

SUSTAINABLE DISPOSAL BEHAVIOUR TOWARDS  
FAST FASHION PRODUCTS AMONG GENERATION Z  
CONSUMERS

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BY

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## DECLARATION

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- (3) Sole contribution has been made by me in completing the FYP.
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## TABLE OF CONTENTS

Copyright @ 2024.....	i
DECLARATION .....	ii
ACKNOWLEDGEMENT .....	iii
TABLE OF CONTENTS.....	iv
LIST OF TABLES .....	viii
LIST OF FIGURES .....	ix
LIST OF ABBREVIATIONS.....	x
LIST OF APPENDICES.....	xi
PREFACE.....	xii
ABSTRACT.....	xiii
<b>CHAPTER 1: INTRODUCTION.....</b>	<b>1</b>
1.0 Introduction .....	1
1.1 Research Background.....	1
1.2 Research Problems .....	3
1.3 Research Objectives .....	4
1.3.1 General Objectives .....	4
1.3.2 Specific Objectives .....	5
1.4 Research Questions .....	5
1.5 Research Significance .....	6
1.5.1 Theoretical Significance of Study .....	6
1.5.2 Practical significance of study .....	6
1.6 Conclusion.....	7
<b>CHAPTER 2: LITERATURE REVIEW .....</b>	<b>8</b>
2.0 Introduction .....	8
2.1 Underlying Theories.....	8
2.1.1 Theory of Planned Behaviour.....	8
2.2 Review of Variables .....	9
2.2.1 Sustainable Clothing Disposal Behaviour .....	9
2.2.2 Environmental Attitudes.....	10
2.2.3 Social Norms .....	11
2.2.4 Perceived Behavioural Control.....	12
2.2.5 Environmental Economics Factors .....	13

2.2.6 Consumer Perceived Ethicality .....	14
2.3 Framework .....	15
2.4 Hypotheses Development.....	16
2.5 Conclusion.....	16
<b>CHAPTER 3: METHODOLOGY .....</b>	<b>17</b>
3.0 Introduction .....	17
3.1 Research Design.....	17
3.1.1 Quantitative Research.....	17
3.1.2 Descriptive Research .....	18
3.2 Sampling Design .....	18
3.2.1 Target Population .....	19
3.2.2 Sampling Frame and Location.....	19
3.2.3 Sampling Element.....	19
3.2.4 Sampling Technique .....	20
3.2.5 Sample Size .....	20
3.3 Data Collection Method .....	21
3.3.1 Primary Data.....	21
3.4 Research Instruments .....	21
3.4.1 Questionnaire Design .....	21
3.4.2 Operational Definition.....	23
3.4.3 Questionnaire Reliability.....	27
3.4.4 Questionnaire Validity.....	27
3.5 Construct Measurement.....	28
3.5.1 Nominal Scale.....	28
3.5.2 Ordinal Scale .....	28
3.5.3 Likert Scale.....	29
3.6 Pilot Test .....	29
3.7 Data Analysis Techniques.....	31
3.7.1 Descriptive Analysis.....	31
3.7.2 Scale Measurement.....	31
3.7.2.1 Internal Reliability Test .....	31
3.7.3 Inferential Statistic.....	32
3.7.3.1 Multiple Linear Regression Analysis.....	32
3.8 Conclusion.....	33
<b>CHAPTER 4: DATA ANALYSIS .....</b>	<b>34</b>



4.0 Introduction .....	34
4.1 Data Collection Process and Respond Rates .....	34
4.2 Descriptive Analysis .....	34
4.2.1 Demographic and Characteristics of Respondent.....	34
4.2.1.1 Gender.....	35
4.2.1.2 Age.....	36
4.2.1.3 Race.....	37
4.2.1.4 Frequency of buying fast fashion items.....	38
4.2.1.5 How many fast fashion items do you typically buy in a month?.....	39
4.2.1.6 Frequency of disposing fast fashion items that you no longer use. ....	40
4.2.1.7 How do you typically dispose of fast fashion items you no longer use?.....	41
4.2.2 Central Tendencies of Measurement .....	42
4.3 Inferential Analysis .....	43
4.3.1 Reliability Test .....	43
4.3.2 Multiple Regression Analysis.....	43
4.3.3 Hypothesis Testing .....	46
4.4 Conclusion.....	48
<b>CHAPTER 5: DISCUSSION, CONCLUSION, AND IMPLICATIONS .....</b>	<b>49</b>
5.0 Introduction .....	49
5.1 Summary .....	49
5.2 Discussion of Major Finding.....	50
5.2.1 Relationship Between Environmental Attitudes and Sustainable Disposal Behaviour.....	50
5.2.2 Relationship Between Social Norms and Sustainable Disposal Behaviour. ....	51
5.2.3 Relationship Between Perceived Behaviour Control and Sustainable Disposal Behaviour.....	52
5.2.4 Relationship Between Environmental Economic Factors and Sustainable Disposal Behaviour.....	52
5.2.5 Relationship Between Consumer Perceived Ethicality and Sustainable Disposal Behaviour.....	53
5.3 Implications of the Study .....	54
5.3.1 Theoretical Implications .....	54
5.3.2 Practical Implication.....	54
5.4 Limitations of Study.....	54
5.5 Recommendations for Future Research .....	55
5.6 Conclusion.....	55

<b>REFERENCES</b> .....	57
<b>APPENDICES</b> .....	75

## LIST OF TABLES

		Page
Table 3. 1	The Operational Definition of Independent Variables and Dependent Variable.....	24
Table 3.2	Cronbach’s Alpha Rules of Thumb.....	30
Table 3.3	Summary of Pilot Test Result.....	30
Table 4.1	Gender.....	35
Table 4.2	Age.....	36
Table 4.3	Race.....	37
Table 4.4	Frequency of buying fast fashion items.....	38
Table 4.5	How many fast fashion items do you typically buy in a month?.....	39
Table 4.6	Frequency of disposing fast fashion items that you no longer use.....	40
Table 4.7	How do you typically dispose of fast fashion items you no longer use?.....	41
Table 4.8	Summary of Mean and Standard Deviation.....	42
Table 4.9	Summary of Reliability Test.....	43
Table 4.10	p-value and the related significance level.....	44
Table 4.11	Model Summary.....	44
Table 4.12	ANOVA.....	45
Table 4.13	Coefficients.....	45
Table 5. 1	Hypothesis Testing Summary.....	50

## LIST OF FIGURES

	Page
Figure 1 Nexus of ESG and CSR.....	2
Figure 2.1 The Conceptual Framework Proposal.....	15
Figure 3. 1 Example of Nominal Scale.....	28
Figure 3. 2 Example of Ordinal Scale.....	29
Figure 3. 3 Likert Scale Measurement.....	29
Figure 4.1 Gender.....	35
Figure 4.2 Age.....	36
Figure 4.3 Race.....	37
Figure 4.4 Frequency of buying fast fashion items.....	38
Figure 4.5 How many fast fashion items do you typically buy in a month? .....	39
Figure 4.6 Frequency of disposing fast fashion items that you no longer use. ....	40
Figure 4.7 How do you typically dispose of fast fashion items you no longer use? .....	41

## LIST OF ABBREVIATIONS

Gen Z	Generation Z
TPB	Theory of Planned Behaviour
TRA	Theory of Reasoned Action
ESG	Environmental, Social, and Governance
CSR	Corporate Social Responsibility
$H_{A1}$	Hypothesis 1
$H_{A2}$	Hypothesis 2
$H_{A3}$	Hypothesis 3
$H_{A4}$	Hypothesis 4
$H_{A5}$	Hypothesis 5
EA	Environmental Attitudes
SN	Social Norms
PBC	Perceived Behavioural Control
EE	Environmental Economic Factors
PE	Consumer Perceived Ethicality
SDB	Sustainable Disposal Behaviour
RC	Recycle
RP	Repurpose
RU	Reuse
DN	Donation
ANOVA	Analysis of Variance
SPSS	Statistical Package for the Social Sciences

## LIST OF APPENDICES

	Page
Appendix 3.1	G* Power Application's Result for Determining
	Sample Size..... 75
Appendix 3.2	Questionnaire..... 76
Appendix 3.3	Pilot Test Results..... 92
Appendix 4.2	The mean and standard deviation of independent
	variables and the dependent variable for each scale
	item employed in the questionnaire, based on
	responses from 192 participants..... 93

## PREFACE

Fast fashion industry had significantly contributed negative impact on both environment and society worldwide. In response this concern, this research investigates the sustainable disposal behavior towards fast fashion products among Generation Z consumers. Through the collection of empirical data via self-administered questionnaires, this study able to determine the sustainable disposal behaviour. The findings offer potential information for fast fashion companies and policymakers to develop sustainable disposal strategies to address environmental harm and promote environmental responsibility within the industry. These reflections have enriched my understanding of the topic and deepened my appreciation for the research process.

## ABSTRACT

The fast fashion industry is often being criticised for its actions which causes environmental issues due to the increasing consumption of fast fashion products. To minimize the impact, consumers disposal behaviour of fast fashion products plays a critical role. This research investigates the sustainability disposal behaviour towards fast fashion products, with the focus of Generation Z consumers who been categorised as the largest user of fast fashion products. This research aims to determine the sustainable disposal behaviour towards fast fashion products among Generation Z consumers. Using quantitative research approach, empirical data were collected through self-administered questionnaires from a convenience sample of 192 Malaysian Gen Z consumers who had prior experience with disposal of fast fashion products. The study found perceived behavioural control, environmental economic factors and consumer perceived ethicality have highly significant effect on the sustainability disposal behaviour towards fast fashion products among Gen Z consumers, while environmental attitudes and social norm do not show significant impact. The study's findings provide valuable insights for fast fashion companies and policymakers in developing sustainable disposal strategies that aligned with Generation Z values, enhancing brand loyalty, and promoting environmental responsibility within the industry.



# **CHAPTER 1: INTRODUCTION**

## **1.0 Introduction**

This chapter provide an overview of research background, followed by the research problems and both general and specific objectives. Additionally, research questions are formulated, and their significance is discussed. The chapter concludes by emphasizing the importance of understanding Generation Z's disposal behaviour towards fast fashion products, underscoring its relevance to this study.

## **1.1 Research Background**

Fashion industry is currently undergoing transformation with the phenomenon known as “fast fashion”. It influences the consumer's fashion experience through its short production cycles, rapid response to emerging trends, and low-cost strategies. (Chaturvedi et al., 2020). The process from design conception to mass production is rapid for fast fashion products, allowing them to reach retail store shelves within a few weeks. This swift turnaround allows fashion retailers to stay abreast of ever-changing trends, providing consumers with a continuous supply of new styles at affordable prices.

However, the fast fashion industry is often being criticised for its actions which causes environmental issues. The increased consumption of fast fashion products is the driver of the wastage. According to (Horner, 2019), annual consumption of clothing has surged to 80 billion pieces, marking a 400% rise in just two decades. However, about 85% of these textiles are sent to landfill every year. The article (United Nations Environment Programme, 2022) discussed the fast fashion’s environmental impact, emphasizing the pollution, waste, and emissions it generates, contributing to the triple planetary crisis. (“AT WHAT COST?” n.d.) also indicates that the fast fashion industry contributes to the climate crisis, accounting for 10% of global carbon dioxide emissions. It highlights the fact that the process of garment production causes waste, wildlife harm, land degradation, and soil and water pollution. In addition to

environmental issues, the social issue of worker exploitation remains a concern in society. Inadequate wages, poor working conditions, child labour, and health hazards are the significant ethical challenge that reflect the exploitative nature of the fast fashion industry (Ross, 2021). To address these concerns, the United Nations (UN) has initiated the Alliance for Sustainable Fashion in 2019 (“UN Alliance for Sustainable Fashion Addresses Damage of ‘Fast Fashion,’” 2019), while the European Union (EU) has declared its goal to eliminate fast fashion by 2030 (“Our Wardrobe in 2030: Rented, Recycled and Regenerative,” 2022).

The rise of fast fashion trend demonstrated the negative consequences for both environmental and society. Recently, Environmental, Social, and Governance (ESG) practices have become a growing concern, emphasizing corporate social responsibility, eco-friendliness, ethics, and transparency worldwide (Singhania & Saini, 2021), (Nugroho et al., 2024). ESG includes a wide aspect of elements that combine corporate social responsibility (CSR) principles with organizational practices focused on governance and sustainability. ESG and CSR are different. CSR typically involves companies addressing social issues with internal motivations, with a primary focus on executing these initiatives, but its standards lack clarity and universality (Oh et al., 2024). Conversely, Nugroho et al. (2024) indicate that ESG builds upon CSR principles and translates them into tangible, measurable indicators beneficial for both investors and consumers. This quantifiable approach enables a more insightful assessment of a company's sustainability, ethical practices, and corporate governance, enhancing transparency and accountability. The concept of ESG and CSR is show in Figure 1 below:

Figure 1. Nexus of ESG and CSR.



Source: Nugroho et al. (2024)

In high rivalry fast fashion industry, companies are required to agile in responding to the evolving consumer demand. This underscores the importance of maintaining a positive

reputation as companies with favorable reputations tend to enjoy competitive advantage in sales and the overall management performance. As such, the fast fashion industry has increasingly recognized the strategic significance of integrating ESG activities into their sustainable management practices, given the growing emphasis on brand reputation, corporate reliability, and consumer preferences (Gupta, 2019; Jiménez-Zarco et al., 2019; Gwilt, 2020).

Generation Z (Gen Z), the largest demographics group, accounting for around 32% of the world's population (Djafarova & Bowes, 2021). In Malaysia, Gen Z also the largest age group, with 29% of the overall population (Tjiptono et al., 2020). According to (Saxena, 2024), (DIMOCK, 2019), (Hecht,2022), Gen Z refers to the younger generation who born between 1997 and 2012. Gen Z consumers hold importance within the fast fashion industry as the main target group of fast fashion giants (Gen Z Contradictions,” n.d.), (Sampson, 2022). Study conducted by (Djafarova & Bowes, 2021) also found that 41% of Gen Z consumers tend to make impulse purchases in the fashion industry. As the generation of digital natives, they are closely influenced by the fast-paced environment of social media and digital culture, resulting in rapid adoption of fashion trends. The affordability and quick changing styles offered by fast fashion is particularly attractive to Gen Z, who values fashion as a means of self-expression and experimentation with diverse looks and identity (Nguyetkiethu, 2023). Meanwhile, there is a growing awareness and emphasis on social and environmental issues among Gen Z. The study of (Soyer & Dittrich, 2021), (Gazzola et al., 2020), (Chaturvedi et al., 2020), (Brand et al., 2022) indicate that Gen Z are showing a notable interest in sustainable practices within the fashion industry. These practices are not only affecting their choices and behaviours as consumers but are also extending beyond purchasing decisions, significantly impacting their disposal behaviour throughout the lifecycle of clothing.

## **1.2 Research Problems**

According to (Adel et al., 2021), it indicates that TPB (Theory of Planned Behaviour) is widely being adopted and has explanatory power in the research regarding consumer behaviour. However, there is an argument regarding the existence of gaps in the relationship between the factors (attitudes, subjective norms, perceived behavioural control) and their subsequent behavioural intentions. Meta-analyses indicate that the TPB often predicts behavioural

intentions with less than 40% accuracy (Tamajón et al., 2018). Despite recognizing the general validity of the TPB, Ajzen (1991) suggested other related constructs could be incorporated into the TPB to strengthen it, (Hai et al., 2023) also emphasized that enhancing the model's explanatory power through the inclusion of additional variables can improve its applicability across diverse contexts. Tamajón et al., (2018) stated that including additional variables on top of the 3 factors might increase the explanatory value of the TPB model accountability, regardless of the contextual variations. Therefore, this study focuses solely on applying TPB and addresses this gap by incorporating environmental economic factors and consumer perceived ethicality to strengthen the explanatory power of the theory within the context of Gen Z consumers' sustainable disposal behaviour towards fast fashion products.

There has been a growing emphasis on ESG factors by both companies and society recently, indicating a shift towards more sustainable and ethical practices. While existing research has investigated the influence of perceived ESG on consumer behaviour, focusing primarily on behaviour such as purchase intentions and brand attitudes, loyalty, and image (Koh et al., 2022; Lee & Rhee, 2023; Yu et al., 2023; Nugroho et al., 2024), there is a noticeable gap in understanding the perceptions of Gen Z consumers and their disposal behaviour, particularly in the context of fast fashion industry. Given Gen Z's heightened awareness of ESG issues (Versace & Absy, 2022), it is essential to explore their perceptions. Therefore, this study aims to address this gap by examining their perceived ethicality influencing sustainable disposal behaviour towards fast fashion products within the framework of ESG.

## **1.3 Research Objectives**

### **1.3.1 General Objectives**

To determine the sustainable disposal behaviour towards fast fashion products among Generation Z consumers.

### **1.3.2 Specific Objectives**

- To determine the relationship between environmental attitudes and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.
- To determine the relationship between social norms and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.
- To determine the relationship between perceived behavioural control and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.
- To determine the relationship between environmental economic factors and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.
- To determine the relationship between consumer perceived ethicality and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.

### **1.4 Research Questions**

- Is there a relationship between environmental attitudes and sustainable disposal behaviour towards fast fashion products among Generation Z consumers?
- Is there a relationship between social norms and sustainable disposal behaviour towards fast fashion products among Generation Z consumers?
- Is there a relationship between perceived behavioural control and sustainable disposal behaviour towards fast fashion products among Generation Z consumers?
- Is there a relationship between environmental economic factors and sustainable disposal behaviour towards fast fashion products among Generation Z consumers?
- Is there a relationship between consumer perceived ethicality and sustainable disposal behaviour towards fast fashion products among Generation Z consumers?

## **1.5 Research Significance**

### **1.5.1 Theoretical Significance of Study**

This study extends the Theory of Planned Behaviour (TPB) to investigate the sustainable disposal behaviours among Generation Z consumers in the fast fashion industry, thereby significantly advancing theoretical understanding. In this study, environmental economic factors and consumer perceived ethicality had been added to the framework to examine the relationship of disposal behaviour. In addition, the integration of TPB within the environmentally conscious fast fashion industry offers insights on the unique impact of environmental attitudes, social norms, and perceived behavioural control on sustainable disposal behaviour. The study on specific generation, Gen Z, contributes to a comprehensive understanding of their behaviour of in disposal towards fast fashion products.

### **1.5.2 Practical significance of study**

Based on Horner (2019), United Nations Environment Programme (2022), (“AT WHAT COST?” n.d.), fast fashion had contributed to significant environment issue in recent years, therefore understanding consumer disposal behaviour towards fast fashion product is vital (Hassan et al., 2022). Despite the increasing environment conscious attitude among Gen Z consumer, the lack of implementations of company limits the success of the sustainability. Therefore, by conducting the research, it provides the crucial insights into the motivation of their disposal behaviour, empowering companies to conduct sustainable practices that meet not only Gen Z, but also the entire society expectation, thus creating brand loyalty. According to (Guerreiro & Pacheco, 2021), consumes tend to associate with the company that involved in sustainable practices, and avoid less sustainable brand.

Besides, clear standards for environmentally friendly practices are essential in the fast fashion industry, which is facing the pressure of environmental issues. According to Kyaw (2022), uncertainty in economic policy limits investment in environmental R&D, thus delaying the implementation of sustainability effort. In this case, the research can serve as a recommendation for standards improvement. For instance, it could propose issuing clearer

guidelines on how fashion products should be recycled. Simultaneously, policymakers may gain insights into consumers' preferences and challenges related to sustainable disposal behaviour through the research, enabling them to implement regulations that better align with consumer needs.

## **1.6 Conclusion**

In conclusion, fast fashion has been proven to pose threat to the environment and society, underscoring the urgent need for sustainable disposal practices. Therefore, understanding the sustainability disposal behaviour, particularly among Gen Z, the main consumer of fast fashion products, showed the significance in this study.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.0 Introduction**

Theory of Planned Behaviour (TPB) has been applied in this study to examine the relationship between several variables: environmental attitudes, social norms, perceived behavioural control, environmental economic factor, consumer perceived ethicality, and sustainable disposal behaviour.

### **2.1 Underlying Theories**

#### **2.1.1 Theory of Planned Behaviour**

Theory of Planned Behaviour (TPB) is a widely adopted framework for examining individual behavioural change. The TPB model originally stemmed from the Theory of Reasoned Action (TRA), assuming that behaviour is intentional and therefore can be predicted (Ajzen, 1991). However, the TPB evolved to incorporate the concept of perceived behavioural control, recognizing that behaviour is not always entirely voluntary or controllable (Ajzen & Fishbein, 1977). According to TPB, individuals' actions are influenced by three key factors: behavioural beliefs (beliefs regarding the likely outcomes of a given behaviour), normative beliefs (perceptions of what others expect), and control beliefs (beliefs about the presence of factors facilitating or hindering behaviour). Behavioural beliefs typically influence individual's attitude towards a particular behaviour, normative belief contribute to perceived social pressure or subjective norms, and control beliefs evoke perceived behavioural control (Vlastelica et al., 2023; Shin et al., 2018). Generally, the stronger the favourable attitude, subjective norm, and perceived control, the higher the likelihood that the individual tends to engage in the behaviour (Arafat & Ibrahim, 2018).

Many researchers have applied TPB in the fashion industry to study consumer purchase's intention and sustainable consumption (Chaturvedi et al., 2020), (Kim & Seock, 2019),



(Vlastelica et al., 2023). For example, Chaturvedi et al., (2020) investigate the factors that influencing intentions to buy recycled clothing among Generation Z. Also, Kim & Seock (2019) mainly used TPB to study the relationship of individual values and personal norms and their impact on pro-environmental apparel product purchasing behaviour. The study of Vlastelica et al., (2023) examined on the factors influencing sustainable clothing disposal behaviour among Gen Z. This involves utilizing clothing collection and recycling boxes placed within fashion retail stores. TBP is also a way to explore the different perspectives of the sustainable consumer behaviour, to understand the complication and multidimensions of the disposal and recycling related behaviour. The main methods applied along with TBP are qualitative and quantitative research. (Sheoran & Kumar, 2021).

## **2.2 Review of Variables**

### **2.2.1 Sustainable Clothing Disposal Behaviour**

The consumers involved in acquisition, consumption, and disposition in their consumption process. (Dommer & Winterich, 2021). Disposal is the process of the phase when consumers decide to stop using unwanted or still usable products. Sustainable disposal behaviour refers to disposal behaviour that aims to prolong the materials of a products, with minimizing the impact of disposal of the products to the environment and maximizing in utilization of the disposing product (Urmi,2023). The increasing environmental awareness of Generation Z consumers in the fast fashion industry has enhance sustainable disposal behaviours (Soyer & Dittrich, 2021), (Gazzola et al., 2020), (Chaturvedi et al., 2020), (Brand et al., 2022).

Disposal behaviour in clothing includes recycling, reuse, repurpose, donation, and resale. In this study, the clothing disposal behaviour is examined from these perspectives to analyse their relationships with the independent variables. Mills (2012) explained recycling is a process of turning not usable materials or waste into useful new products following the process of collecting, processing, and transforming used materials into raw materials; Reuse refers to the process of using a product again for the originally intended purpose; Repurpose refers to a combination of “reuse” and “recycle”, to recreate new value of the product. Donation refers to

an act of giving something to another party or individuals (Park et al., 2016); Resale refers to the act of selling the used items in exchange for monetary compensation.

### **2.2.2 Environmental Attitudes**

Environmental attitudes defined as an individual's level of concern about environmental issues (Fenitra et al., 2021). Studies suggest that pro-environmental attitudes and personality traits, such as agreeableness and openness are highly associated (Bukhari et al., 2018), (Hirsh, 2010). These attitudes play a pivotal role in influencing behaviors related to clothing disposal (Grębosz-Krawczyk & Siuda, 2019). Environmental concern acts as a psychological factor that significantly shapes how people choose to dispose of clothing and relate to the environment in their decision making (Cruz-Cárdenas & Arévalo-Chávez, 2017).

The study conducted by (Fenitra et al., 2021) found individuals who prioritise environmental concerns tend to engage in environmental behaviours, including clothing donation, and their environmental attitude affects the donation intention. Another study of (Joung & Park-Poaps, 2011) further enhances the insight of the influence of environmental attitudes on clothing disposal behaviour. In the study involving five motivational factors, including environment, have revealed the complex interactions that influence students' clothing disposal decisions. The findings highlight the critical role of environmental concerns in explaining resale and donation behaviour, implying that individuals with environmental concerns are more likely to behave in these actions.

Park (2016) studies on the relationship between attitudes of UK, China, and South Korea people towards recycling and environmental protection with their countries' clothing disposal behaviour correspondingly, it was found that environmental attitudes played an important role in affecting individuals' decision regarding sustainable disposal behaviour of clothing. The study also stated that factors such as recycling for purely eco-friendliness purpose and personal preference to contribute to eco-friendliness are two of the components that an environmental attitude person contains. Moreover, (Zhang et al., 2020) have conducted research on consumers' clothing disposal behaviours in Nanjing, China and the results indicate that attitudes towards environment are very significant to the sustainable clothing disposing behaviour intention.

### **2.2.3 Social Norms**

Social norms are shared standards of accepted behaviour within a society, playing an important role in shaping individual attitudes and actions (Pristl et al., 2020). These norms are recognized patterns of thinking, feeling, or behaviour that are accepted because they are believed to be proper. They constitute a set of rules, values, or standards collectively accepted by individuals in a social group that guide acceptable and desirable attitudes and behaviours associated with that group. (Dewanto et al., 2020). Social norms consist of both descriptive and injunctive elements. Descriptive elements indicate how people usually act, while injunctive aspects indicate what is socially approved and what is not.

To illustrate, when an individual lacks a distinctive opinion, they may adjust their behaviour to make it consistent with social norms to comply and cater the society, seeking to "fit in" with the prevailing expectations of the social environment. This social pressure is explained by (Borusiak et al., 2020). Additionally, the observation of an individual's contribution to a common goal enhances trust in the collaborative intentions of others, increases confidence in the achievement of desired outcomes, and positively influences an individual's willingness to contribute positively to collective pursuit (Hanss et al., 2016).

Numerous studies have identified that social norms play a significant role in influencing diverse behaviours within the context of sustainable practices in the fashion industry. (Kim & Seock, 2019) found that social norms are significantly associated with pro-environmentally friendly behaviour when the people around them, particularly family members and close friends, express approval for engaging in sustainable practices. While Hassan et al., (2022) investigated the factors affecting consumer's sustainable fashion consumption and the connect to sustainable disposal behaviour. They found social norms significantly influence sustainable fashion consumption, and there also a positive and significant correlation between sustainable fashion consumption and sustainable clothing disposal behaviour. In short, young consumer feel pressured from the information they receive from their peers, particularly regarding environmentally conscious practices, prompting them to align their behaviour with their peers.

## 2.2.4 Perceived Behavioural Control

Perceived behavioural control (PBC) is introduced under Theory of Planned Behaviour. It refers to consumers' perception regarding their ability to control a certain behaviour and their perception of the ease or difficulty of performing the behaviour (Ajzen, 1986). It indicates how confident a person is in carrying out a behaviour with their current ability including personal factors such as knowledge, skills, willpower, and mind control, and external factors such as time, available facilities, opportunities, and relevant parties' cooperation to carry out a behaviour (Mustafa et al., 2023). PBC is a necessary and directory variable to determine the TPB model behaviour intention.

In Taljaard (2015) research on male consumers' pro-environmental motivation, their self-confidence in engaging in pro-environmental activities such as recycling, and waste reduction planning significantly effect on whether they conduct the pro-environment actions. The research further explains male consumers tend to involve in pro-environmental actions if they believe they have the capability of doing it effectively and efficiently. They prefer to invest their time in activities that benefit the environment.

In another research of (Arkorful et al., 2021), perceived behavioural control and sustainability disposal behaviour have proved that the two variables are positively correlated where the higher the confidence the respondents possess, the larger their intentions to separate mask waste accordingly. This research explained that a less difficult action like separation of mask during disposal is the best method to identify whether the PBC of a person is affecting their disposal behaviour, which indicated this research data is highly reliable to become a reference for PBC research. In short, the research results showed difficulties of an action or behaviour significantly affect the intention of the people to conduct it.

Sonnenberg et al., (2022) examined the disposal behaviour of female consumers regarding apparel in South Africa. Through exploratory and confirmatory factor analyses, the research identified 8 factors including environmental consequences awareness, social norms, personal norms, PBC, attitudes, and willingness to contribute, resell, and participate in clothing

reuse/recycling. The result showed that PBC and sustainable disposal behavior, particularly donation, have a significant effect. Finally, the study of Vlastelica et al., (2023) also found that PBC was the most significant factor influencing consumers' sustainable disposal behaviour of used clothing.

### **2.2.5 Environmental Economics Factors**

The concept of environmental economics factors combines measurements of both environmental and economic concerns in a consumer's attitude and decision-making process. (Hanley et al.,2019). In the research of Hassan et al. (2022), it stated that consumers who choose resale in their disposal behaviour also preserve the environment, instead of solely emphasis on economic return. While economic factors, refers to the perceived economic incentives when conducting disposal. The economic reasons for the disposal behaviour have been discussed in this study, with the monetary behaviour focusing on the resale of unwanted clothes for financial gain. The study indicates that consumers who engage in this behaviour feel guilty when they do not utilize the benefits of clothing disposal, particularly a disposal method that could help them generate returns while protecting the environment.

In addition, the availability of sustainability programs encourages the sustainability disposal behaviour. (Farahani et al., 2021) pointed out that economic incentives such as discounts and giving of promotions can increase or lower the level of sustainable disposal behaviour. Certain initiatives like clothing recycling programs or returning of old garments can increase the rate at which consumers sustainably dispose of their fast fashion products. Further, imposed economic benefits like store credits on future purchases made can motivate individuals into participating in sustainable disposal practices (Mizrachi & Tal, 2022).

According to (Joung & Park-Poaps, 2011), stated that pro-environmental sustainability behaviour is positively influenced by various incentives, particularly monetary incentives. The author also stated that consumers participated in the online platforms to conduct their resale behaviour to gain monetary incentives. The result of a regression analysis among survey data showed that economic concerns in terms of money saving have significant relationship with resale and donation.

## 2.2.6 Consumer Perceived Ethicality

An ethical company is characterized by its commitment to avoiding harm to society, promoting social causes, and conducting its operations with accountability, responsibility, integrity, and honesty (Khan & Fatma, 2023; Fatma & Rahman, 2017). According to Li et al. (2021), in terms of ESG, environmental aspects might involve evaluating a company's environmental impact, such as its carbon footprint or waste management practices. Social factors illustrate through the elements like workforce freedom, workplace and customer health and safety, efficient supply chain management, etc. Governance factors typically examine the company's implementation of codes of conduct and business principles, engagement with stakeholders, etc. Many studies have pointed out the advantages for a company if it is perceived as ethical by stakeholders, potentially leading to benefits like increased purchase intention, brand trust, and brand loyalty (Fatma & Rahman, 2017; Amoako et al., 2021; Tanveer et al., 2021; Geetha et al., 2023; Zahira et al., 2023). In recent years, there has been a noticeable rise in the ethical consciousness of various stakeholders (i.e. customers, employees, investors, and the public) (Chouaibi & Affes, 2021). This growing awareness has led to an increased demand for companies to address ethical concerns and uphold corporate social responsibility practices, as ethics have been proven to positively influence corporate image (Chen et al., 2021).

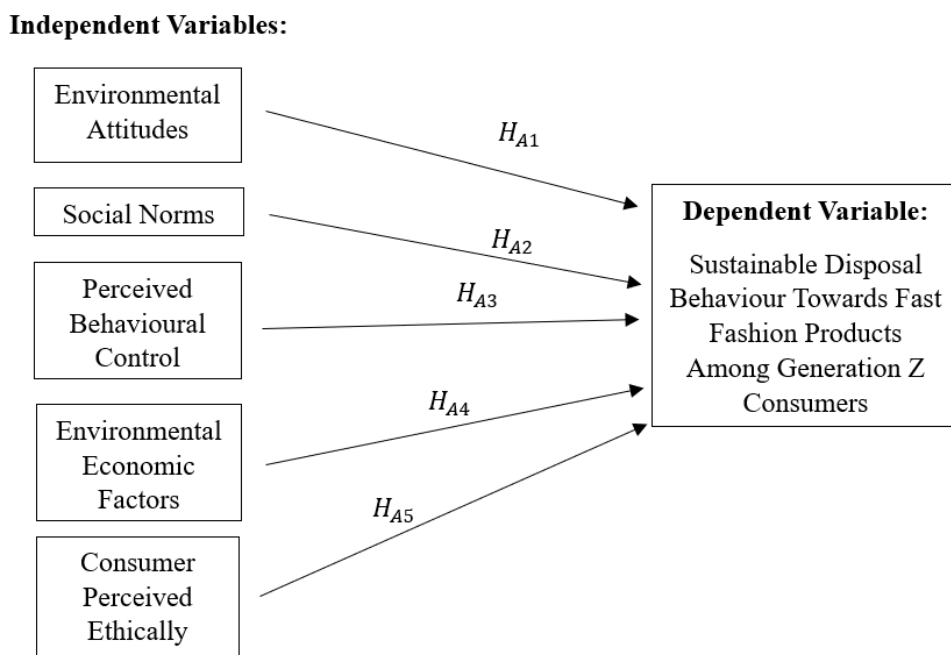
Consumer perceived ethicality (CPE) is a construct introduced by Brunk (2012). CPE refers to consumers form an overall perception of the morality associated with various subjects, including company, brand, product, or service, which can range from neutral to positive or negative. Brunk also categorized consumer attitudes and responses to a company's ethics into three main areas: (1) Perceived importance and attitude towards corporate ethics. (2) Sentiments towards business ethics. (3) Corporate associations. It demonstrates how customers gauge and evaluate the ethical behaviour of a company or brand through the lens of their own values, beliefs, and expectations (Brunk, 2010a, 2010b; Brunk, 2012).

The study of Kumar et al. (2022) found that corporate social responsibility (CSR) is a key factor that influencing consumer's perceived ethicality, and the research of Nugroho et al. (2024) found that perceived ESG factors exert a positive and statistically significant impact on

consumer behaviour. Therefore, when consumer perceived a company as ethical, they are more likely to attribute ethical efforts to the company, as consumers nowadays are seeking companies that align with their values and beliefs (Deep, 2023; Ilyas et al., 2022), thus influencing their behaviour. The study of Berki-Kiss & Menrad (2022) found that consumers are more inclined to purchase products that align with their ethical values and preferences, especially when they are more informed and emotionally connected to the ethical aspects of the products. Consequently, consumers who believe a product behaves ethically are inclined to feel positively about the brand (Zahira et al., 2023). Conversely, the study by Huang et al. (2021) highlights that when employees in the company display negative behaviour, consumers tend to perceive the organization as less ethical. Consequently, this perception influences consumers to exhibit negative behaviours. In essence, the study demonstrates that company behaviour can significantly affect consumer behaviour. This alignment extends to disposal behaviours, where consumers may feel motivated to support the company's commitment to sustainability by engaging in environmentally responsible practices.

## 2.3 Framework

Figure 2.1: The Conceptual Framework Proposal



Source: Formulated for the study

## **2.4 Hypotheses Development**

$H_{A1}$ : There is a relationship between environmental attitudes and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.

$H_{A2}$ : There is a relationship between social norms and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.

$H_{A3}$ : There is a relationship between perceived behavioural control and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.

$H_{A4}$ : There is a relationship between environmental economic factors and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.

$H_{A5}$ : There is a relationship between consumer perceived ethicality and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.

## **2.5 Conclusion**

In summary, 5 variables: Environmental Attitudes, Social Norms, Perceived Behavioural Control, Environmental Economics Factors, and consumer perceived ethicality have relationship with sustainable disposal behaviour towards fast fashion products among Generation Z consumers. In next chapter, the collection and analysis method are reviewed.



## **CHAPTER 3: METHODOLOGY**

### **3.0 Introduction**

In this chapter, research methods employed are discussed, including research design, sampling design, data collection methods, research instrument development, construct measurement, pilot testing, and data analysis techniques.

### **3.1 Research Design**

According to Riyaz Ansari et al. (n.d.), research design refers to a comprehensive framework that illustrates the methodology for conducting research. Well-designed research allow researcher to structure their work and execute study easily and efficiently.

#### **3.1.1 Quantitative Research**

Quantitative research is a methodological approach used to collect and analyze numerical data, with the aim of addressing research questions and measuring relationships among variables. This approach employs statistical techniques for analysis and involves gathering data through structured methods such as surveys and experiments (Kandel, 2020). According Younas et al. (2023), quantitative research is considered a critical research methodology in various fields, including health, social, and behavioural sciences. Researchers have also applied quantitative methods in their study on consumer behaviour (Han et al., 2022; Ittaquallah et al., 2020; Chauhan et al., 2021).

In this study, a quantitative approach is applied to study on the sustainable disposal behaviour towards fast fashion products among generation Z consumers. To obtain the results, numerical data will be collected from respondents via surveys, with questionnaires employed to gather quantitative information. The quantitative research offers systematic and precise techniques for

collecting numerical data, allowing researchers to generalize findings, identify patterns, and inform evidence-based decision-making in the study. (Kandel, 2020). By leveraging statistical techniques, researcher can assess the relationships between various variables and validate the hypotheses.

### **3.1.2 Descriptive Research**

Hunter, McCallum, and Howes (2019) outlined descriptive research serves as a tool for describing and summarizing data and is useful for characterizing the population being studied. Therefore, descriptive research is applied in this study. Section 2 of the questionnaire consists of screening questions designed to ensure that respondents meet the inclusion criteria for the study. The questions help to identify individuals within the target demographic, thus ensuring the relevant data is collected. Following the screening section, Section 3 focuses on demographic profiles, such as gender, age, race, the pattern, and frequency of disposal and purchasing behaviour. In section 4, it examines the sustainable disposal behaviour towards fast fashion products among generation Z consumers, with five variables including environmental attitudes, social norms, perceived behavioural control, environmental economic factors, and consumer perceived ethicality. Through the structure of the descriptive design, the research can investigate and analyze the relationships between the variables.

## **3.2 Sampling Design**

A sample is a smaller group of data selected from a larger group. The selected sample is considered as a representative of the population, and it allows the research to conclude about the larger group based on the characteristics of the sample (Deming, 1991). This section provides an overview of the target population, sampling frame, location, element, technique employed, and sample size.

### **3.2.1 Target Population**

The target population refers to the specific group of people that a research intervention aims to study and derive conclusions from (Barnsbee et al., 2018). To ensure the smooth survey process, the targeted population focus on Malaysia Generation Z who aged at 18 years old and above, those born between 1997 and 2016. This age range is chosen to account for the emerging interest in sustainable practices within the fashion industry among this demographic (Soyer & Dittrich, 2021), (Gazzola et al., 2020), (Chaturvedi et al., 2020), (Brand et al., 2022). Therefore, this study focuses on individuals within this target group who demonstrate awareness of sustainability when disposing of their purchased fast fashion products.

### **3.2.2 Sampling Frame and Location**

Sampling frame serves as the list from which units are selected to form the sample (Brown, 2010). In this research, there is no sampling frame. Instead, the online survey questionnaire on sustainable disposal behaviour towards fast fashion products among Gen Z consumers will be distributed to Malaysian respondents to fill out. Malaysia like many other countries, is affected by the fast fashion industry, which has been linked to overconsumption and unsustainable practices (Rosely & Syed Ali, 2023). Consequently, studying sustainable disposal behaviour in this context offers deeper understanding of the challenges and opportunities specific to Malaysia's interaction with the fast fashion industry.

### **3.2.3 Sampling Element**

This research sampling element is a Malaysian Generation Z consumer aged 18 to 27 (born between 1997 and 2006) who have experience in sustainable disposing of fast fashion products. Beyond age, there are no specific constraints regarding gender or race for respondents meeting this criterion.

### **3.2.4 Sampling Technique**

The focus of this study is on convenience sampling, which is a non-probability sampling method. Participants were selected based on their availability and accessibility. This method was selected because of the limited resources available in accessing the target population, and the lower cost and speed. However, this sampling technique may impose bias on the sample as the participants might not constitute a representative of the larger population (Emerson, 2021). Therefore, statistical tests and analyses will also be used to illustrate potential bias, and to improve the study's reliability and validity. In addition, the survey questions will be asked through an online platform, specifically Google Form, and the link will be sent or distributed to the participants. This method of data collection offers several advantages in terms of convenience, cost-effectiveness, and consistency, and can help to increase the quality and validity of the data collected, compared to other methods, such as paper-based surveys or face-to-face interviews.

### **3.2.5 Sample Size**

The statistical power of 0.95 and the minimum sample size required for this study were determined using G Power 3.1.9.7 software (Faul et al., 2007). According to the G Power calculation, the estimated sample size required for this study is 138 participants, based on effect size: 0.15 and a significance alpha level: 0.05 (Appendix 3.1). Meanwhile, Roscoe (1969) guidelines propose that for most behavioural studies, a sample size ranging from greater than 30 to less than 500 is appropriate, and Sekaran and Bougie (2016) caution that exceeding a sample size of 500 may increase the risk of committing a Type II error. Suhr (2006), as cited in Ali Memon et al. (2020), and Rahman (2023) highlight a common rule for sample-to-item(s) ratio, suggesting a minimum ratio of 5:1. Therefore, applying this rule, the study's questionnaire, comprising 33 items, requires a minimum sample size of 165 ( $33 \times 5 = 165$ ).

## **3.3 Data Collection Method**

### **3.3.1 Primary Data**

Primary data from 165 participants is being collected through an online survey with closed ended questions. Primary data provides researchers with precision, control, and freshness, enabling the collection of data directly related to the research question. This ensures accuracy and fosters the generation of new insights (Khuc, 2021). Therefore, primary data collection is ideal for examining the relationship between independent variables such as Environmental Attitudes (EA), Social Norms (SN), Perceived Behavioural Control (PBC), Environmental Economic Factors (EE), and Consumer Perceived Ethicality (CPE), and sustainable disposal behaviour among Generation Z consumers. This approach aids in gaining a deeper understanding of these relationships.

## **3.4 Research Instruments**

In this study, a self-administered questionnaire serves as the data collection technique. For the survey questionnaire, Google Forms was utilized to design the questionnaire. To ensure the attainment of diverse sample, the questionnaire was distributed online through various platforms, including social media platforms (Instagram, WhatsApp). Additionally, to facilitate accessibility and engagement, the questionnaire was distributed directly to Universiti Tunku Abdul Rahman (UTAR) students via Microsoft Teams. This strategic approach not only targets individuals within the desired age range but also ensures active participation from a demographic closely aligned with the research focus.

### **3.4.1 Questionnaire Design**

The self-administered questionnaire is structured and designed using English language and simple wording to enhance the clarity. Screening questions were integrated and direct them to submit their responses without further answering other questions. Moreover, multiple-choice,

and linear scale questions were incorporated in the questionnaire, facilitating quick and straightforward responses tailored to respondents' preferences. Furthermore, the questionnaire was divided into segments to enhance respondents' experience.

The sections are presented as follows:

- Section 1: Personal Data Protection Statement
- Section 2: Screening Question
- Section 3: Demographic and Characteristics of Respondent
- Section 4: Environmental Attitudes (EA)
- Section 5: Social Norms (SN)
- Section 6: Perceived Behavioural Control (PBC)
- Section 7: Environmental Economic Factors (EE)
- Section 8: Consumer Perceived Ethicality (PE)
- Section 9: Disposal Behaviour: Recycle (RC), Repurpose (RP), Reuse (RU), Donation (DN)

The details information and Section 1 regarding Personal Data Protection Statement were stated in the first page of the questionnaire. In section 2, screening questions had included to ensure that respondents meet the criteria for participation in the research. Section 3 of the questionnaire includes multiple-choice questions to gather demographic information and characteristics of respondents, including gender, age, race, frequency, and quantity of fast fashion purchases, as well as the frequency and methods of disposing of fast fashion items.

Section 4 to 8 serve as the independent variables in the study, including EA, SN, PBC, EE, and PE. These sections feature 5 Likert scale questions, allowing respondents to rate their agreement or disagreement with the statements. The scale ranges from 1 for “Strongly Disagree” to 5 for “Strongly Agree”. Finally, Section 9 of the questionnaire serves as the dependent variable in the study. This section focuses on sustainable disposal behaviour, including categories such as RC, RP, RU, and DN. By analyzing the data collected in Section 9, researchers can assess the impact of independent variables on respondents’ sustainable

disposal behaviour. This analysis helps to understand the factors influencing sustainable disposal behaviour among Generation Z consumers.

### **3.4.2 Operational Definition**

In this research, the focus lies in uncovering the relationship between the independent variables: EA, SN, PBC, EE, and PE and dependent variable: sustainable disposal behaviour (SDB) towards fast fashion products among Generation Z consumers.

Table 3. 1: The Operational Definition of Independent Variables and Dependent Variable

<b>Variable</b>	<b>Item</b>	<b>Statement</b>	<b>Source</b>
<b>Environmental Attitudes (EA)</b>	<b>EA1</b>	Preserving and protecting the environment should be one of our priorities.	Fenitra et al. (2021)
	<b>EA2</b>	If all of us, individually, made an environmentally responsible decision; it would have a significant effect.	Shim (1995)
	<b>EA3</b>	Environmental issues are very important to me.	
<b>Social Norms (SN)</b>	<b>SN1</b>	People who are important to me expect me to dispose of my clothing in an eco-friendly manner.	Sonnenberg et al. (2022)
	<b>SN2</b>	People who are important to me think that I should consider the environmental impact of throwing clothes in the dustbin.	
	<b>SN3</b>	People who are important to me expect me to get rid of old clothes	



<b>Perceived Behavioural Control (PBC)</b>	<b>PBC1</b>	For me, getting rid of old clothes in an environmentally friendly manner is easy.	Sonnenberg et al. (2022)
	<b>PBC2</b>	Recycling clothes is easy for me.	
	<b>PBC3</b>	I have a lot of options to get rid of old clothes in an environmentally friendly manner.	
	<b>PBC4</b>	I am confident that I would be able to recycle my old clothes.	
<b>Environmental Economic Factors (EE)</b>	<b>EE1</b>	I sell unwanted clothing to reduce garbage disposal problem.	Yee et al. (2016)
	<b>EE2</b>	I sell old garments for environmental reasons.	
	<b>EE3</b>	I resell clothing to recycle the garments that are in good condition.	
	<b>EE4</b>	I sell clothes for the money.	
	<b>EE5</b>	I sell much of clothing for economic reasons.	
<b>Consumer Perceived Ethicality (PE)</b>	<b>PE1</b>	The fast fashion company with which I have engaged complies with the moral norms.	Kumar et al. (2022) Ahn (2016)
	<b>PE2</b>	The fast fashion company with which I have engaged always adheres to the law.	
	<b>PE3</b>	The fast fashion company with which I have engaged is socially responsible.	
	<b>PE4</b>	The fast fashion company with which I have engaged avoids damaging behaviour at all costs.	
	<b>PE5</b>	The fast fashion company with which I have engaged is a good firm.	

<b>Sustainable Disposal Behaviour (SDB)</b>				
	<b>Recycle</b>	<b>RC1:</b> I donate garments in recycling bins (purpose is recycling).	Soyer & Dittrich (2021)	
		<b>RC2:</b> I take it back to the store to be recycled without receiving an incentive.		
	<b>Repurpose</b>	<b>RP1:</b> Before discarding clothes, I remove items such as labels, buttons, and zippers with the intention to use these again.		
		<b>RP 2:</b> I use it as rags for cleaning purposes.		
	<b>Reuse</b>	<b>RU 1:</b> I give clothes away to friends or family.		
		<b>RU 2:</b> I bring it back to the store in return for a purchase voucher.		
		<b>RU 3:</b> I sell garments via second-hand stores (online and offline).		
		<b>RU 4:</b> I swap clothes via the online platform.		
		<b>RU 5:</b> I swap clothes with friends or family.		
	<b>Donation</b>	<b>DN 1:</b> I would be willing to donate old clothing to be more pro-environmental.		Sonnenberg et al. (2022)
		<b>DN 2:</b> I would be willing to donate old clothing to reduce environmental consequences.		
		<b>DN 3:</b> I would be willing to donate old clothing to be more sustainable.		
		<b>DN 4:</b> I would be willing to donate old clothing to reduce waste.		

Source: Formulated for the study

For EA, a total of 3 items were incorporated, with 2 items adopted from Fenitra et al. (2021) and 1 item from Shim (1995). SN and PBC constructs were adopted from Sonnenberg et al. (2022), contributing 3 and 4 items respectively to the questionnaire. Additionally, EE were

sourced from Yee et al. (2016), constituting 5 items in total. PE was assessed using 5 items adopted from Kumar et al. (2022) and Ahn (2016).

For SDB, incorporating 13 construct items. 2 items each for Recycle and Repurpose, and 5 items for Reuse are all sourced from Soyer & Dittrich (2021), along with 4 construct items for donation sourced from Sonnenberg et al. (2022).

### **3.4.3 Questionnaire Reliability**

Data screening and cleaning have been applied to enhance the reliability of questionnaire data. These essential processes involve identifying and rectifying outliers, missing data, response errors, and inconsistencies, ensuring the accuracy and consistency of the dataset. By checking for data distribution and ensuring clarity and consistency in survey questions, the reliability of the findings is improved. Moreover, cleaned, and screened data are easier to interpret, contributing to the overall credibility of the research results.

### **3.4.4 Questionnaire Validity**

In this study, both construct validity and content validity were assessed. Middleton (2023) indicates construct validity examines whether the test effectively measures the intended theoretical construct or concept, while content validity was assessed to guarantee the comprehensiveness and accuracy of questionnaire, ensuring that no crucial elements were overlooked. To ensure the validity of the content and construct, pilot test will be performed to evaluate questionnaire's clarity, identify any potential misrepresentations in the questions formulated by the researchers.

## 3.5 Construct Measurement

### 3.5.1 Nominal Scale

Mishra et al., (2018) indicate nominal scale does not involve meaningful rankings or orders, and the values do not carry any inherent numerical significance. In this research, nominal scale is employed in section 2 and 3 of the questionnaires. Yes-or-no question, nationality and brand purchases or the option of not purchasing are used to screen out the targeted respondents. While section 3, employs nominal scale for demographic profile in terms of gender, race, and methods of disposal of fast fashion product.

Figure 3. 1: Example of Nominal Scale

**Does your birth year fall between 1997 and 2006?**

Yes

No

Sources: Research Survey Questionnaire

### 3.5.2 Ordinal Scale

Ordinal Scale Data allows for ranking or sorting based on specific attributes, but the distinctions between each category may not be uniform or measurable (Mishra et al., 2018). The Section 3 of the survey employs this scale to examine demographic factors: age, the frequency, and quantity of fast fashion purchases, as well as the frequency and methods of disposing of fast fashion items.

Figure 3. 2: Example of Ordinal Scale

**Frequency of buying fast fashion items.**

- Once a week
- Once a month
- Once every 6 months
- Once a year

Sources: Research Survey Questionnaire

### **3.5.3 Likert Scale**

The survey structure of this research was inspired by (Sonnenberg et al., 2022), (Yee et al., 2016), (Fenitra et al., 2021), therefore, 5-point Likert scale measurements, will continue to employ the same scale in this study and it is employed in section 4 to Section 9 of the questionnaire. The 5-point Likert scale is used to identify the relationship between independent variables and dependent variable.

Figure 3. 3: Likert Scale Measurement

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

Sources: Research Survey Questionnaire

### **3.6 Pilot Test**

Pilot test had been conducted before the distribution of the survey questionnaire to the actual target population. (Soori, 2024) indicates that pilot test aims to determine the feasibility and effectiveness of the study design and methodology. It is characterized by its smaller scale

compared to the main study, serving as an early indication to enhance the quality and efficiency of the subsequent investigation (In, 2017). Cronbach’s Alpha is applied to test the reliability and validity of the questionnaire’s questions.

**Table 3.2: Cronbach’s Alpha Rules of Thumb**

<b>Alpha Coefficient Range</b>	<b>Internal Consistency</b>
$\alpha \geq 0.9$	Excellent
$0.8 \leq \alpha < 0.9$	Good
$0.7 \leq \alpha < 0.8$	Acceptable
$0.6 \leq \alpha < 0.7$	Questionable
$0.5 \leq \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable

Source: Cronbach (1951)

To achieve minimum sample size of 165 respondents, a pilot test with 30 participants will be conducted. Once 30 respondents have been gathered, the questionnaire's reliability and validity will be assessed using IBM SPSS (Statistical Package for the Social Sciences) software.

Based on Appendix 3.3, the pilot test result summarized in Table 3.3 shows that one variable demonstrates acceptable reliability, while the other five exhibit good internal consistency, with Cronbach’s Alpha values above 0.8.

**Table 3.3: Summary of Pilot Test Result**

Variables	Cronbach’s Alpha	No. of Items	Internal Consistency
Environmental Attitudes (EA)	0.811	3	Good
Social Norms (SN)	0.892	3	Good
Perceived Behavioural Control (PBC)	0.799	4	Acceptable
Environmental Economic Factors (EE)	0.852	5	Good
Consumer Perceived Ethicality (PE)	0.856	5	Good
Sustainable Disposal Behaviour	0.842	13	Good

Source: SPSS Pilot Test Result Formulated for the Study

## **3.7 Data Analysis Techniques**

This study utilized IBM SPSS software to convert raw data to useful statistic. Additionally, a multiple regression analysis will be performed to ascertain the correlation between independent variables and the dependent variable. This study employed diverse data analysis methods to gain insights into the population from a specific sample.

### **3.7.1 Descriptive Analysis**

Descriptive analysis is advantageous for researchers conducting studies on large samples, as it allows for easy analysis (Kemp et al., 2018). This study utilized pie charts and bar charts to illustrate the frequencies discovered in the investigation.

### **3.7.2 Scale Measurement**

#### **3.7.2.1 Internal Reliability Test**

Reliability and validity are essential in research because they ensure that the data and results obtained are accurate, consistent, and meaningful. (Sürücü & Maşlakçı, 2020). In this study, Cronbach's Alpha was utilized for evaluating the data's internal consistency. The rules of thumb presented in Table 3.2 indicate that a value of 0.7 or higher signifies acceptable internal consistency, while a value of 0.8 or higher suggests good internal consistency, indicating that the data can produce consistent results for the study. Meanwhile, IBM SPSS software is employed to minimize random errors in the questionnaires and ensure the production of consistent results.

### 3.7.3 Inferential Statistic

Inferential statistics allow researchers to predict population characteristics by analysing sample data and drawing conclusion from it (Wooditch et al., 2021). Amrhein et al. (2019) also utilize the obtained findings to assess the influence of the independent variables on the dependent variable. Therefore, Multiple Linear Regression Analysis will be employed in this study.

#### 3.7.3.1 Multiple Linear Regression Analysis

Multiple linear regression serves as a statistical tool utilized for analysing the relationship between several independent variables and a dependent variable. It aims to predict, explain, and quantify the relationship and degree of interdependence among multiple variables (Cui et al., 2022). In this study, Multiple Linear Regression Analysis will assess the impact of five independent variables: environmental attitudes (EA), social norms (SN), perceived behavioural control (PBC), environmental economic factors (EE), and consumer perceived ethicality (PE) on the single dependent variable: sustainable disposal behaviour towards fast fashion products among Generation Z consumers.

Multiple regression Equation:

$$y = a + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 \dots \dots \dots$$

Parameter meaning:

y=dependent variable

a=constant value/ y-intercept

$\beta$ = unstandardized coefficient

x =independent variables

Equation:

$$\widehat{SDB} = a + \beta_1 EA + \beta_2 SN + \beta_3 PBC + \beta_4 EE + \beta_5 PE$$



Whereby,

SDB=Sustainable Disposal Behaviour

EA=Environmental attitudes

SN=Social norms

PBC= Perceived behavioural control

EE= Environmental economic factors

PE= Consumer Perceived ethicality

### **3.8 Conclusion**

The methodology chapter outlines the research approach, including quantitative and descriptive research designs, primary data collection, and convenience sampling. Prior to the main research, a pilot test was conducted. Multiple Linear Regression Analysis was employed to assess the relationship between independent variables and dependent variable. Chapter 4 will present the data analysis for the research.

## **CHAPTER 4: DATA ANALYSIS**

### **4.0 Introduction**

This chapter analyse the collected data using quantitative analysis techniques. It includes descriptive analysis, reliability analysis, and multiple regression analysis. Finally, hypothesis testing is conducted.

### **4.1 Data Collection Process and Respond Rates**

A Google Forms-based online self-administered survey was utilized to gather data from Gen Z. The questionnaire was distributed online through various platforms, including Microsoft Teams and social media platforms (Instagram, WhatsApp). A total of 250 questionnaires were distributed, but only 208 responses were collected. Out of these, only 192 responses were accepted; five respondents declined to disclose their personal data, while the remaining rejected respondents had not passed the screening questions or had chosen options that directed them to submit their responses without further answering other questions. Therefore, the response rate was calculated to be 76.8%.

### **4.2 Descriptive Analysis**

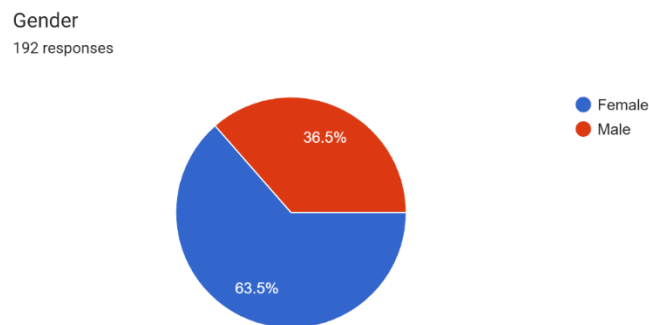
#### **4.2.1 Demographic and Characteristics of Respondent**

This analysis encompasses two main components: respondent demographics and characteristics. The demographic profile includes gender, age, and race. Additionally,

respondents were asked two questions each regarding their purchasing habits and disposal practices to gather general information on their consumer behaviour.

#### 4.2.1.1 Gender

Figure 4.1: Gender



Sources: Research Survey Questionnaire Result

Table 4.1: Gender

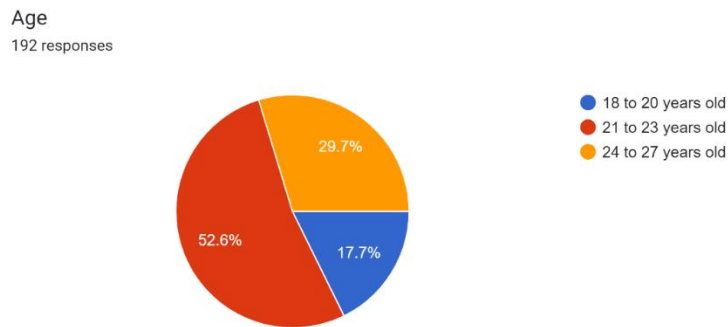
		Gender			Cumulative Percent
		Frequency	Percent	Valid Percent	
Valid	Female	122	63.5	63.5	63.5
	Male	70	36.5	36.5	100.0
	Total	192	100.0	100.0	

Source: Researcher SPSS Result

According to Figure 4.1 and Table 4.1, the results indicate that most respondents are female, accounting for 63.5%, with males comprising 36.5%.

#### 4.2.1.2 Age

Figure 4.2: Age



Source: Research Survey Questionnaire Result

Table 4.2: Age

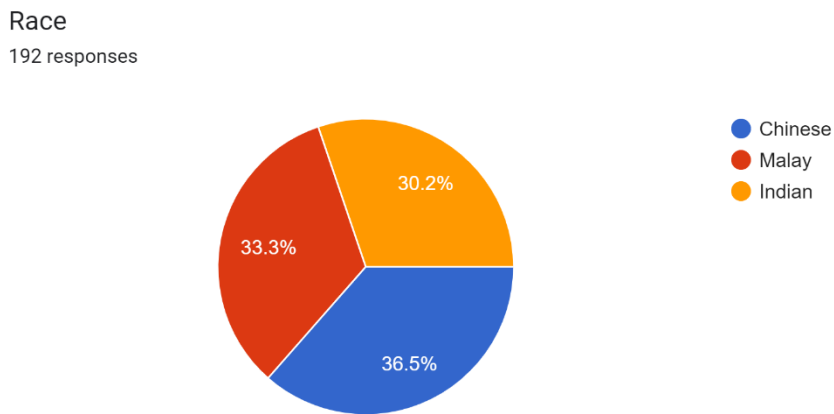
		Age			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 to 20 years old	34	17.7	17.7	17.7
	21 to 23 years old	101	52.6	52.6	70.3
	24 to 27 years old	57	29.7	29.7	100.0
Total		192	100.0	100.0	

Source: Researcher SPSS Result

Figure and Table 4.2 reveal that among Generation Z respondents, those aged 21 to 23 years old constitute the largest percentage at 52.6%, followed by the age group of 24 to 27 years old at 29.7%, with those aged 18 to 20 years old representing 17.7%.

### 4.2.1.3 Race

Figure 4.3: Race



Source: Research Survey Questionnaire Result

Table 4.3: Race

		Race			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Chinese	70	36.5	36.5	36.5
	Indian	58	30.2	30.2	66.7
	Malay	64	33.3	33.3	100.0
	Total	192	100.0	100.0	

Source: Researcher SPSS Result

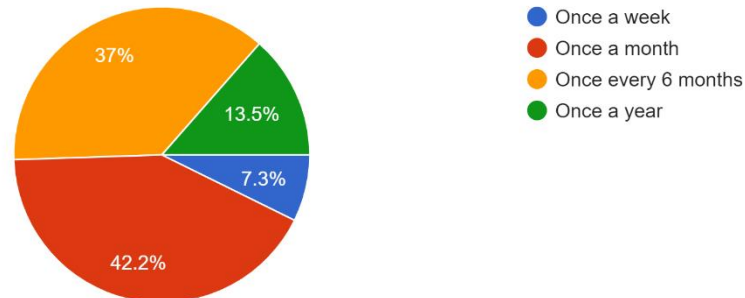
Among the respondents, the highest proportion is Chinese at 36.5%, followed by Malay at 33.3%, and Indian at 30.2%.

#### 4.2.1.4 Frequency of buying fast fashion items.

Figure 4.4: Frequency of buying fast fashion items

Frequency of buying fast fashion items.

192 responses



Source: Research Survey Questionnaire Result

Table 4.4: Frequency of buying fast fashion items

**Frequency of buying fast fashion items.**

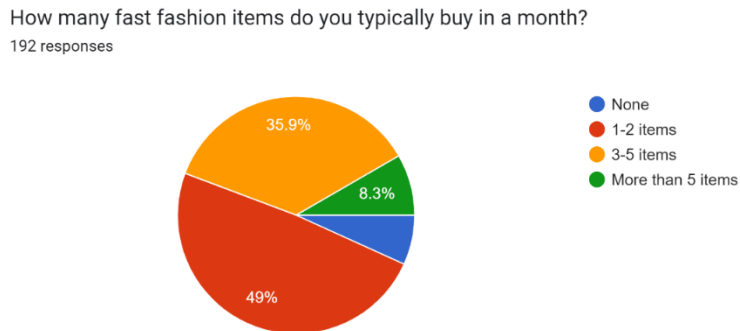
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Once a month	81	42.2	42.2	42.2
	Once a week	14	7.3	7.3	49.5
	Once a year	26	13.5	13.5	63.0
	Once every 6 months	71	37.0	37.0	100.0
	Total	192	100.0	100.0	

Source: Researcher SPSS Result

Result shows the most common purchasing frequency among respondents is once a month, accounting for 42.2% of respondents. This is followed by 37% who buy fast fashion items once every six months, 13.5% who purchase them once a year, and only 7.3% who buy them once a week.

#### 4.2.1.5 How many fast fashion items do you typically buy in a month?

Figure 4.5: How many fast fashion items do you typically buy in a month?



Source: Research Survey Questionnaire Result

Table 4.5: How many fast fashion items do you typically buy in a month?

**How many fast fashion items do you typically buy in a month?**

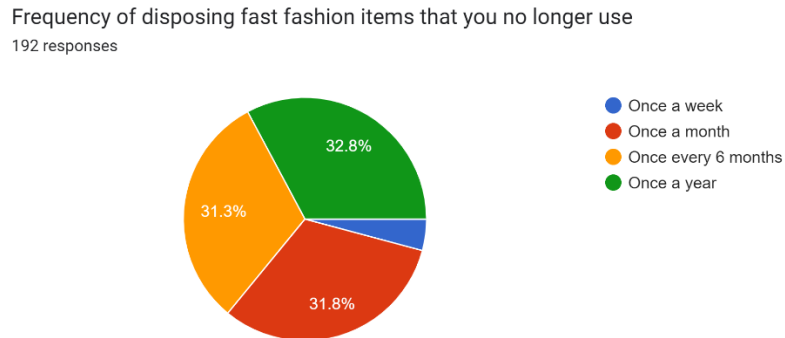
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-2 items	94	49.0	49.0	49.0
	3-5 items	69	35.9	35.9	84.9
	More than 5 items	16	8.3	8.3	93.2
	None	13	6.8	6.8	100.0
Total		192	100.0	100.0	

Source: Researcher SPSS Result

Result indicates that in a month, 49% of respondents tend to buy 1-2 fast fashion items, while 35.9% buy 3-5 items. Additionally, 8.3% of respondents purchase more than 5 items, and only 6.8% do not buy any fast fashion items in a month.

#### 4.2.1.6 Frequency of disposing fast fashion items that you no longer use.

Figure 4.6: Frequency of disposing fast fashion items that you no longer use.



Source: Research Survey Questionnaire Result

Table 4.6: Frequency of disposing fast fashion items that you no longer use.

#### Frequency of disposing fast fashion items that you no longer use

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Once a month	61	31.8	31.8	31.8
	Once a week	8	4.2	4.2	35.9
	Once a year	63	32.8	32.8	68.8
	Once every 6 months	60	31.3	31.3	100.0
	Total	192	100.0	100.0	

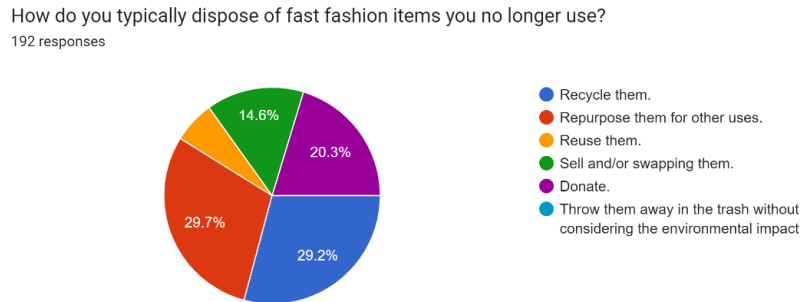
Source: Researcher SPSS Result

Result in Figure and Table 4.6 show, 32.8% of Generation Z respondents dispose of fast fashion items they no longer use once a year. Notably, the frequencies of disposal once a month and once every six months are almost identical, differing by just one respondent. Additionally, a small percentage, 4.2% of respondents, dispose of fast fashion items once a week.



#### 4.2.1.7 How do you typically dispose of fast fashion items you no longer use?

Figure 4.7: How do you typically dispose of fast fashion items you no longer use?



Source: Research Survey Questionnaire Result

Table 4.7: How do you typically dispose of fast fashion items you no longer use?

**How do you typically dispose of fast fashion items you no longer use?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Donate.	39	20.3	20.3	20.3
	Recycle them.	56	29.2	29.2	49.5
	Repurpose them for other uses.	57	29.7	29.7	79.2
	Reuse them.	12	6.3	6.3	85.4
	Sell and/or swapping them.	28	14.6	14.6	100.0
	Total	192	100.0	100.0	

Source: Researcher SPSS Result

The result shows that the repurpose disposal method for fast fashion items they no longer use holds the highest percentage at 29.7%, closely followed by recycle at 29.2%, and donate at 20.3%. A notable 14.6% of respondents choose to sell and/or swap their unused fast fashion items, while only 6.3% choose to reuse them.

## 4.2.2 Central Tendencies of Measurement

Table 4.8 summarized the mean and standard deviation of each independent variables, including Environmental Attitudes (EA), Social Norms (SN), Perceived Behavioural Control (PBC), Environmental Economic Factors (EE), and Consumer Perceived Ethicality (PE), and dependent variable sustainable disposal behaviour (SDB) among Generation Z consumers. These statistics are based on SPSS Results shown in Appendix 4.2.

Table 4.8: Summary of Mean and Standard Deviation

<b>Variables</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>N</b>
Environmental Attitudes (EA)	4.24	0.8577	192
Social Norms (SN)	4.07	0.8783	192
Perceived Behavioural Control (PBC)	4.1725	0.841	192
Environmental Economic Factors (EE)	3.904	1.019	192
Consumer Perceived Ethicality (PE)	4.086	0.8356	192
Sustainable Disposal Behaviour	4.1292	0.8999	192

Source: Formulated for the study

Based on Table 4.8, most of the independent variables and the dependent variable have a mean value greater than 4.0, except for EE (3.904). This indicates that participants generally hold positive attitudes or perceptions towards the factors represented by these variables. However, the lower mean value for EE suggests that participants perceive environmental economic factors to have a comparatively lower influence on sustainable disposal behaviour.

A small standard deviation indicates data points are close to the mean and less variability or spread in the data, while when the standard deviation is large, the data points are more widely dispersed from the mean (*Finding and Using Health Statistics*, n.d.). Based on Table 4.8, most of the independent variables and the dependent variable have standard deviations less than 1,

indicating a higher level of agreement or consistency in their attitudes and perceptions towards EA, SN, PBC, and PE. A standard deviation greater than 1 for EE indicates that there is significant diversity in participants' perceptions.

## 4.3 Inferential Analysis

### 4.3.1 Reliability Test

Table 4.9: Summary of Reliability Test

Variables	Cronbach's Alpha	No. of Items	Internal Consistency
Environmental Attitudes (EA)	0.744	3	Acceptable
Social Norms (SN)	0.785	3	Acceptable
Perceived Behavioural Control (PBC)	0.791	4	Acceptable
Environmental Economic Factors (EE)	0.841	5	Good
Consumer Perceived Ethicality (PE)	0.753	5	Acceptable
Sustainable Disposal Behaviour (SDB)	0.859	13	Good

Source: Researcher's SPSS Result

According to Table 3.2,  $\alpha \geq 0.7$  is considered reliable. The results presented in Table 4.9 indicate that all five independent variables: EA, SN, PBC, EE, and PE, and dependent variable: SDB, have Cronbach's Alpha values ranging from 0.744 to 0.859. This confirms the reliability of all the variables in this study, enabling further analysis.

### 4.3.2 Multiple Regression Analysis

In the statistical testing process, p-values are computed to assess the significance of the findings, indicating whether there is a correlation between the variables (SCHMIDT & OSEBOLD,

2017). When there is substantial evidence against the null hypothesis, it is rejected, necessitating consideration of an alternative hypothesis. Table 4.10 provides details on the p-values and their corresponding levels of significance.

Table 4.10: p-value and the related significance level

<b>Significance Level</b>	<b>Specification</b>
p>0.05	Not significant
p≤ 0.05 * (5%)	Significant
p≤ 0.01** (1%)	Very Significant
p≤ 0.001*** (0.1%)	Highly Significant

Source: (Das & Das, 2023), (SCHMIDT & OSEBOLD, 2017)

According to (Nieminen, 2022), unstandardized coefficient  $\beta$  represents the change in the dependent variable associated with a one-unit change in the independent variable, while holding all other variables constant. A positive beta coefficient indicates that as the predictor variable increases by one unit, the dependent variable is expected to increase by the value of the beta coefficient; A negative beta coefficient indicates that as the predictor variable increases by one unit, the dependent variable is expected to decrease by the value of the beta coefficient (Statistics Solutions, n.d.).

Table 4.11: Model Summary

**Model Summary<sup>b</sup>**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.812 <sup>a</sup>	.659	.649	4.28465

a. Predictors: (Constant), EA, SN, PBC, EE, PE

b. Dependent Variable: SDB

Source: Researchers' SPSS Result

According to Table 4.11, an R-squared value is 0.659 suggesting that approximately 65.9% of the variation in sustainable disposal behaviour (SDB) can be attributed to the variance in the

five independent variables: EA, SN, PBC, EE, PE. The remaining 34.1% of the variance remains unexplained by these factors. This implies the existence of additional factors influencing sustainable disposal behaviour towards fast fashion products.

**Table 4.12: ANOVA**

**ANOVA<sup>a</sup>**

Model		Sum of Squares	d f	Mean Square	F	Sig.
1	Regression	6585.691	5	1317.138	71.746	<.001 <sup>b***</sup>
	Residual	3414.637	186	18.358		
	Total	10000.328	191			

a. Dependent Variable: SDB

b. Predictors: (Constant), EA, SN, PBC, EE, PE

Source: Researcher's SPSS Result

Table 4.12 shows the result of Analysis of Variance (ANOVA), which is employed in regression analysis to assess the regression model's overall significance. The F value of 71.746 and significant value of <0.001 indicate a significant overall effect of the set of independent variables on the dependent variable.

**Table 4.13: Coefficients**

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.945	2.425		4.514	<.001
	EA	.371	.194	.107	1.912	.057
	SN	-.124	.192	-.038	-.645	.520
	PBC	.596	.164	.217	3.624	<.001***
	EE	.789	.094	.436	8.356	<.001***
	PE	.694	.154	.284	4.506	<.001***

a. Dependent Variable: SDB

Source: Researcher's SPSS Result

### **Model**

$$\widehat{SDB} = 10.945 + 0.371 EA + (-0.124) SN + 0.596 PBC + 0.789 EE + 0.694 PE$$

Assuming all other variables remain constant,

One-unit increase in EA is associated with an increase of 0.371 in SDB.

One-unit increase in SN is associated with a decrease of 0.124 in SDB.

One-unit increase in PBC is associated with an increase of 0.596 in SDB.

One-unit increase in EE is associated with an increase of 0.789 in SDB.

One-unit increase in PE is associated with an increase of 0.694 in SDB.

Therefore, based on the magnitudes of the coefficients, EE seems to have the largest impact on SDB, followed by PE, PBC and then EA. SN has a negative coefficient, indicating negative relationship with SDB, and it has the smallest magnitude among the variables.

### **4.3.3 Hypothesis Testing**

The following hypotheses testing is based on the result in Table 4.13.

#### **Hypothesis 1**

$H_{01}$ : There is no relationship between environmental attitudes and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.

$H_{A1}$ : There is a relationship between environmental attitudes and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.

Reject  $H_{01}$  if p-value < 0.05.

The significant value of environmental attitudes is 0.057, which is > 0.05, therefore do not reject  $H_{01}$ . This indicates there is no relationship between environmental attitudes and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.

## **Hypothesis 2**

**$H_{02}$** : There is no relationship between social norms and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.

**$H_{A2}$** : There is a relationship between social norms and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.

Reject  **$H_{02}$**  if p-value < 0.05.

The significant value of social norms is 0.520, which is > 0.05, therefore do not reject  **$H_{02}$** . This indicates there is no relationship between social norms and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.

## **Hypothesis 3**

**$H_{03}$** : There is no relationship between perceived behaviour control and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.

**$H_{A3}$** : There is a relationship between perceived behaviour control and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.

Reject  **$H_{03}$**  , if p-value  $\leq$  0.001

The significant value of perceived behaviour control is < 0.001, therefore reject  **$H_{03}$** . This indicates there is a relationship between perceived behaviour control and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.

#### **Hypothesis 4**

**$H_{04}$** : There is no relationship between environmental economic factors and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.

**$H_{A4}$** : There is a relationship between environmental economic factors and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.

Reject  **$H_{04}$**  , if p-value  $\leq 0.001$

The significant value of environmental economic factors is  $<0.001$ , therefore reject  **$H_{04}$** . This indicates there is a relationship between environmental economic factors and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.

#### **Hypothesis 5**

**$H_{05}$** : There is no relationship between consumer perceived ethically and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.

**$H_{A5}$** : There is a relationship between consumer perceived ethically and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.

Reject  **$H_{05}$**  , if p-value  $\leq 0.001$

The significant value of consumer perceived ethically is  $<0.001$ , therefore reject  **$H_{05}$** . This indicates there is a relationship between consumer perceived ethically and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.

## **4.4 Conclusion**

Overall, this chapter analyses the data by presenting relevant patterns of the results and analyses that effectively address all study questions and objectives. The findings provide valuable insights into the research topic.



# **CHAPTER 5: DISCUSSION, CONCLUSION, AND** **IMPLICATIONS**

## **5.0 Introduction**

The major finding is summarized and discussed in this chapter. Moreover, study implications for both theoretical and practical aspects are emphasized, and research limitations and recommendations are suggested.

## **5.1 Summary**

Based on the result in Chapter 4, most of the respondent in this study were females aged 21-23, with the majority Chinese. The most common frequency of purchasing fast fashion items is once a month, with most respondents buying 1-2 items in a month. In terms of disposal behaviour, respondents commonly disposed of unused fast fashion items once a year, with a notable preference for repurposing as a sustainable practice.

Based on Table 4.8, most of the independent variables and the dependent variable have a mean value greater than 4.0 and standard deviations less than 1, except for EE (mean =3.904, standard deviations greater than 1).

For inferential analysis, Cronbach's Alpha was employed in evaluating the reliability of the variables. The result confirms the reliability of all the variables in this study.

In addition, Multiple Regression Analysis was conducted. Table 4.11 shows an R-squared value of 0.659, indicating that approximately 65.9% of the variation in sustainable disposal behaviour (SDB) can be attributed to the variance in the five independent variables: EA, SN, PBC, EE, PE. In Table 4.12, the F-value is 71.746 with significant value of <0.001, indicating a significant overall effect of the set of independent variables on the dependent variable.

Table 4.13 reveals that environmental economic factors (EE) have the most significant impact on sustainable disposal behaviour (SDB) with highest coefficients  $\beta$  of 0.789 and highest t value=8.356, followed by Consumer Perceived Ethicality (PE) and Perceived Behavioural Control (PBC). Conversely, Environmental Attitudes (EA) and Social Norms (SN) is not significant towards sustainable disposal behaviour as their significant value is 0.057 and 0.520 respectively, which is  $>\alpha=0.05$ .

## 5.2 Discussion of Major Finding

Table 5. 1: Hypothesis Testing Summary

Research Objectives	Hypothesis	Result	Supported / Rejected
To determine the relationship between environmental attitudes and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.	<b>H<sub>A1</sub>:</b> There is a relationship between environmental attitudes and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.	$\beta = 0.371$ t-value= 1.912 p-value= 0.057 (>0.05)	<b>Rejected</b>
To determine the relationship between social norms and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.	<b>H<sub>A2</sub>:</b> There is a relationship between social norms and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.	$\beta = - 0.124$ t-value= - 0.645 p-value= 0.520 (>0.05)	<b>Rejected</b>
To determine the relationship between perceived behavioural control and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.	<b>H<sub>A3</sub>:</b> There is a relationship between perceived behaviour control and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.	$\beta = 0.596$ t-value=3.624 p-value= <0.001 ( $\leq 0.001$ )	<b>Supported</b>
To determine the relationship between environmental economic factors and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.	<b>H<sub>A4</sub>:</b> There is a relationship between environmental economic factors and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.	$\beta = 0.789$ t-value=8.356 p-value= <0.001 ( $\leq 0.001$ )	<b>Supported</b>
To determine the relationship between consumer perceived ethicality and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.	<b>H<sub>A5</sub>:</b> There is a relationship between consumer perceived ethicality and sustainable disposal behaviour towards fast fashion products among Generation Z consumers.	$\beta = 0.694$ t-value=4.506 p-value= <0.001 ( $\leq 0.001$ )	<b>Supported</b>

Source: Formulated for the study

### 5.2.1 Relationship Between Environmental Attitudes and Sustainable Disposal Behaviour.

Based on the result, there is no relationship between environmental attitudes and sustainable disposal behaviour towards fast fashion products among Generation Z consumers ( $\beta = 0.371$ , t-

value=1.912,  $p= 0.057 >0.05$ ), leading to the failure to reject the null hypothesis(  $H_{01}$  ). The result is inconsistent with the previous research by Joung & Park-Poaps (2011), Park (2016), Cruz-Cárdenas & Arévalo-Chávez (2017) Grębosz-Krawczyk & Siuda (2019), Zhang et al. (2020 and Fenitra et al. (2021) that found relationship between environmental attitudes and sustainable behaviour. This may be attributed to other motivations or constraints that exert a stronger influence on Gen Z's disposal behaviour than their environmental attitudes alone. The result of this study revealed that environmental economic factors, which encompass considerations related to both environmental preservation and economic returns, emerged as the most significant relationship among the variables.

Overall, the research objective and research question 'Is there a relationship between environmental attitudes and sustainable disposal behaviour towards fast fashion products among Generation Z consumers?' in this study were not achieved due to the insignificant results obtained."

### **5.2.2 Relationship Between Social Norms and Sustainable Disposal Behaviour.**

The result indicates that there is no relationship between social norms and sustainable disposal behaviour towards fast fashion products among Generation Z consumers ( $\beta= -0.124$ ,  $t\text{-value}= - 0.645$ ,  $p= 0.520 >0.05$ ), resulting in not rejecting the null hypothesis(  $H_{02}$  ). This indicates that Gen Z engagement in sustainable disposal behaviour is not significantly influenced by social norms. This is contrasting with the study of Kim & Seock (2019) and Hassan et al., (2022) provided before. Melnyk et al. (2021) found that the effect of social norms can vary across different behaviours and cultural contexts, thus adding complexity to the association between social norms and sustainability behaviour. The study also indicates an increasing influence of social norms on behaviours that are not socially approved, especially in societies that prioritize traditional values and survival. Moreover, the way social norms are communicated, like through specific groups or organizations, and the existence of financial costs, affect how people adhere to these norms.

Overall, the research objective and research question “Is there a relationship between social norms and sustainable disposal behaviour towards fast fashion products among Generation Z consumers?” were not achieved due to the insignificant results obtained.

### **5.2.3 Relationship Between Perceived Behaviour Control and Sustainable Disposal Behaviour.**

Result indicates highly significant relationship between perceived behaviour control and sustainable disposal behaviour towards fast fashion products among Generation Z consumers. ( $\beta = 0.596$ ,  $t\text{-value} = 3.624$ ,  $p < 0.001$  ( $\leq 0.001$ ), leading to the rejection of the null hypothesis ( $H_{03}$ ). This finding is supported by the studies of Taljaard (2015), Arkorful et al. (2021), Sonnenberg et al. (2022), and Vlastelica et al. (2023), which highlighted that perceived behavioural control affect consumers’ engagement in sustainable disposal behaviour. The result indicates that when Gen Z is confident in their capabilities, particularly if they have access to necessary resources, they tend to engage in sustainable disposal behaviour. Conversely, if they perceive sustainable disposal actions as difficult, such as limitations in accessing facilities like recycling bins, it can hinder their engagement in sustainable behaviours.

Therefore, the research objective and research question 'Is there a relationship between perceived behaviour control and sustainable disposal behaviour towards fast fashion products among Generation Z consumers?' in this study were achieved, as the results show a highly significant relationship.

### **5.2.4 Relationship Between Environmental Economic Factors and Sustainable Disposal Behaviour.**

The result indicates highly significant relationship between environmental economic factors and sustainable disposal behaviour towards fast fashion products among Generation Z consumers. ( $\beta = 0.789$ ,  $t\text{-value} = 8.356$ ,  $p < 0.001$  ( $\leq 0.001$ ), leading to the rejection of the null hypothesis ( $H_{04}$ ). This result aligns with the study by Hanley et al. (2019) and resonates with insights from other studies like Hassan et al. (2022), Farahani et al. (2021), Mizrachi & Tal

(2022), and Joung & Park-Poaps (2011) on the concept of environmental economics factors, which combines measurements of both environmental and economic concerns in a consumer's attitude and decision-making process. The integration of economic incentives with environmental concerns significantly influences consumers' choices regarding sustainable disposal practices. In summary, the findings highlight the substantial impact of environmental economic factors on Generation Z's attitudes and behaviors toward the sustainable disposal of fast fashion products.

The research objective and research question 'Is there a relationship between environmental economic factors and sustainable disposal behaviour towards fast fashion products among Generation Z consumers?' in this study were achieved, as the results show a highly significant relationship.

### **5.2.5 Relationship Between Consumer Perceived Ethicality and Sustainable Disposal Behaviour.**

The findings indicate a significant relationship between consumer perceived ethicality and sustainable disposal behaviour towards fast fashion products among Generation Z consumers. ( $\beta = 0.694$ ,  $t\text{-value} = 4.506$ ,  $p < 0.001$  ( $\leq 0.001$ ), leading to the rejection of the null hypothesis ( $H_{05}$ ). This relationship aligns with previous research indicating CSR as a significant influencer of consumer ethical perception (Kumar et al., 2022) and the positive impact of perceived ESG factors on consumer behaviour (Nugroho et al., 2024), and consumers are more likely to support companies aligned with their values (Deep, 2023; Ilyas et al., 2022). Therefore, it can be concluded that if fast fashion companies prioritize sustainability disposal efforts in their business operations, Gen Z consumers are more likely to adopt sustainable disposal practices for clothing items associated with that company's brand. This alignment fosters a sense of trust and loyalty among Gen Z consumers, prompting them to support the company's ethical endeavours through their disposal behaviours.

Overall, the research objective and research question 'Is there a relationship between consumer perceived ethicality and sustainable disposal behaviour towards fast fashion products among

Generation Z consumers?' in this study were achieved, as the results show a highly significant relationship.

## **5.3 Implications of the Study**

### **5.3.1 Theoretical Implications**

This study contributes significantly to the theoretical framework of the TPB by exploring Sustainable Disposal Behaviour towards Fast Fashion Products among Generation Z consumers. It also extends the TPB by integrating additional variables, specifically environmental economic factors, and consumer perceived ethicality. The study's findings offer empirical evidence on how these variables interact with traditional TPB constructs, enhancing the understanding of disposal behaviour in the fast fashion context.

### **5.3.2 Practical Implication**

The insights gained from this study offer valuable guidance for companies, particularly fast fashion companies, and policymakers aiming to promote sustainable disposal behaviours among Generation Z consumers in the fast fashion industry. Understanding the factors influencing their disposal behaviours is crucial for making informed decisions. For example, fast fashion companies can leverage these insights to develop sustainable product disposal programs and initiatives. By offering convenient and environmentally responsible disposal options such as recycling or donation programs, companies can align with the values of Generation Z consumers, thereby fostering long-term brand loyalty.

## **5.4 Limitations of Study**

The employed research design may limit the generalizability of the findings, as data were collected specifically from Gen Z within the context of the fast fashion industry. Therefore, caution should be exercised when extrapolating the results to other populations or industries.

Moreover, the collected sample size is insufficient to draw conclusions about the entire population of Gen Z. Additionally, the geographical restriction to Malaysia may further limit the broader applicability of the findings. Furthermore, the study may overlook other relevant factors that influence Gen Z's sustainable disposal behaviors towards fast fashion products, such as advertising and marketing strategies, government policies and regulations, and other socio-cultural influences.

## **5.5 Recommendations for Future Research**

The expansion on the demographic by considering others generation such as Gen Y and Millennials should be considered. Besides, collect a more diverse sample representing various age groups, socio-economic background, and geographical locations. This approach enhances the understanding of sustainable disposal behaviour towards fast fashion products across different population. In addition, increase the sample size is essential for enhancing the statistical power and generalizability of findings, allowing researchers to draw a more reliable conclusions regarding the sustainability disposal behaviour towards fast fashion products among Gen Z. The future study is also recommended to broaden geographical scope through cross-national studies to overcome the geographical restriction observed in the current research and allow better capture the variability in sustainable disposal behaviours across diverse regions and countries. Finally, incorporating additional factors that may influence Generation Z's sustainable disposal behaviours towards fast fashion products into the study provides a more comprehensive understanding of the study.

## **5.6 Conclusion**

The main objective of this research is to determine the sustainable disposal behaviour towards fast fashion products among Generation Z consumers. The result shows PBC, EE, and CPE have significant relationship with sustainable disposal behaviour towards fashion product among Gen Z. Conversely, EA and SN do not demonstrate such relationship. This study enhances the knowledge of the factors influencing sustainable disposal behaviour towards fashion product among Gen Z, making a significant contribution to the theoretical framework

of the TPB. It also assists fast fashion companies in making informed decisions. Finally, the study identifies limitations provide recommendations for future research.



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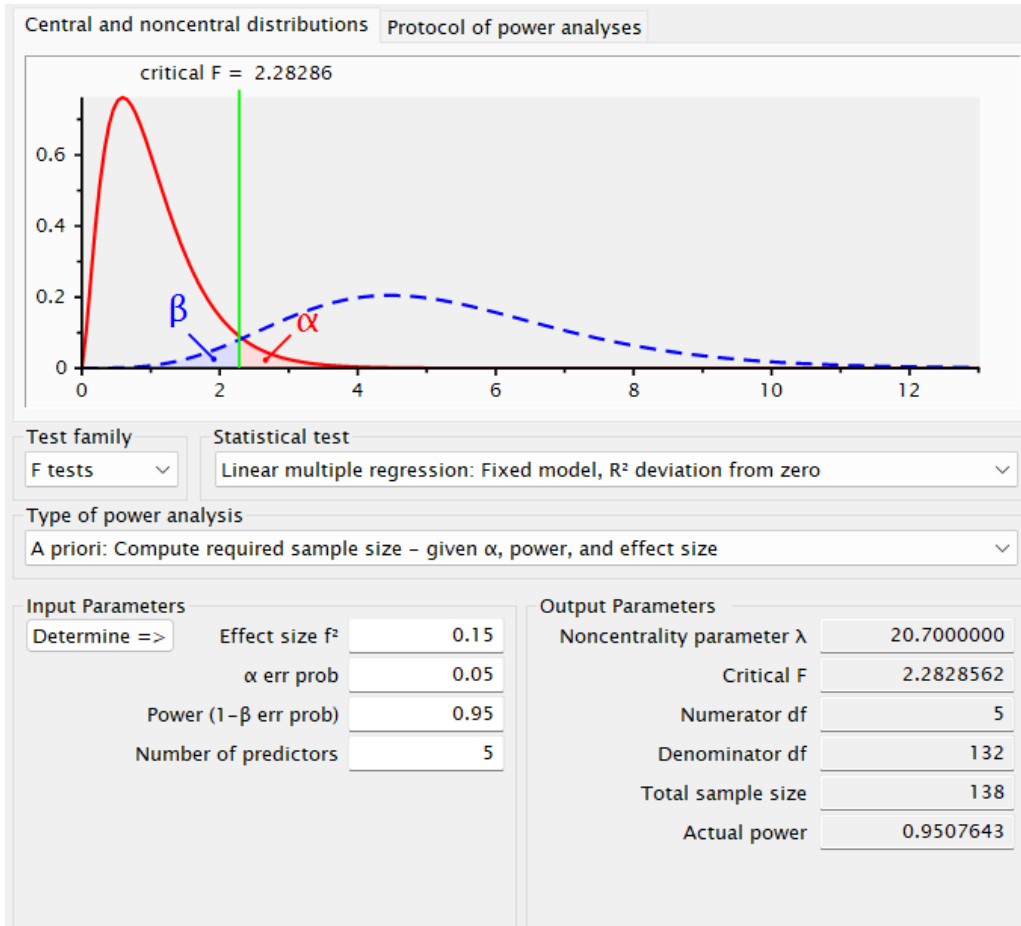


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## APPENDICES

### Appendix 3. 1: G\* Power Application's Result for Determining Sample Size



Source: Faul et al. (2007)

## Appendix 3. 2: Questionnaire



Section 1 of 14

# Sustainable Disposal Behaviour Towards Fast Fashion Products Among Generation Z Consumers

**B** *I* U ↺ ✕

Dear Respondents,

I am Alyssa Tiaw Yuen Qi (Student ID: 2105477), a final year undergraduate student pursuing Bachelor of International Business (Hons) at Universiti Tunku Abdul Rahman (UTAR), Sungai Long Campus. I am currently conducting a research on "Sustainable Disposal Behaviour Towards Fast Fashion Products Among Generation Z Consumers. "

Fast Fashion describes **low-priced but stylish clothing that moves quickly from design to retail stores to meet trends**, with new collections being introduced continuously. Example brands of fast fashion: H&M, Zara, Uniqlo, Topshop, Shein, Mango, etc.

This survey extends an invitation to individuals within the Generation Z demographic, born between 1997 and 2006, to participate. Your input is integral to our research, and we anticipate that completing the survey will take approximately 5-10 minutes of your time. Your participation in this study is greatly valued.

## **Section 1 : Personal Data Protection Statement \***

Please be informed that in accordance with Personal Data Protection Act 2010 ("PDPA") which came into force on 15 November 2013, Universiti Tunku Abdul Rahman ("UTAR") is hereby bound to make notice and require consent in relation to collection, recording, storage, usage and retention of personal information.

1. Personal data refers to any information which may directly or indirectly identify a person which could include sensitive personal data and expression of opinion.

Among others it includes:

- a) Name
- b) Identity card
- c) Place of Birth
- d) Address
- e) Education History
- f) Employment History
- g) Medical History
- h) Blood type
- i) Race
- j) Religion
- k) Photo
- l) Personal Information and Associated Research Data

2. The purposes for which your personal data may be used are inclusive but not limited to:

- a) For assessment of any application to UTAR
- b) For processing any benefits and services
- c) For communication purposes
- d) For advertorial and news
- e) For general administration and record purposes
- f) For enhancing the value of education
- g) For educational and related purposes consequential to UTAR
- h) For replying any responds to complaints and enquiries
- i) For the purpose of our corporate governance
- j) For the purposes of conducting research/ collaboration

3. Your personal data may be transferred and/or disclosed to third party and/or UTAR collaborative partners including but not limited to the respective and appointed outsourcing agents for purpose of fulfilling our obligations to you in respect of the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shared when required by laws and when disclosure is necessary to comply with applicable laws.

4. Any personal information retained by UTAR shall be destroyed and/or deleted in accordance with our retention policy applicable for us in the event such information is no longer required.

5. UTAR is committed in ensuring the confidentiality, protection, security and accuracy of your personal information made available to us and it has been our ongoing strict policy to ensure that your personal information is accurate, complete, not misleading and updated. UTAR would also ensure that your personal data shall not be used for political and commercial purposes.

Consent:

6. By submitting or providing your personal data to UTAR, you had consented and agreed for your personal data to be used in accordance to the terms and conditions in the Notice and our relevant policy.

7. If you do not consent or subsequently withdraw your consent to the processing and disclosure of your personal data, UTAR will not be able to fulfill our obligations or to contact you or to assist you in respect of the purposes and/or for any other purposes related to the purpose.

- I have been notified and that I hereby understood, consented and agreed per UTAR above noti...
- I Disagree , my personal data will not be processed.

What is your nationality? \*

- Malaysian
- Non-Malaysian

Which of the following fast fashion brands have you purchased from before? (Select all that apply)

- H&M
- Zara
- Uniqlo
- Topshop
- Shein
- Mango
- Other: \_\_\_\_\_

Please select this option only if none of the above options apply to you.

- I DO NOT purchase any fast fashion product.

### Section 3: Demographic and Characteristics of Respondent

Gender \*

- Female
- Male

Age \*

- 18 to 20 years old
- 21 to 23 years old
- 24 to 27 years old

Race \*

- Chinese
- Malay
- Indian
- Other: \_\_\_\_\_



Frequency of buying fast fashion items. \*

- Once a week
- Once a month
- Once every 6 months
- Once a year
- Other: \_\_\_\_\_

How many fast fashion items do you typically buy in a month? \*

- None
- 1-2 items
- 3-5 items
- More than 5 items

Frequency of disposing fast fashion items that you no longer use \*

- Once a week
- Once a month
- Once every 6 months
- Once a year
- Other: \_\_\_\_\_

How do you typically dispose of fast fashion items you no longer use? \*

- Recycle them.
- Repurpose them for other uses.
- Reuse them.
- Sell and/or swapping them.
- Donate.
- Throw them away in the trash without considering the environmental impact

#### Section 4: Environmental Attitudes (EA)

EA1. Preserving and protecting the environment should be one of our priorities. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

EA2. If all of us, individually, made an environmentally responsible decision, it would have a significant effect. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

EA3. Environmental issues are very important to me. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

## Section 5: Social Norms (SN)

SN1. People who are important to me expect me to dispose of my clothing in an eco-friendly manner. \*

1      2      3      4      5

Strongly Disagree                  Strongly Agree

SN2. People who are important to me think that I should consider the environmental impact of throwing clothes in the dustbin. \*

1      2      3      4      5

Strongly Disagree                  Strongly Agree

SN3. People who are important to me expect me to get rid of old clothes in a way that will save the environment. \*

1      2      3      4      5

Strongly Disagree                  Strongly Agree

## Section 6: Perceived Behavioural Control (PBC)

PBC1. For me, getting rid of old clothes in an environmentally friendly manner is easy. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

PBC2. Recycling clothes is easy for me. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

PBC3. I have a lot of options to get rid of old clothes in an environmentally friendly manner. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

PBC4. I am confident that I would be able to recycle my old clothes. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

## Section 7: Environmental Economic Factors (EE)

EE1. I sell unwanted clothing to reduce garbage disposal problem. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

EE2. I sell old garments for environmental reasons. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

EE3. I resell clothing to recycle the garments that are in good condition. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

EE4. I sell clothes for the money. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

EE5. I sell much of clothing for economic reasons. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

## Section 8: Perceived Ethicality(PE)

PE1. The fast fashion company with which I have engaged complies with the moral norms. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

PE2. The fast fashion company with which I have engaged always adheres to the law. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

PE3. The fast fashion company with which I have engaged is socially responsible. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

PE4. The fast fashion company with which I have engaged avoids damaging behaviour at all cost. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

PE5. The fast fashion company with which I have engaged is a good firm. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

## Section 9: Disposal Behaviour

Recycle (RC)

RC1. I donate garments in recycling bins (purpose is recycling) \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

RC2. I take it back to the store to be recycled without receiving an incentive. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree



## Repurpose (RP)

RP1. Before discarding clothes, I remove items such as labels, buttons and zippers with the intention to use these again. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

RP 2. I use it as rags for cleaning purposes. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

## Reuse (RU)

RU 1. I give clothes away to friends or family. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

RU 2. I bring it back to the store in return for a purchase voucher. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

RU 3. I sell garments via second-hand stores (online and offline) \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

RU 4. I swap clothes via the online platform. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

RU 5. I swap clothes with friends or family. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

## Donation (DN)

DN 1. I would be willing to donate old clothing to be more pro-environmental. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

DN 2. I would be willing to donate old clothing to reduce environmental consequences. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

DN 3. I would be willing to donate old clothing to be more sustainable. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

DN 4. I would be willing to donate old clothing to reduce waste. \*

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

### Appendix 3. 3: Pilot Test Results

Environmental Attitudes (EA)'s Pilot Test's Cronbach's Alpha

#### Reliability Statistics

Cronbach's Alpha	N of Items
.811	3

Social Norms (SN)'s Pilot Test's Cronbach's Alpha

#### Reliability Statistics

Cronbach's Alpha	N of Items
.892	3

Perceived Behavioural Control (PBC) 's Pilot Test's Cronbach's Alpha

#### Reliability Statistics

Cronbach's Alpha	N of Items
.799	4

Environmental Economic Factors (EE) 's Pilot Test's Cronbach's Alpha

#### Reliability Statistics

Cronbach's Alpha	N of Items
.852	5

Consumer Perceived Ethicality (PE) 's Pilot Test's Cronbach's Alpha

#### Reliability Statistics

Cronbach's Alpha	N of Items
.856	5

Disposal Behaviour's Pilot Test's Cronbach's Alpha

### Reliability Statistics

Cronbach's Alpha	N of Items
.842	13

**Appendix 4.2: The mean and standard deviation of independent variables and the dependent variable for each scale item employed in the questionnaire, based on responses from 192 participants.**

### Environmental Attitude (EA)

Item Statistics			
	Mean	Std. Deviation	N
EA1. Preserving and protecting the environment should be one of our priorities.	4.21	.830	192
EA2. If all of us, individually, made an environmentally responsible decision, it would have a significant effect.	4.30	.876	192
EA3. Environmental issues are very important to me.	4.21	.867	192

Source: Researcher SPSS Result

## Social Norms (EA)

Item Statistics			
	Mean	Std. Deviation	N
SN1. People who are important to me expect me to dispose of my clothing in an eco-friendly manner.	4.03	.843	192
SN2. People who are important to me think that I should consider the environmental impact of throwing clothes in the dustbin.	4.06	.893	192
SN3. People who are important to me expect me to get rid of old clothes in a way that will save the environment.	4.12	.899	192

Source: Researcher SPSS Result

## Perceived Behavioural Control (PBC)

Item Statistics			
	Mean	Std. Deviation	N
PBC1. For me, getting rid of old clothes in an environmentally friendly manner is easy.	4.27	.880	192
PBC2. Recycling clothes is easy for me.	4.18	.831	192
PBC3. I have a lot of options to get rid of old clothes in an environmentally friendly manner.	4.08	.856	192
PBC4. I am confident that I would be able to recycle my old clothes.	4.16	.797	192

Source: Researcher SPSS Result

## Environmental Economic Factors (EE)

Item Statistics			
	Mean	Std. Deviation	N
EE1. I sell unwanted clothing to reduce garbage disposal problem.	3.86	.917	192
EE2. I sell old garments for environmental reasons.	4.03	.957	192
EE3. I resell clothing to recycle the garments that are in good condition.	4.02	.954	192
EE4. I sell clothes for the money.	3.91	1.096	192
EE5. I sell much of clothing for economic reasons.	3.70	1.171	192

Source: Researcher SPSS Result

## Consumer Perceived Ethicality (PE)

Item Statistics			
	Mean	Std. Deviation	N
PE1. The fast fashion company with which I have engaged complies with the moral norms.	4.20	.872	192
PE2. The fast fashion company with which I have engaged always adheres to the law.	4.05	.827	192
PE3. The fast fashion company with which I have engaged is socially responsible.	4.07	.755	192
PE4. The fast fashion company with which I have engaged avoids damaging behaviour at all cost.	4.09	.820	192
PE5. The fast fashion company with which I have engaged is a good firm.	4.02	.904	192

Source: Researcher SPSS Result

**Sustainable Disposal behaviour (SDB): Recycle (RC), Repurpose (RP), Reuse (RU) and Donation (DN)**

<b>Item Statistics</b>			
	Mean	Std. Deviation	N
RC1. I donate garments in recycling bins (purpose is recycling)	4.16	.842	192
RC2. I take it back to the store to be recycled without receiving an incentive.	4.05	.948	192
RP1. Before discarding clothes, I remove items such as labels, buttons and zippers with the intention to use these again.	4.04	.964	192
RP 2. I use it as rags for cleaning purposes.	4.18	.772	192
RU 1. I give clothes away to friends or family.	4.14	.740	192
RU 2. I bring it back to the store in return for a purchase voucher.	3.96	1.134	192
RU 3. I sell garments via second-hand stores (online and offline)	3.77	1.177	192
RU 4. I swap clothes via the online platform.	3.89	1.120	192
RU 5. I swap clothes with friends or family.	4.11	.902	192
DN 1. I would be willing to donate old clothing to be more pro-environmental.	4.27	.765	192
DN 2. I would be willing to donate old clothing to reduce environmental consequences.	4.48	.792	192
DN 3. I would be willing to donate old clothing to be more sustainable.	4.27	.818	192
DN 4. I would be willing to donate old clothing to reduce waste.	4.36	.725	192

Source: Researcher SPSS Result