceptable, usable, and easy to understand for the respondents. The value of Cronbach's Alpha obtained for the variables are greater than 0.4 which is ranged from 0.817 to 0.865. Therefore, this indicates that the measurements for all variables are reliable in this study.

4.7 NORMALITY TEST

Researchers utilized the SPSS software to examine the results of normality tests. Given the substantial 370 respondents. The Kolmogorov-Smirnov normality test was chosen as N>30. The

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analysis revealed that all normality tests for both dependent and independent variables produced significant values of 0.01. Since 0.01 is less than 0.05, it suggests that the data is not normally distributed.

Table 4.7: Normality Test

Statistic	ogorov-Sn df	nirnov ^a Sig.	Statistic	shapiro-Wilk df	Sig.
	df	Sig.	Statistic	df	Sig.
.188	370	.000	.881	370	.000
.174	370	.000	.856	370	.000
.230	370	.000	.850	370	.000
.190	370	.000	.864	370	.000
	.190	.230 370	.230 370 .000 .190 370 .000	.230 370 .000 .850 .190 370 .000 .864	.230 370 .000 .850 370 .190 370 .000 .864 370

The data displays the findings of the normality test on the following four variables: consumer behavior in purchasing green products, sustainability messaging, green product offering, eco-friendly product promotion. The normality of these variables was assessed using the Shapiro-Wilk and Kolmogorov-Smirnov tests. Generally speaking, if "Sig." < 0.05, we may say that a variable is not normally distributed. Researchers seeking for findings from analyses of

normality tests find that all variables have Sig. <0.000. These findings demonstrate that there is no normal distribution pattern in the data for this variable. These variables vary greatly from the projected curve, hence statistical techniques that presume normalcy must be used cautiously since these distributions lack normality.



4.8 SPEARMAN'S CORRELATION COEFFICIENT

Table 4.8: Interpretation Size of Correlation Coefficient

The Strength of The Relationship	Spearman (P)
Very Strong Relationship	<u>≥</u> 0.70
Strong Relationship	0.40 To 0.69
Moderate Relationship	0.30 To 0.39
Weak Relationship	0.20 То 0.29
No Or Negligible Relationship	0.01 To 0.19

Source: Dancey and Reidy (2019)

The 3 independent variables and dependent variables were analyzed using Spearman's correlation coefficient. Furthermore, to identify the strength of the between IVs and DVs, interpretation from Dancey and Reidy (2019) was used. This analysis also is used to identify if the hypothesis can be accepted or rejected.



Table4.9: The Spearman's rho Correlation

Correlations								
		Consumer Behaviour in Purchasing Green Products	Sustainability Messaging	Green Product Offering	Eco-friendly Product Promotion			
Consumer Behaviour in	Correlation Coefficient	1.000	.832**	.761**	.769**			
Purchasing Green Products	Sig. (2-tailed)		.000	.000	.000			
Products	N	370	370	370	370			
Sustainability Messaging	Correlation Coefficient	.832**	1.000	.777**	.801**			
	Sig. (2-tailed)	.000		.000	.000			
	N	370	370	370	370			
Green Product Offering	Correlation Coefficient	.761**	.777**	1.000	.737**			
	Sig. (2-tailed)	.000	.000	ΓΊ	.000			
	N	370	370	370	370			
Eco-friendly Product	Correlation Coefficient	.769**	.801**	.737**	1.000			
Promotion	Sig. (2-tailed)	.000	.000	.000				
	N	370	370	370	370			
**. Correlation is	significant at the 0.	01 level (2-taile	ed).	IN	•			

Sources: Author Calculation using SPSS Version 27

4.9 HYPOTHESIS TESTING

Hypothesis testing can be defined as a tool of statistics that analyses the assumption regarding a parameter. This method is used in order to assess the plausibility of certain hypotheses by using sample data. There are two different test hypotheses which are null hypothesis and alternative hypothesis.

4.9.1 Hypothesis 1: The relationship between sustainability messages and consumer behaviour in purchasing green products.

Correlations							
				Consumer Behavior in Purchasing Green Products		Sustainability Messages	
Spearman's rho	Consumer Behavior	in	Correlation Coefficient		1.000	0.832**	
	Purchasing Green Products		Sig. (2-tailed)				
			N	382		382	
	Sustainability Messages	,		0.832**		1.000	
	IINI		Sig. (2-tailed)	CITI		·	
	UIN.	ΙV	N		382	382	
**. Correlation	on is significan	t at the	0.01 level (2-ta	ailed)			

The results of the correlation analysis indicate that the variables of sustainability messages and consumer behaviour in purchasing green products have a very strong relationship. A two-tailed test reveals a very strong relationship between these variables, as shown by the Spearman correlation value ρ =0.832. Additionally, our significance value of <0.000 indicates a very significant result. The correlation between sustainability messages and consumer behaviour in purchasing green products, with a sample size of

370, indicates that while one variable rises, the other tends to rise as well. A high correlation value indicates a considerable propensity for these variables to move together in a linear way. In general, hypothesis (H1) is approved.

4.9.2 Hypothesis 2: There is a significant relationship between Green Product
Offerings and Customer Behaviour in Purchasing Green Products.

Correlations							
			Customer Behaviour in Purchasing Green Products	Green Product Offerings			
	GD) (Correlation Coefficient	1.000	.761**			
CBM	CBMean	Sig. (2-tailed)		.000			
Spearman's		N	385	385			
rho	an out	Correlation Coefficient	. <mark>761**</mark>	1.000			
	GPOMean	Sig. (2-tailed)	.000	•			
		N	385	385			
**. Correlation	n is significant	at the 0.01 level (2	-tailed).				

The results of the correlation analysis indicate that the variables green product offerings and customer behaviour in purchasing green products have a significant relationship. A two-tailed test reveals a very strong relationship between these variables, as shown by the Spearman correlation value ρ =0.761. Additionally, our significance value of <0.000 indicates a very significant result. The correlation between green product offerings and customer behaviour in purchasing green products with a sample size of 370, indicates that while one variable rises, the other tends to rise as well. A high correlation

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value indicates a considerable propensity for these variables to move together in a linear way. In general, hypothesis H2 is agreed upon.

4.9.3 Hypothesis 3: There is a significant relationship between Eco-Friendly Product
Promotion and Customer Behaviour in Purchasing Green Products.

Correlations								
	CBMean EPPMean							
Spearman's rho		Correlati	ion (Coefficient	1.000	.769**		
	CBMean	Sig. (2-tailed)			.000			
		N		370	370			
	EPPMean	Correlati	ion (Coefficient	.769**	1.000		
		Sig. (2-tailed)		.000				
		N		370	370			
**. Correlation is significant at the 0.01 level (2-tailed).								

The results of the correlation analysis show that the variables eco-friendly product promotion and customer behaviour in purchasing green products have a significant relationship. A two-tailed test revealed a very strong relationship between these variables, as indicated by the Spearman correlation value ρ =0.769. Also, our significance value of <0.000 indicates a highly significant result. The correlation between eco-friendly product promotion and customer behaviour in purchasing green products, with a sample size of 370, shows that even when one variable increases, the other tends to increase as well. A high correlation value indicates a large tendency for these variables to move together in a linear fashion. In general, hypothesis H3 is accepted.

Table 4.10: Summary of Hypothesis Testing

Relationship			Correlation Coefficient	Sig. (2-tailed)	Correlation (Relationship)	Decision	
H1:	Sustainability	Messages	and	0.832	< 0.000	Very Strong	Accepted
	Consumer	Behaviour	in				
	Purchasing Gre	en Products					
H2:	Green Product Offerings and			0.761	< 0.000	Very Strong	Accepted
	Customer	Behaviour	in				
	Purchasing Green Products						
H3:	Eco-Friendly Product Promotion			0.769	< 0.000	Very Strong	Accepted
	and Customer	r Behaviour	in				
	Purchasing Gre	en Products					

Sources: Author Calculation using SPSS version 27

The study's outcome is in line with the premise that was put forward at the outset. Regarding the four variables which is, sustainability messages, green products offering, eco-friendly product promotion and customer behaviour in purchasing green products—all hypotheses are accepted. A very significant link is shown in all cases, with a significance value less than 0.001. Sustainability messages had the highest association with a correlation coefficient of ρ =0.832, followed by eco-friendly products promotion with a correlation coefficient of ρ =0.769. The variable with the lowest correlation among the three is green products offering, which has a little bit lowest (ρ =0.0.761). These three variables fit the description of having a very high correlation with consumer behaviour in purchasing green products. All of the factors are nonetheless classified as having a strong connection, albeit a strong one, with the dependent

variable consumer behaviour in purchasing green products. To sum up, all theories are acceptable.

4.10 SUMMARY

This chapter focuses on performing in-depth data analysis on the 370 research participants using the Statistical Package for the Social Sciences (SPSS). The chapter's first portion discusses descriptive analytical methods. Measures of central tendency and dispersion, among other key features of the dataset, are compiled and presented by the researcher using SPSS. The following section of the chapter examines reliability analysis and demonstrates how using SPSS facilitates assessing the internal consistency and reliability of measurement scales. The chapter also covers normality testing, outlining how researchers can assess the distributional characteristics of variables using SPSS. Subsequently, the focus switches to Spearman correlation analysis, showing how to examine the direction and magnitude of correlations between variables using SPSS. In order to enable readers to develop knowledgeable interpretations of the analyzed data, the chapter provides them with useful insights into the use of SPSS for data exploration, reliability assessment, correlation analysis, and normality testing.

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CHAPTER 5

DISCUSSION AND CONCLUSION

5.1: INTRODUCTION

This research paper is the discussion section, where the complex story of the findings is brought together. In this section, we review the significance and implications of the results, discuss possible limitations, relate the results to previous research, and provide insight into the broader implications of our work. We strive to present a comprehensive understanding of the studied phenomenon through a critical analysis of the evidence and synthesis of relevant hypotheses.

5.2 KEY FINDINGS

To begin with, the Dependent Variable is Consumer Behaviour in Purchasing Green Products. Meanwhile, there are three (3) Independent Variable that has been discussed in this research paper. The Independent Variables are Sustainability Messages, Green Product Offerings and Eco-Friendly Product Promotion. For the demographics, there are several aspects we discuss such as Age, Gender, Races, Year of Studies and Places of Study. For the highest percentage for Age is 44.94% which is from 21-23 years old. The highest percentage for Gender is Female which is 56.62%. The highest percentage for Races is Malay which is 54.55%. The highest percentage for a year of study is Year 4 which is 38.18%. Lastly the highest for Place of Study is UMK which is 33.25%.

The method that researchers use is quantitative which is the researchers required to collect data from surveys. Our target respondents are undergraduates from Malaysia. The sample size for this research paper is 382 and the population is 75000. By this figure, the number of

respondents will be between 380 and 400 approximately. We also use Google Form as our method tools to collect our data. The calculation will be conducted by using Krejcie and Morgan Sampling Method.

For the questionnaire, they are already divided into three (3) sections which are Section A, B and C. For Section A, the question is about the demographic of the respondents. Section B is about Dependent variable which is Customer Behaviour. Last section is about Independent Variables such as Sustainability messages, Green Product Offerings and Eco-friendly Product Promotion. Each Section for Section B and C, there are 5 different questions that require the respondents to answer using Likert Scale.

For the validity and reliability test, the value of Cronbach's Alpha obtained for the variables are greater than 0.4 which is ranged from 0.817 to 0.865. Therefore, this indicates that the measurements for all variables are reliable in this study. Meanwhile, the analysis revealed that all normality tests for both dependent and independent variables produced significant values of 0.000. Since 0.000 is less than 0.05, it suggests that the data is not normally distributed.

Next is correlation analysis. Through the correlation data that has been computed, consumer purchasing behaviour. Mean, sustainability messages mean, Eco-friendly Products Promotion Mean and Green Products Offering Mean, there positive relationship between Sustainability Messages Mean because the value is greater than 0.50 which means the value for SM Mean is 1.0, EPP Mean is 0.815 and the value for Green Products Offering Mean is 0.843. The hypothesis testing, there are three (3) sets of hypotheses testing that we can compute based on the data. For Hypothesis 1 (H1), there is a significant relationship between Customer Behaviour and Sustainability Messages which is the p-value of 0.000 which indicates below 0.5

significance threshold. For the Spearman Correlation, the value is indicated at 1.0 between customer behaviour in purchasing green products and Sustainability Messages.

Next is Hypothesis 2 (H2). There is a significant relationship between customer behaviour and Green Product Offerings which is the p-value of 0.000 which indicates below 0.5 significance threshold. For the Spearman Correlation, the value is indicated at 0.843 between customer behaviour in purchasing green products and Green Product Offerings. Last is for Hypothesis 3 (H3), There is significant relationship between Customer Behaviour in Purchasing Green Products and Eco-Friendly Product Promotion which is the p-value of 0.000 which indicate below 0.5 significance threshold. For the Pearson Correlation, the value is indicated at 0.815 between Customer Behaviour and Eco-Friendly Product Promotion.

5.3 DISCUSSION

5.3.1 Hypothesis 1

H1: There is a relationship between Customer Behaviour and Sustainability Messages.

Table 4.9 provided supports this hypothesis by indicating a strong relationship between Customer Behaviour in Purchasing Green Product and Sustainability Messages. Pearson Consumer behaviour's correlation with itself is 1, as would be predicted given self-correlation. Pearson Sustainability messages have a correlation of one with themselves, which is consistent with self-correlation. Customer behaviour and sustainability messages appear to have a strong and consistent association, as indicated by the correlation, which is considered significant at the 0.01 level (2-tailed). This result suggests that there is a high correlation between consumer behaviour and sustainability-related messaging.

Sustainability messaging are likely to have an impact on customers who display particular behaviours, and vice versa. This has substantial consequences for firms and marketers attempting to align their communications with customer values and preferences.

However, it is important to remember that correlation does not imply causality. Although a correlation suggests a relationship, it cannot pinpoint the influence's direction. According to Hypothesis 1, there is a strong correlation between customer behaviour and sustainability messages. This association provides useful information for companies looking to connect with customers that care about the environment.

5.3.2 Hypothesis 2

H2: There is a relationship between Customer Behaviour and Green Product Offerings

Table 4.9 provided supports this hypothesis by showing a strong positive relationship between Customer Behaviour and Green Product Offerings. Customer behaviour and green product offerings have a significant positive link, as shown by the Pearson link value of 0.843 between the two variables. A positive connection implies that there is a rise in Green Product Offerings in tandem with an increase in Customer Behaviour, and vice versa. According to this research, consumers are more likely to be drawn to and interested in green products if they engage in specific behaviours' both correlations, the Sig (2-tailed) value of 0.000 indicates the statistical significance of the correlation. The reliability of the association between customer behaviour and green product offerings is suggested by this number, which shows that it is improbable that the observed correlation happened by accident. This concept has important commercial and

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marketing ramifications. It implies that the success of green product offers may be significantly attributed to an awareness of and responsiveness to consumer behaviour. Businesses can effectively target and attract customers who are more likely to purchase green products by matching their product offerings with customer preferences and behaviour's. It's crucial to remember that a connection does not suggest a cause. The correlation does not prove a cause-and-effect link, but it does show a tie between customer behavior and green product offerings. The demand for and availability of green products may also be influenced by additional variables or circumstances.

5.3.3 Hypothesis 3

H3: There is relationship between Customer Behavior and Eco-Friendly Product

Promotion

Table 4.9 analysis reveals interesting insights. The perfect positive correlation between Customer Behavior and Eco- Friendly Product suggests that as customer behavior increases, there is a corresponding increase in the promotion of eco-friendly products. This implies that customers who exhibit certain behaviors are more likely to respond positively to eco-friendly product promotion efforts, and vice versa. The strong positive correlation between eco-friendly products and customer behaviour in purchasing green products further supports this relationship. The significant relationship between Customer Behaviour and Eco-Friendly Product Promotion suggests that businesses and marketers should focus on promoting eco-friendly products to customers who exhibit certain behaviours. By understanding and leveraging these relationships, companies can

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develop effective strategies to promote eco-friendly products and encourage positive customer behaviour towards sustainability.

5.4 IMPLICATIONS OF THE STUDY

In this research there are three variables used in this study, which is the strategies that have been studied by the previous researchers and reconfirmed that the information on sustainability messaging, green product offerings and eco-friendly products promotion have positive influence on consumer behaviour. Furthermore, the research findings have provided the opinion and feedback from Generation Z undergraduates in developing a more efficient and effective eco-friendly marketing strategies.

There are several implications to consider, which is customizing eco-friendly marketing approaches to resonate with Generation Z undergraduates demands a nuanced application of the principles. Recognized for their pronounced environmental awareness, Generation Z constitutes a distinctive consumer demographic with specific preferences and behaviors. In the first place, educational initiatives tailored for this group should encompass digital platforms, social media, and university curriculum to effectively convey the environmental consequences of their choices. Infusing sustainability-related content into their academic journey empowers Generation Z undergraduates to make informed and eco-conscious decisions, aligning with their deeply ingrained values.

Transparent and authentic communication holds particular importance when engaging with Generation Z. Esteeming authenticity, this cohort critically evaluates brands for their environmental assertions. For eco-friendly marketing to strike a chord, companies must not only adhere to sustainable practices but also transparently communicate these efforts. Leveraging

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social media platforms and other digital channels for clear and authentic messaging can help establish trust among Generation Z undergraduates. For example, brands can spotlight their commitment to sustainability through behind-the-scenes content, showcasing eco-friendly certifications, and straightforwardly communicating their environmental initiatives.

Innovative packaging solutions and accessibility are equally crucial when targeting Generation Z undergraduates. This tech-savvy generation appreciates innovation, making it imperative for brands to invest in sustainable and aesthetically pleasing packaging. Moreover, ensuring the accessibility and affordability of eco-friendly products is pivotal. Given that Generation Z often navigates student budgets, they respond positively to products that align with their values and are economically viable. Collaborating with universities and student organizations can create avenues for accessible eco-friendly options on campuses, cultivating a culture of sustainability among Generation Z undergraduates.

Adapting eco-friendly marketing strategies for Generation Z undergraduates involves aligning educational initiatives, transparent communication, and innovative packaging solutions with the distinct values and preferences of this environmentally conscious demographic. By comprehending and catering to the specific needs of Generation Z, businesses can adeptly navigate this dynamic consumer landscape and foster a sustainable marketplace.

5.5 LIMITATIONS OF THE STUDY

Limitations of the study are the design or methodological features that affect or influence the interpretation of research findings. Although the current study has been conducted successfully, some limitations have also been encountered by the researchers. One of the main limitations of this study is the difficulty of finding respondents promptly due to time constraints. This also

includes the possibility of respondents having no time to answer the questionnaires due to being occupied with daily work or hybrid classes which is certain classes must attend face to face and others must do online, making it impossible for the researchers to distribute the questionnaires face-to-face.

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Therefore, the researchers could only distribute the questionnaires through applications such as WhatsApp and Telegram. The next limitation of the study includes internet connection problem. As the questionnaires were administered online using Google Forms, some respondents might not be able to answer the questionnaires due to poor connections.

5.6 RECOMMANDATION/ SUGGESTION FOR FUTURE RESEARCH

Our recommendation to future researchers is to study consumer acceptance of environmentally friendly products. This is to get data on why consumers are less likely to get environmentally friendly products to use in their daily lives. Therefore, entrepreneurs producing environmentally friendly products must always conduct research on the community's acceptance and knowledge of environmentally friendly products. Therefore, as a researcher who is aware of the environment. In the meantime, it is advised to conduct a survey first before starting production operations to obtain authentic data related to knowledge and environmental impact.

In addition, the product marketing strategy is also very important to advertise so that the public gets to know and get used to the new products. In addition, before distributing the questionnaire, a clear explanation should be included and open to everyone. This means that this study is not only at Universiti Malaysia Kelantan. Besides that, must study in a broader scope to examine the concept of the environment. This is very important to attract customers to answer questionnaire. After carefully consider what we need to improve is like this suggestion, we hope

hopefully we can help researchers in the future to get respondents faster because the community becomes interested and wants to get products for them. Next, increase advertising related to the effects of the environment on life on earth. Therefore, the community needs to research and be knowledgeable in accepting any situation and condition as well as using it.

Based on what we do, the collection of data from respondents with quantitative methods is most effective and reliable. This is because our purpose is to study the influence of environmentally friendly marketing on consumer behavior in making purchases. In addition, the method of propagation. Online questionnaires help to quickly obtain data related to environmentally friendly marketing strategies as a satisfactory and complete response. The next research proposal is the issue and challenges in obtaining environmentally friendly goods. Ecofriendly marketing strategies such as campaigns to introduce eco-friendly products should be highlighted in universities. Studies on environmentally friendly products and marketing need to be studied in more detail.

5.7 OVERALL CONCLUSION OF THE STUDY

The purpose of the study, according to the researchers, is to investigate "The Influence Of Eco-Friendly Marketing Strategies On Consumer Behavior: A Case Study Among Generation Z Undergraduates". After that, the study relationship between dependent and independent variables must be examined. For example, there is a significant correlation between sustainability messages, environmentally friendly product offerings, eco-friendly product promotion, and customer purchasing behavior in generation Z undergraduates. The material we have studied has become the basis for our investigation. Furthermore, we are aware of the link or impact between each independent and dependent variable based on this investigation. For this research, a total of

370 participants completed our questionnaire created. Furthermore, we collected and analysed data using the Statistical Package for the Social Sciences (SPSS), normality test, reliability analysis, descriptive statistics, and correlation analysis.

In addition, based on the reliability check that has been made all the variables are higher than 0.8 and reach up to 0.9 and above. This shows the results in this study in excellent and categories are acceptable plus the researcher may conclude that respondents find questionnaire items to be appropriate, useful and easy to understand. It is explained that there is a strong relationship between marketing strategy and customer buying behaviour. We sincerely hope that all the information and results of this study can help the relevant parties, that is, consumers and parties that produce environmentally friendly goods and sustainability fighters to consumers out there for common good. Among the benefits is the openness of customers with marketing strategies such as sustainability messages which will increase the level and knowledge of customers about the importance of choosing environmentally friendly products and that both parties always consider the welfare of customers.

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REFERENCES

- Afroz, R., Rahman, A., Masud, M. M., & Akhtar, R. (2017). The knowledge, awareness, attitude and motivational analysis of plastic waste and household perspective in Malaysia. *Environmental Science and Pollution Research*, 24, 2304-2315.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, *50*(2), 179-211.
- Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies*, 2(4), 314-324.
- Alamsyah, D., Aryanto, R., Widjaja, V., & Rohaeni, H. (2021). The strategy of eco-friendly products with green consumer behavior: Development of green trust model. IOP Conference Series: Earth and Environmental Science,
- Alamsyah, D. P., Syarifuddin, D., & Mohammed, H. A. A. (2018). Green customer behavior on eco-friendly products: Innovation approach. *JDM (Jurnal Dinamika Manajemen)*, *9*(2), 159-169.
- Anonymous. (2000). Eco-friendly marketing. *Dairy Field*, 183(7), 14. https://www.proquest.com/trade-journals/eco-friendly-marketing/docview/232180754/se-2?accountid=51152
- Asare, M. (2015). Using the theory of planned behavior to determine the condom use behavior among college students. *American journal of health studies*, *30*(1), 43.
- Bandara, H., Lakmali, M., & Samaraweera, G. (2022). Impact of visual and verbal elements of eco-friendly packaging on consumer buying behavior. *Journal of Dry Zone Agriculture*, 8(1).
- Batubara, N. A. (2021). *An Analysis of Climate Apocalypse in Jenny Offill's Novel Weather: An Ecocriticism Approach* Universitas Sumatera Utara].
- Chen, H. L., Nath, T. K., Chong, S., Foo, V., Gibbins, C., & Lechner, A. M. (2021). The plastic waste problem in Malaysia: management, recycling and disposal of local and global plastic waste. *SN Applied Sciences*, *3*, 1-15.
- Conner, M., & Armitage, C. J. (1998). Extending the theory of planned behavior: A review and avenues for further research. *Journal of applied social psychology*, 28(15), 1429-1464.
- Godin, G., & Kok, G. (1996). The theory of planned behavior: a review of its applications to health-related behaviors. *American journal of health promotion*, 11(2), 87-98.
- Greaves, M., Zibarras, L. D., & Stride, C. (2013). Using the theory of planned behavior to explore environmental behavioral intentions in the workplace. *Journal of Environmental Psychology*, *34*, 109-120.
- Halinski, R. S., & Feldt, L. S. (1970). The selection of variables in multiple regression analysis. *Journal of Educational Measurement*, 7(3), 151-157.
- Harjadi, D., & Gunardi, A. (2022). Factors affecting eco-friendly purchase intention: subjective norms and ecological consciousness as moderators. *Cogent Business & Management*, *9*(1), 2148334.
- Krosnick, J. A. (2018). Questionnaire design. *The Palgrave handbook of survey research*, 439-455.
- Lorek, A. (2015). Current trends in the consumer behaviour towards eco-friendly products. *Economic and Environmental Studies*, *15*(2 (34)), 115-129.
- Mehraj, D., Qureshi, I. H., Singh, G., Nazir, N. A., Basheer, S., & Nissa, V. u. (2023). Green marketing practices and green consumer behavior: Demographic differences among young consumers. *Business Strategy & Development*.
- Pookulangara, S., Hawley, J., & Xiao, G. (2011). Explaining consumers' channel-switching behavior using the theory of planned behavior. *Journal of Retailing and Consumer Services*, 18(4), 311-321.

Reddy, K. P., Chandu, V., Srilakshmi, S., Thagaram, E., Sahyaja, C., & Osei, B. (2023). Consumers perception on green marketing towards eco-friendly fast moving consumer goods. *International Journal of Engineering Business Management*, 15, 18479790231170962.

Roopa, S., & Rani, M. (2012). Questionnaire designing for a survey. *Journal of Indian Orthodontic Society*, 46(4_suppl1), 273-277.

Sedgwick, P. (2012). Pearson's correlation coefficient. Bmj, 345.



APPENDIX A

Draft of Questionnaire



SURVEY OF THE INFLUENCE OF ECO-FRIENDLY MARKETING STRATEGIES ON CUSTOMER BEHAVIOR: A CASE STUDY AMONG GEN Z UNDERGRADUATES.

Dear Respondents,

This survey was conducted to examine 'The Influence of Eco-friendly Marketing Strategies on Customer Behavior: A Case Study Among Gen Z Undergraduates. Congratulations for being selected to answer this survey. Your opinion is very important in the complexity of the research. All information you provide is confidential and used for research purposes only. Thank you for taking the time to answer this survey.

Notes

Please note that participation in this survey is voluntary, you can withdraw by cancelling at any time and there will be no consequences. The information obtained will be kept anonymous and confidential and it will be used solely for academic purposes.

There is no risk associated with this survey, as we will not meet you personally and no name, contact information or IP address will be collected.

Any further information can contact researcher:

- 1. Nurul Anis Adlina Binti Abdullah (a20a1852@siswa.umk.edu.my)
- Khayal Velee A/P S. Ravindran (a20a1393@siswa.umk.edu.my)
- Muhammad Afizzudin Bin Othman (a20a1493@siswa.umk.edu.my)
- 4. Vik Shong Tham A/L Eh Sook (a20a2060@siswa.umk.edu.my)

Fakulti Kesusahawanan dan Perniagaan, Universiti Malaysia Kelantan.





TINJAUAN PENGARUH STRATEGI PEMASARAN MESRA ALAM TERHADAP TINGKAH LAKU PELANGGAN: KAJIAN KES DI KALANGAN SARJANA MUDA GENERASI Z.

Responden yang dihormati,

Tinjauan ini dijalan<mark>kan untuk</mark> mengkaji Kesan Strategi Pem<mark>asaran M</mark>esra Alam terhadap Tingkah Laku Pelang<mark>gan: Kajia</mark>n Kes Di Kalangan Siswazah Ge<mark>n Z.</mark>

Tahniah kerana terpilih untuk menjawab tinjauan ini. Pendapat anda sangat penting dalam kerumitan penyelidikan. Semua maklumat yang anda berikan adalah sulit dan digunakan untuk tujuan penyelidikan sahaja. Terima kasih kerana meluangkan masa untuk menjawab tinjauan ini.

Nota

Sila ambil perhatian bahawa penyertaan dalam tinjauan ini adalah secara sukarela, anda boleh menarik diri dengan membatalkan pada bila-bila masa dan tidak akan ada akibatnya. Maklumat yang diperolehi akan dirahsiakan dan ia akan digunakan semata-mata untuk tujuan akademik. Tiada risiko yang berkaitan dengan tinjauan ini, kerana kami tidak akan bertemu anda secara peribadi dan tiada nama, maklumat hubungan atau alamat IP akan dikumpulkan.

Sebarang maklumat lanjut boleh menghubungi penyelidik:

- 1. Nurul Anis Adlina <mark>Binti Abdul</mark>lah
- (a20a1852@siswa.umk.edu.my)
- 2. Khayal Velee A/P S. Ravindran
- (a20a1393@siswa.umk.edu.my)
- 3. Muhammad Afizzuddin Bin Othman
- (a20a1493@siswa.umk.edu.my)
- 4. Vik Shong Tham A/L Eh Sook
- (a20a2060@siswa.umk.edu.my)

Fakulti Keusahawanan dan Perniagaan, Universiti Malaysia Kelantan.

KELANTAN

SECTION A: DEMOGRAPHIC INFORMATION BAHAGIAN A: MAKLUMAT DEMOGRAFIK

	tick (/) at the appropriate answer.
Sila ta	ndakan (/) pad <mark>a jawapan y</mark> ang sesuai.
1.	Age/ Umur
	18-20 years/ tahun
	21-23 years/ tahun
	24-26 years/ <i>tahun</i>
2.	Gender/ Jantina
	Male/ Lelaki
	Female/ Perempuan
3.	Race/ Bangsa
	Malay/ Melayu
	Chinese/ Cina
	Indian/ India
	Native of Sabah and Sarawak
	Others/ Lain-lain.
4.	Year of Studies/ Tahun Pengajian
	Year 1/ Tahun 1
	Year 2/ Tahun 2
	Year 3/ Tahun 3
	Year 4/ Tahun 4
	Year 5/ Tahun 5
5.	Place of Study/ Tempat Belajar
	UMK
	UiTM

SECTION B: Dependent Variable (Customer Behaviour)

BAHAGIAN B: Pembolehubah bersandar (GelagatPelanggan)

Please respond to each item by ticking (/) one of the five (5) scales that reflects the influence of eco-friendly marketing strategies on customer behaviour among Gen Z undergraduates.

Berikan maklum balas bagi setiap item dengan menandakan (/) pada salah satu daripada lima (5) skala yang menggambarkan pengaruh strategi pemasaran mesra alam terhadap pengguna di kalangan sarjana muda Gen Z.

Strongly	Disagree/ Tidak	Neutral	Agree/ Setuju	Strongly Agree/
Disagree/	Setuju			Sangat Setuju
Sangat Tidak		4		
Setuju				
1	2	3	4	5

			Ratin	ng/ Per	nilaian	
No.	Statement/ Pernyataan					5
		1	2	3	4	3
1.	I am willing to pay a premium for marketed eco-					
	friendly products. / Saya bersedia untuk membayar			_		
	premium untuk produk mesra alam yang dipasarkan.		Π,			
	OTTIVE	1		ı.		
2.	The company's commitment to sustainability in its					
	marketing strategy greatly influenced my loyalty to					
	their eco-friendly products. / Komitmen syarikat	5 1	A			
	terhadap kemampanan dalam strategi pemasarannya					
	sangat mempengaruhi kesetiaan saya kepada produk					
	mesra alam mereka.	- 5	70.	T		
	KELANI	A		V		
3.	I am likely to recommend a product to others based					

	on eco-friendly marketing whose message really
	resonates with me. / Saya mungkin mengesyorkan
	produk kepada orang lain berdasarkan pemasaran
	mesra alam ya <mark>ng mesej</mark> nya benar-benar memberi
	kesedaran kepa <mark>da saya.</mark>
4.	I regularly consider the environmental impact of
	products before making a purchase decision. / Saya
	sering mempertimbangkan kesan alam sekitar sesuatu
	produk sebelum membuat keputusan pembelian.
5.	The eco-friendliness of a brand significantly
	influences my overall satisfaction with a purchase. /
	Kemesraan alam sekitar jenama ini sangat
	mempengaruhi kepuasan keseluruhan saya dengan
	pembelian.

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SECTION C: INDEPENDENT VARIABLES (IV) [SUSTAINABILITY MESSAGING, GREEN PRODUCT OFFERINGS, ECO-FRIENDLY PRODUCT PROMOTION] / BAHAGIAN C: PEMBOLEHUBAH BEBAS (IV) [MESEJ KELESTARIAN, PENAWARAN

T T

The items below are statement that reflect the influence of Eco-friendly marketing strategies among Gen Z undergraduates. / Perkara di bawah adalah pernyataan yang menggambarkan pengaruh strategi pemasaran mesra alam dalam kalangan mahasiswa Gen Z.

Strongly	Disagree/ Tidak	Neutral	Agree/ Setuju	Strongly Agree/
Disagree/	Setuju			Sangat Setuju
Sangat Tidak				
Setuju				
1	2	3	4	5

IV1: SUSTAINABILITY MESSAGING/ MESEJ KELESTARIAN

PRODUK HIJAU, PR<mark>OMOSI P</mark>RODUK MESRA ALAM]

No.	Statement/ Pernyataan	Rating/ Penilaian						
110.	Statement, Ternyalaan	1	2	3	4	5		
1.	I have seen many eco-friendly advertisements, whether on the internet or in reality. / Saya telah melihat banyak iklan mesra alam, sama ada di internet atau dalam realiti.	5 I	1	1				
2.	I am familiar with eco-friendly advertisement. / Saya biasa dengan iklan mesra alam.	Λ	N	ĭ				
3.	The messages from eco-friendly advertisement are really persuasive. / Mesej daripada iklan mesra alam	H	·I	N				

	benar-benar meyakinkan.			
4.	Environmentally friendly ads influence your purchase intentions. / <i>Iklan mesra alam mempengaruhi keinginan pembelian anda</i> .			
5.	The information about eco-friendly advertisement helps me to know about the environment. / Maklumat tentang iklan mesra alam membantu saya mengetahui tentang alam sekitar.			

IV2: GREEN PRODUCT OFFERINGS/ PENAWARAN PRODUK HIJAU

No.	Statement/ Permuataan	Rating/ Penilaian						
NO.	Statement/ Pernyataan	1	2	3	4	5		
1.	There are many eco-friendly products in the market. / Terdapat banyak produk mesra alam di pasaran.							
2.	Purchasing eco-friendly products helps me to reduce pollution. / Membeli produk mesra alam membantu saya mengurangkan pencemaran.	I	Т	I				
3.	I always get eco-friendly cutlery when buying food or drinks. / Saya sentiasa mendapat kutleri mesra alam apabila membeli makanan atau minuman.	5 1	A	1				
4.	The quality of eco-friendly products is similar to others. / Kualiti produk mesra alam adalah serupa dengan yang lain.	Α	. P	J				

5.	My first option is eco-friendly products. / Pilihan			
	pertama saya ialah produk mesra alam.			

IV3: ECO-FRIENDLY PRODUCT PROMOTION/ PROMOSI PRODUK MESRA ALAM

No.	Statement/ Pernyataan		Ratir	ng/ Per	nilaian	,
NO.	Statement Ternyalaan	1	2	3	4	5
1.	Eco-friendly products will be my choice if the					
	products get a discount. / Produk mesra alam akan					
	menjadi pilihan saya ji <mark>ka produk mend</mark> apat potongan					
	harga.					
2.	Environmental awareness campaigns among the					
	community can introduce more products that are safer					
	for the enviro <mark>nment. / Kempen kesedaran alam</mark>					
	sekitar dik <mark>alangan</mark> masyarakat dapat					
	memperkenalkan lagi produk-produk yang lebih					
	selamat untuk alam.					
	IIMIVEDS	T	Т	T		
3.	Various social media platforms such as Tiktok and	7.1	Т	T		
	Instagram can publish advertisements to introduce					
	various types of environmentally friendly daily goods					
	to the community. / Pelbagai platform media sosial		Λ			
	seperti Tiktok dan Instagram dapat menerbitkan iklan	7.1		7		
	bagi memperkenalkan pelbagai jenis barangan					
	harian yang mesra alam kepada masyarakat.					
	KELANT	Δ		J		
4.	Eco-friendly products such as straws, bottles and so	4 3				
	on can be promoted in fast food restaurants because					

	they have a higher influence to buy. / Produk mesra			
	alam seperti straw, botol dan sebagainya boleh			
	dipromosikan di r <mark>estora</mark> n makanan segera kerana ia			
	mempunyai pen <mark>garuh yan</mark> g lebih tinggi untuk dibeli.	1		
5.	I use eco-friendly products such as shopping bags			
	(tote bag) during grocery shopping. / Saya			
	menggunakan p <mark>roduk mesra</mark> alam seperti b <mark>eg</mark>			
	membeli-belah (tot <mark>e bag) semasa</mark> membeli- <mark>belah</mark>			
	runcit.			

END/ TAMAT

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APPENDIX B: GANTT CHART

BIL / DATE		ACTIVITES/		Pl	PTA	I		PPTA II									
		WEEK	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1.	8 Oct 2023	PPTA briefing for students															
2.	16 Oct 2023	Identify the issues/ problem of research															
3.	19 Oct 2023	Read article based on the study topic															
4.	20 0ct 2023	Group discussion about the finding related topic															
5.	22 Oct 2023	Basic report writing workshop via Zoom/ Google Meet platforms															
		Meet the supervisor to discuss about the group research title and determine the study objectives of the topic															
6.	23 Oct 2023	Group discussion about the base paper that needs to be used on the research project proposal															
		Find the related article with the topic															
7.	24 Oct 2023	Determine the title of the study and the base paper used															
8.	26 Oct 2023	Group writing on PPTA I															
9.	1 Nov 2023	First physical group meeting with supervisor															
10.	1 Nov 2023	First project proposal draft writing															
11.	6 Nov 2023	Do corrections															
12.	8 Nov 2023	Physical Class and submission of the research project proposal															
		draft to supervisor															
13.	10 Nov 2023	Submission for the correction draft to supervisor															
14.	16 Nov 2023	Submission of video presentation of research project proposal															

15.	17 Nov 2023	Do the pilot test							
16.	19 Nov 2023	Distributes the questionnaire to the respondents							
17.	2 Dec 2023	Data Collection							
18.	3 Dec 2023	Data analysis workshop via Zoom/ Google Meet platform							
19.	4 Dec 2023	Do the data analysis							
20.	10 Dec 2023	Data transfer							
21	25 Dec 2023	Group discussion about the research project for PPTA II							
22.	27 Dec 2023	Group writing on PPTA II							
		Complete all the chapters of research proposal project							
23.	1 Jan 2024	Check turnitin							
		Correction maker							
24.	15 Jan 2024	Submission for the final draft of the research project report to the							
		supervisor							
25.		Physical presentation of the project at COLLOQIUM				•			
		UNIVERS	1						
26.	20 Jan 2024	Final report submission process and overall evaluation							

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