

**FACTORS INFLUENCING PURCHASE  
INTENTION TOWARDS GREEN CLOTHING  
PRODUCTS: A STUDY AMONG GEN-Y  
CONSUMERS IN SELANGOR, MALAYSIA**

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**ASIA e UNIVERSITY  
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FACTORS INFLUENCING PURCHASE INTENTION TOWARDS GREEN  
CLOTHING PRODUCTS: A STUDY AMONG GEN-Y CONSUMERS IN  
SELANGOR, MALAYSIA

JASON HONG KOK SIONG

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## **ABSTRACT**

Environment issues such as climate change, pollution and waste management are key concerns which trigger the attention for societies and consumers toward the importance of green and preservation, resulting in them becoming more environmental conscious and specific-focus on green movement initiated by business companies. And as sustainability becomes the catchword for these companies, they began to redevelop organizational management strategies and strategic policies to be green-sustainably competitive. The concept of green sustainability is important in the fashion and apparel industry because their numerous practices have contributed significantly to the degradation of the environment with toxic wastes and pollution among others. Consequently, this has provided a good opportunity for apparel manufacturing and marketing companies to explore green-clothing products that incorporate green awareness in their competitive production and marketing operations. However, there are few studies done to examine the impact of purchase intention of Gen-Y consumers especially in Selangor, including the critical factors that influence their purchase intention toward green clothing products, hence the objectives of, and research questions raised in this study. This quantitative research garnered a total of usable 396 questionnaires responses from Gen-Y between 25 to 45 years old, processed with SPSS software, that produce the following results-analysis for the supported research hypotheses: Four factors (perceive behavior control, emotion, product attribute and price) have positive relationships with consumer purchase intention, but perceived behavior control had the strongest effect among the Selangor Gen-Y purchase intention of green products.

## **APPROVAL**

This is to certify that this thesis conforms to acceptable standards of scholarly presentation and is fully adequate, in quality and scope, for the fulfilment of the requirements for the degree of Doctor of Philosophy

The student has been supervised by: Assoc Prof. Dr. Oo Yu Hock

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This thesis was submitted to Asia e University and is accepted as fulfilment of the requirements for the degree of Doctor of Philosophy.

## **DECLARATION**

I hereby declare that the thesis submitted in fulfilment of the PhD degree is my own work and that all contributions from any other persons or sources are properly and duly cited. I further declare that the material has not been submitted either in whole or in part, for a degree at this or any other university. In making this declaration, I understand and acknowledge any breaches in this declaration constitute academic misconduct, which may result in my expulsion from the programme and/or exclusion from the award of the degree.

**Name Candidate: Jason Hong Kok Siong**

**Signature of Candidate:**

**Date: 1 September 2022**



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## **LIST OF ABBREVIATION**

|       |                                            |
|-------|--------------------------------------------|
| AT    | Attitudes                                  |
| DV    | Dependent Variables                        |
| EK    | Environmental Knowledge                    |
| EM    | Emotion                                    |
| GA    | Green Advertising                          |
| Gen-Y | Generation Y                               |
| IV    | Independent Variables                      |
| UN    | United Nations                             |
| PA    | Product Attributes                         |
| PI    | Purchase Intention                         |
| PL    | Place                                      |
| PR    | Price                                      |
| ROIs  | Return on Investments                      |
| SN    | Subjective Norms                           |
| SPSS  | Statistical Package for the Social Science |
| TPA   | Theory of Reasoned Action                  |
| TPB   | Theory of Planned Behavior                 |

# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 Overview**

The Nielsen Global Survey (2015) on 51-country consumer sustainability behavior has revealed that about 90% of Malaysians are concerned about environmental issues, but the majority are not willing to change their buying behavior, so much so that Sharaf, Isa, and Al-qasa (2015) had concluded that most Malaysians tend to perceive green products as high-priced goods meant for high net-worth consumers in comparison with non-green products, thus their reluctance to indulge in, voluntarily or otherwise in activities and declared pursuits of the latter. Even when the Government of Malaysia has introduced several initiatives over time to promote sustainability-driving actions to motivate its citizens, for example, by encouraging them to increase their usage of green products with limited promoting incentives, the enthusiastic participation or response is low and slow. A case in point is the Ministry of Energy, Green Technology and Water (KeTTHA), established in the year 2009, to endorse green products and encourage consumers to consider using and consuming eco-friendly products. However, this initiative did not have the expected impact on Malaysian purchasing intention and behavior especially among the Gen-Y.

In the context of Malaysia, the Generation Y (Gen-Y) – as a growing section of Malaysia's youthful population, comprise individuals below the age of 36 years of age who are reportedly more concerned about the environment more so than their parents and elders before them. As such, according to Naderi and Van Steenburg (2018), their perceptions on the importance of buying green and anticipated or actual behavior to buying green may contribute to reinforcing the need and urgency to

recycling wastes for green production. The latter, earlier observed by Norazah Mohd (2013), as a contributing factor that damages the environment and causes health hazards, must be redressed soonest to enable and facilitate the movement toward go-green and green purchasing. Nevertheless, according to Azila et al. (2012), a survey of 616 respondents reported that only 30 per cent have had the experience of buying green products does not provide a promising picture of the green-commitment by then Malaysian Gen-Y consumers. In summary, according to Tan, Ojo, and Thurasamy (2019), there is a low-level awareness and practice of green-products purchase among Malaysian young consumers who may have limited knowledge of or inclined to be active purchase-intention consumers at this point in time.

Rapid economic-consumption growth therefore over the few decades, according to Jaiswal and Kant (2018), has caused environmental deterioration through over consumption and over-utilization of natural resources. As a consequence, consumers, businesses, and governments are faced with the biggest challenge of preserving natural resources and protecting the environment. This phenomenon, observed earlier by Lee, Wahid, and Goh (2013) and Vazifehdoust, Taleghani, Esmaeilpour, Nazari, and Khadang (2013), included the problems of ozone depletion and air pollution, global warming and haze, and health-hazard solid wastes. Relatedly, over-consumption and over-utilization of resources are linked, directly or indirectly to the challenges of production and distribution aspects which, according to Li, Liu, Wang, and Liu (2016), are related to marketing-retailing chains of businesses worldwide. For example, the thriving billion-dollar businesses of the textile and clothing industry controls an extensive global marketing-retailing chain of unique niche and common wholesale lines of products that have contributed, wittingly and unwittingly, environment-questionable practices in the past-but-present correcting



green-driven sustainable environment-friendly practices. Consequently, Jacobs, Petersen, Hörisch, and Battenfeld (2018) have lamented that, production of and marketing green clothing products that can improve various aspects of sustainability, have started to capture some significant attention of environment-friendly consumers but the market share of green clothing products produced in environment-friendly way and socially responsible ways is still lagging behind. A nagging issue is the lack of a wide range of green-products although increasingly the market segmentation in this area of potential business is encouragingly visible more so today than before.

## **1.2 Background of the Study**

Environmental issues such as global warming, reduction of stratospheric ozone layer, pollution of water, noise pollution, light and acid rain are common and publicly announced globally and rapidly, with internet and technological connectivity, with inconsiderate and indiscriminate economic development, among one of the continuing serious causes of environment-damaging and climatic-change issues including depletion of natural resources ((Bhate and Lawler, 1997; Joshi and Rahman, 2016). In short, according to Thieme, Royne, Jha, Levy, and McEntee (2015), and repeated in various articulations by many environmentalists and volunteer organizations, the environment-economic overtures in developing and growing human and related business enterprises, compounded by an increasing population have eventually damaged and degraded Nature's environment. The effect of environmental degradation and destruction is borderless but the calamities that follow are frighteningly and death visible which, according to Said, Ahmadun, Paim, and Masud, as early as in their 2003 writings, have affected negatively to the chagrin of generations to come. Without immediate action-driven plans and management systems to arrest the declining quality of life by seriously preserving, protecting and conserving

disrupted and damaged eco- systems, these earth-destruction and its degraded environmental issues will continue to decline to the detriment of all human societies without exception. In essence, the earth-world is sick and needs healing and considerate care to recover and replenish itself to serve humankind. All over the world, organizations and peoples must respond and cooperate, with ready-made agendas for sustainable world and living programs by United Nations and other international organizations to “heal the globe” of climatic-environment transforming changes that affect all aspects of life, living, livelihood and global enterprises and its networks of visible and invisible chains of production, distribution, storage and retailing to reach the over-consuming lifestyles of growing human avarices in “throw-away” apathetic habits that are continually destroying our planet.

Despite numerous efforts, nationally, regionally and internationally to conserve, protect and heal the disrupted and depreciated environment, the “throw-away” and “eat-discard” plastic-wraps and containers of fast-food or takeaway consumption preferences or habits have been relentless in piling heaps of waste disposals at dumpsites and landfills that constantly remind us of the sinful and indifferent attitudes and behaviors in our daily existence. For example, the efficacy of the precautionary measures adopted on sustainable counter-measures to reduce the decaying and sick environment is questionable. In essence, regulating uncontrolled and disruptive development activities through, among others, national and international Environment Protection Agency policy initiatives and governance compliance to conserve natural environment and ensure safe human health must be reviewed constantly and its strategic actions revised periodically, not as-and-when the need such as disasters occur. More specifically, many overlapping legislative initiatives directed at solving issues such as releases of harmful gases into the

atmosphere until the late 1980s and “the Earth Decade” or “Decade of the Environment” of the 1990s that have reinforced increasing environmental awareness and protests among consumers such as the activists from numerous vociferous non-profit organizations (NGOs), according to Kalafatis, Pollard, East, and Tsogas (1999) are outdated for timely reformation. And this includes what McIntosh, 1990; Wüstenhagen and Bilharz (2006) have been repeatedly asserting being “have been articulations” no longer effective such as, among others, the national and international legislation on environment preservation and conservation, the depreciated values of media coverages on tapering environmental issues of the past with arrested aging repairs no longer efficacious to deal with current more vociferous environmental disasters, and the declining frail voices of environmentalism among a greying community of consumers. Efforts by governments and nations are no lacking but these are often insufficient in terms of compliance and enforcement practices to ensure effective and efficient action-driven results of conservation, protection and healing are achieved

In general, there is a rapid increase in consumer-awareness orientation on climatic and environmental issues. Such awareness of the destruction of natural resources are usually associated with environment-protection and environment-conservation issues which, in turn, has created eco-friendly consumption called “green consumerism” Educated consumers are increasingly environment conscious-responsive about how their consumption activities, with more available knowledgeable and exemplary practices of damage-disaster repairs of flood mitigation and hill-slopes landscaping solutions to nurse depreciated natural environments, the latter has been compounded by indiscriminate disposal of products, purchases and consumption materials that over-flow landfills and clog-up drainage systems that

continue to negatively impact upon the environment. Hence, green consumer environmentalism that ensue reparable and re-nurtured environments have become more popular and acceptable throughout the world (Punyatoya, 2015; Moisander, 2007; McIntosh, 1990).

Numerous countries across the globe are beginning to heed this threat and they have started working towards minimizing the harmful impact of their business activities on the environment. International companies have acknowledged the need to become more ecological conscious-action driven. According to Joshi and Rahman (2016), Thieme et al. (2015), Cheah and Phau (2011) and Pickett-Baker and Ozaki (2008), this phenomenon has egged multi-national corporations, product manufacturers, academics and other stakeholders to execute and reform strategic landmark guidelines to convert environment-awareness agendas into market opportunities to be exploited.

Researchers of environment-friendly organizations have recommended converting recycled material-attributes into a type of competitive business advantage that offers new avenues for higher employee commitment, customer satisfaction, and achievement of higher market shares and profitability. In addition, the availability of increasing green products in the marketplace with these companies applying more green practices as part of the marketing strategies, has captured the imagination and interest of the public consumers. Thus, going green also means that these organizations are able to further enhance positive brand images of their businesses. Subsequently, most consumers are likely to think and behave likewise as the organizations do (Booi Chen and Teck Chai, 2010; Luo, X. and Bhattacharya, 2006; Maignan and Ferrell, 2001; Menguc and Ozanne, 2005; Punyatoya, 2015; Rothenberg and Matthews, 2017; Gam, 2011).

Environmentally responsible purchasing therefore is vital, and unplanned purchasing of goods that can severely damage the environment must be reformed. Consumers possess the capability to prevent or decrease environmental damage by purchasing green products. As a result, green movement and environmental protection practices have found a place among consumers especially those using green clothing products which, in turn, help maintain efficient energy, reduce water pollution and toxic waste, recycling material sources and many more which do not harm the environment. Green products also provide better air quality indoors and free from chemicals which can reduce health problems. Consumers now are more prepared and willing to purchase green products that are not harmful to the environment (Y. S. Chen, 2010).

Environmental issues can be caused by production practices and the ways of consumption by consumers indirectly or directly (Tsen et al., 2006). Since the industry and consumers have caused the problems, then both of them have to find for solutions. The environment degradation caused by humans has enlarged the prominence of responsible role of numerous parties including consumers, governments, institutions, media and companies (Carrete, Castaño, Felix, Centeno, and González, 2012). (Grunert and Juhl, 1995) mentioned that consumers' household purchases solely were already accountable to 40% of the environmental damages. Any case, overconsumption can also hurt the natural environment and human beings' quality of life in the long-term (Felix and Braunsberger, 2016).

In addition, researches such as the works of Konuk (2015), Yadav and Pathak (2017) and Jansson, Marell, Trivedi, Patel, and Savalia (2015), Nordlund (2010) and D'Souza et al. (2006) have lamented the limited researches done on green purchasing intention and behavior. As such, the theoretical and practical gaps here need to be

bridged because it is necessary to understand consumer purchase intention, for example, in Malaysia from the business perspective in which there is still a lot of market-space for improvement. Green products are known as environmental-friendly products which cause minimum disruptive effect on the environment. They have also been defined as environmental-friendly products which have minor impact on the natural environment and are harmless to human health; they are quality-assured products that protect the environment by using natural ingredients. Malaysia is one the country which strongly support the concept of green application in the nation.

Green products have become more important since 1970 especially in 1990s due to the increasing concerns for environment and society. In a classic by Antil (1984), he had defined that environmental-friendly products are produced, consumed or disposed in ways which are less harmful to the environment. On the one hand, green products or environmental-friendly products do not contain harmful elements, hence they are friendlier to the environment. On the other hand, socially conscious consumers are individuals who care about the consequences caused to the public by their own consumption, and they usually have high-level environmental consciousness (Borin, Cerf and Krishnan, 2011; Frederick E. Webster, 1975; Mohd Suki and Mohd Suki, 2015). Therefore, they are often associated with certain product purchases with minimum negative environmental consequences, following what Follows and Jobber (2000) and Moser (2015) had advocated as changing daily-consumption behavior to improve and resolve environment-conservation issues.

### **1.3 Statement of the Problem**

Environmental issues, caused by inconsiderate business response-to-demand production practices and the indiscriminate lifestyle consumption by consumers, constitute a major problem of both industry stakeholders and public consumers at

large; the former driven by business and profit-bent motives and the latter driven by increasing demands for more than essential-type consumption to feed unsaturated and emerging non-essential (luxury and niche) consumption. Furthermore, the pace of environmental degradation caused by humans is wittingly or unwittingly compounded by numerous other parties including governments, institutions, media and companies who, directly or indirectly, compound environment and human issues through their respective or combined policy provisions and action agendas. In short, overconsumption in modern societies nationally and globally have compounded the rape and degradation of natural environment and depreciated the health and quality of human life for many years now.

There is a discrepancy or “gap” between consumer-expressed favorable attitudes and actual purchasing practices in the green purchase intention and behavior of consumers including government policies and business practices of domestic and foreign companies in terms of local and foreign direct investments in various types of business and trade activities. But, more importantly, is the attitudinal and behavioral attributes of producers and consumers in the supply-demand chain. For instance, while many consumers have shown a positive attitude towards purchases of organic food products, only a small number of consumers actually purchase them, suggesting that consumers have expressed their concerns for the environment but ironically they seldom translate them into active green-purchase consumers. This gap widens further as the pace of articulated willingness to purchase environment-friendly products or green products increases without a corresponding pace to convert into articulation into action, that is, words of interest-support of green products do not translate into action-purchases as well.

Furthermore, the majority of consumers have not realized their potential power in making a difference to reform negative environmentalism into positive recovery or rehabilitation of degraded and damaged environment by over-consumption practices fanned by ever-responding supply-production chain activities in the business interest of MNC corporations locally and overseas. Moreover, it is a burden on and unfair to the government to confront the myriad of environmental-economic challenges alone, politics aside; both the business communities and consumers at large should be more involved actively to resolve the shared environmental issues – a phenomenon not completely resolved yet. Invariably, formulating laws and regulatory legislations alone are still not enough to address environmental issues effectively because outdated policy- requirements regulations must be reviewed and reformed, with new compliance governance being introduced as necessary to create a balance needed to match changing societal needs and lifestyle-demand of people for better quality living and livelihood standards.

There is a culture bias in the current research findings based on the “Euro – American” context of high-awareness among its green-driven consumers which cannot be used to justify the lack of, and the need to improve, similar environment-friendly awareness in developing or emerging countries including Malaysia. This is because environmental awareness in Asian markets is recent and more market research needs to be done. And particularly there are very limited researches done on green purchasing intention and behavior of demand-driven consumers in Asia. Unless the crucial aspect on how Asian (and more Malaysian) consumers make their choices on green product such as green clothing products is pursued more consistently and in full blast, with environmental concerns blended into the mainstream marketing, the clarion call and effort to focus on green products purchases and related environment-friendly actions



to pursue them, the current action taken is not adequate to bridge both the theoretical and practical gaps available. In other words, many improvements are still lacking in this huge Asian and Malaysian markets that require business companies to review and strategize their targets and market segmentation on green products especially green clothing to enable business enterprises better understand the characteristics of green consumers, their expectations and purchase intentions toward environment-friendly green products including green clothing products.

#### **1.4 Objective of the Study**

The main purpose of doing this research is to understand the factors influencing Gen-Y consumer purchase intention toward green clothing products in Selangor Malaysia, by recognizing the variables that have positive significant relationship with them. The objectives of the study are as follows:

- a) To examine the factors influencing Gen-Y consumer purchase intention towards green clothing products in the State of Selangor.
- b) To analyze the relationship between the nine independent variables (attitude, perceived behavioral control, emotion, environmental knowledge, subjective norms, product attributes, price, place and green advertising) and Gen-Y's purchase intention towards green clothing products in the State of Selangor.
- c) To discuss the strongest factor that influencing Gen-Y consumer purchase intention toward green clothing products in the State of Selangor.
- d) To suggest ways of improving the limited research scope of population-sample focus in similar future research to be conducted.
- e) To examine the factors influencing Gen-Y consumer purchase intention towards green clothing products in the State of Selangor.

## **1.5 Research Questions**

The questions proposed in order to define the scope of this research are as follows:

- a) What are the factors influencing Gen-Y consumer purchase intention towards green clothing products in the State of Selangor?
- b) What is the relationship between the nine independent variables (attitude, perceived behavioral control, emotion, environmental knowledge, subjective norms, product attributes, price, place and green advertising) and Gen-Y's purchase intention towards green clothing products in the State of Selangor?
- c) What is the strongest factor that influencing Gen-Y consumer purchase intention toward green clothing products in the State of Selangor?
- d) What are recommended ways of improving the limited research scope of population-sample focus in similar future research to be conducted?

## **1.6 Significance of the study**

There is a need for the textile firms and the clothing industry to identify the factors influencing the purchase intention especially of Gen-Y towards green clothing products, to enable the marketers formulate more effective and efficient marketing strategies for business gains and in the public interest. The findings of this study on Gen-Y inclinations in particular and the consumers in general, in this case in the State of Selangor, can be extrapolated to generalize an outcome-influence of this population of consumers on green products especially on green clothing purchases. The resultant effect would be an improvement in green habitual intentions and purchases that would engender a better environment and healthier lifestyles. At the same time, manufacturers, retailers and marketers of the textile and fashion industry may find the research findings useful.

The theoretical contribution of this research study is the development of a structural model that describes the various factor influencing purchase intention of Gen-Y consumers toward purchase and usage of green clothing products. The proposed research model extends from the traditional Theory of Planned behavior (TPB) by redefining the independent variables of attitude, perceived behavioral control, emotion, environmental knowledge, subjective norms, product attributes, price, place and green advertising that influence the consumer purchase intention of Gen-Y toward green clothing products in Selangor.

This research study will be able to provide an insight into how Gen-Y perceive their purchase-intention of green clothing products. In this way, the findings of this study provides some information or data for the manufacturers and marketers in the textile and fashion industry able to understand the factors influencing Gen-Y consumer purchase intention toward green clothing products, thus enabling them to formulate appropriate production and marketing strategies respectively. As Joshi and Rahman (2016) had asserted, it is important to conduct such study in developing countries like Malaysia due to the limited numbers of researches available especially for green clothing products. In fact, developing countries should be promising markets for green clothing products due to their existing environmental issues, growing economy and huge customer base.

The fashion and apparel industry today is a multi-billion dollars business affecting everyone around the world in some way. Fashion is the second dirtiest industry in the world, following right after oil. Due to speedy production and over consumption, the fashion industry has landed itself on an environmentally damaging path, much different than 100 years ago. Although the industrial revolution and the creation of ready-to-wear in the early 1900s may have sparked the initial beginning of

the clothing industry yet, unless specified as fair trade or organic, it contains harmful dyes, toxins and pesticides that seep into the Earth's system when thrown away. The True Cost, a documentary highlighting the reality of the fashion industry, has highlighted that the average American throws away 82 pounds annually of garments, accessories and shoes. Fast fashion (cheap trendy collections) bases its business model on high volume collections and speedy production. And because production is so fast and the clothing is right on trend, consumers cannot help to be constantly bombarded with the latest items they must have. The reality is we really do not need this much clothing in our lives. The documentary reiterates that, worldwide, we consume 80 billion pieces of clothing a month, which is a 400% increase from two decades ago. Sustainability is incredibly important in textile and fashion industry and so too brands; hence, this research study can contribute in some ways to raise awareness and heighten green-conscious actions that could help shift societies and consumption preference and habits toward high quality and sustainable practices so important to overcoming increasing environmental and waste issues.

For policy makers, this research study enables them to review and design appropriate policies to enhance environment-friendly efforts in the future. These environment- oriented policies may be able to provide ideas for businesses to re-strategize and continuously develop new green-driven marketing initiatives aimed at increasing consumer purchases of green clothing products. Such policies and strategies should target the Gen-Y consumers as they are the growing majority of the entire population in Malaysia who can act as change-drivers in encouraging environment-conscious behaviors in developing markets in the near future (Nguyen, Phan, Cao and Nguyen, 2017). For the manufacturers of clothing products, they would be able to use the findings of this study to improve their distribution network-chains for more

systematic sales in retail outlets located in shopping centers. And in this manner, their focus on green clothing products to satisfy their customer needs and wants could achieve better target returns on investments (ROIs), while helping reinforce the green awareness and green-purchase practices of Gen-Y consumers and their generation to come. More importantly, too, the findings of this research can also advance the body of knowledge while bridging the theoretical and practical gaps in this green-intention-come-purchase phenomenon to improve healthy consumerism and better environmentalism control.

### **1.7 Scope of the Study**

The scope of the study is confined to establishing the nature of youthful purchase intention to buy green clothing products among Malaysian Generation Y (Gen-Y) consumers. Green products, in this study, is confined to green clothing products defined as sustainable fabric clothing produced from eco-friendly resources such as grown fiber crops or recycled materials including organic textiles and sustainable materials. These materials, for example, include hemp and non-textiles such as bamboo or recycled plastic bottles, and recycled products such as clothes made from recycled clothing including vintage, textile and other reusable materials.

Specifically, the study focuses on identifying factors that influence the consumer purchase intention of Gen-Y toward green clothing products in the State of Selangor only. And it is confined to an examination of the relationship between the nine independent variables (attitude, perceived behavioral control, emotion, environmental knowledge, subjective norms, product attributes, price, place and green advertising) and Gen-Y's purchase intention toward green clothing products in Selangor, the ethnic or racial composition of the population-sample espoused in Chapter four. Since the finding-results are based on Selangor with the largest

population, the analysis-interpretation can be extrapolated to generalize, to a limited extent, for Malaysia as a whole because of the plural composition of its total population. In so doing, the nine constructs, when tested, would produce the results for analysis that will achieve the research objectives and answer the research questions.

### **1.8 Limitations of the Study**

The current research study has several inevitable shortcomings which need to be improved in future. A limitation is the restricted extrapolated generalization of the Gen-Y green-purchase intention in Selangor to the whole of Malaysia; herein lies the opportunity to research the whole of Malaysia including both West and East Malaysia in the future.

As a limited state cross -section study, according to Laroche, M., Bergeron, J. and Barbaro-Forleo (2001), the extent of the knowledge in the model studied will be constrained as the impact of the study and the results obtained may be differ based on the time-frame chosen in a cross -sectional perspective instead of a longitudinal perspective. In other words, the cross -sectional study is just providing knowledge at a certain time-frame – a still picture with limitations of being one.

More elaborately, this research study is targeted only Gen-Y respondents in Selangor, which excludes other states in Peninsula Malaysia, Sabah and Sarawak. Although the Selangor state has highest population (20.1%), according to Department of Statistic Malaysia in 2021, Sabah with 11.7% has the second highest in population, followed by Johor (11.6%) and Sarawak (8.6%) in third and fourth in position respectively. Therefore, the findings might subject to limited generalizability as the sample might not be sufficient to represent the overall opinion of the Malaysia consumer on purchase intention of green clothing products.

The research is mainly focus only on Gen-Y consumer, aged between 25 to 45 years old. As the millennium consumers have their own opinions and viewpoints on purchase intention of green clothing products, they may differ among themselves about the range of green products. In this context of analysis, the scope or representative samples of Gen-Y respondents chosen was only confined to Gen-Y consumer is not wide enough to generalize to the general Gen-Y population in Malaysia, suggesting an inherent bias not only in sampling technique and unit of analysis chosen but also the actual restricted choice of variables that will have a significant impact on the consumer purchase intention may be flawed, as attested by the research assumption of the green clothing products in general without focusing on specific clothing products. Hence, it is questionable if the limited research study can be applicable to other types of green products such as organic foods and other nutrition-based products as well.

Furthermore, the research questionnaires distributed were in the closed-ended format consisting of limited items in each variable collected, without a feedback section for each item. Hence, the respondents were restricted from expressing their genuine opinion and they were unable to provide the better and accurate responses to the questions. Consequently, there will be a possibility of inaccurate or misleading responses collected that might affect the reliability of the analysis results.

## **1.9 Research Workflow**

The research process workflow for this study is show in Figure 1 below. It was designed to be executed accordingly to the planned workflow in order to ensure the completeness of the research study. All the phases identified have taken into consideration the starting stage until the execution stage of the research project. Phase 1 includes the literature review and survey research. Phase 2 includes a review of the exploratory case study. Phase 3 involves the mapping of potential variables by survey

research. Phase 4 involves conceptualizing and developing a draft research framework for the research study. Phase 5 involves a pilot test to verify, evaluate and revise the framework as needed. And, lastly, Phase 6 involves implementation of the final framework for data collection.

**Figure 1.1: Research Process Workflow**



Source: Developed for the research

## **1.10 Structure of the Dissertation**

Chapter One – INTRODUCTION: The first chapter provides an overview of a brief reported profile on Gen-Y inclination toward green issues. It discusses the factors influencing purchase intention of green clothing products among Gen-Y consumers in Selangor, Malaysia with a brief description of green products and their existence as background of the study, leading to the identification and explanation of issues in the statement of the problem, research objectives, research questions, significance of the study, scope and limitation of the study, research workflow and structure of the thesis/dissertation.



Chapter Two – Review of Literature: The second chapter reviews the key definition, past studies and explains theoretical foundation of TPB model. The research framework and hypotheses will be formed in the same chapter.

Chapter Three – Research Methodology: This chapter demonstrates the research methodology that are carrying out which includes identifying the research strategies and determining sampling design, data collection method, variables as well as measurements used in this study.

Chapter Four – Findings and Analysis: It presents the analysis of data and interpretation of results including descriptive analysis, scale measurement and inferential analysis.

Chapter Five – Summary, Recommendations and Conclusion: The final chapter sums up the descriptive analysis, scale measurement and inferential analysis. Besides, it also explains the key findings, implications, and limitations for the future research.

## **CHAPTER 2**

### **REVIEW OF LITERATURE**

#### **2.1 Introduction**

According to Tsen, Phang, Hasan, and Buncha (2006) and Zanon and Teichmann (2016), numerous studies have shown that consumers are becoming more environmental conscious especially in developed countries in the West. For instance, the United Kingdom 2017 Unilever study on 20,000 respondents in five countries (United Kingdom, United States, India, Turkey and Brazil) revealed that 33% of the consumers have chosen to purchase from brands they believe are socially and environmentally responsible, suggesting the potential availability of untapped opportunities for environmentally friendly products. As such, Thieme et al. (2015) had asserted that, when consumers are troubled by the reminding conscience on rapidly increasing environment-generated problems, they are gradually becoming more aware and learning to be more supportive of companies making efforts to sell environment-friendly products and offer related consultancy education-training advisory services.

The environment-friendly relationships between human communities and business enterprises, as an integral part of economic-wealth creating activities and citizen- consumption demand-supply interactions are rapidly becoming disruptive, with death- threatening health consequences, starvation and hunger, among other disastrous impact, is becoming the norm of modern living and societies worldwide. These depressing scenarios are compounded by conflicts, insurgencies and even spasms wars and poverty strewn across the globe. According to Bostroem and Klintman (2008), societies and human communities are overwhelmed by the alarming increase in climate change, chemical pollution, food contamination and other health hazards in the depreciated environment ensuing over-development and over-

consumption in pursuit of changing lifestyles and tastes that care less for Nature's gifts than human selfish-chase for rapidly changing living needs and livelihood demands contributing to destruction of eco-friendly environment. As part of the proposed solution to restore the health and safety of depreciated and disrupted environment and habitats, they explore the merits and demerits of green and politically engaged consumerism by raising issues on whether green labelling offer ways toward a greener and more democratic society, and the solutions arising therefrom.

Discerning consumers who value transparency and authenticity, according to Carvill, Butler and Evans (2021), are no longer content with brands that are dismissive of, or even apathetic to, sustainability. They expect brands to convey understanding and concern in relation to the practice of environment-friendly products that are affected by climate change, carbon footprints and toxic waste. Most importantly, genuinely committed to these standpoints as reminders of their consistent and proactive pursuit of these principles, their heightened eco-friendly consciousness and principled belief-driving motivation, they are challenging business organizations that ignore consistent and policy-compliant practices of sustainability to amend their tendency to deviate from the normative environment-friendly guidelines of international world organizations such as the United Nations Declaration of Sustainable Development. Therefore, drawing upon their combined decades of expertise and experiences, they are convinced that "Sustainable Marketing" is the answer to delivering a new benchmark for modern marketing by clarifying the importance of the sustainable approach before providing a comprehensive guide to implementing, driving and maintaining these practices in any organization. Moreover, they combine a blended delivery of academic research and practical case studies that initiate and inspire sustainable initiatives – the footprint guides to green products

purchases and consumption that harmonizes the relationship between humans and their environments of businesses and socio-cultural activities.

## **2.2 Green Materials**

The questions raised by Solanki and Corbin (2018), about the human dilemma of confronting numerous environment-friendly issues and potential materials-related solutions, are as follows: (a) What does it mean to live in a material world, and (b) how do materials of the past and present hold the keys to the future? Viewed from the perspectives of projects by designers, artists, makers, and scientists, the answers provide a colorful tapestry of ideas, technologies, and creative efforts that focus on the earth's most basic elements and, at the same time, demonstrate how these elements can be transformed into entirely new materials.

In retrospect, for example, they asserted how ancient practices such as dyeing fabric and making glue may hold the secret to renewable and earth-friendly consumer products, including how recycling plastics can resolve food waste, and how a type of light metal being developed may one day make air travel less fuel-reliant. They further contended that the potential of the digital experience should be explored, suggesting how this most ephemeral type of matter can be used to improve our world in an about-turn to rejuvenate and nurture the degraded environment to heal as much as possible from issues such as over-production and over-consumption in response to almost uncontrollable wasteful demands of new lifestyles and monetized pursuits of some indifferent, even disruptive and destructive, business enterprises. In essence, the materials they suggested serve as both a stimulating catalog of possibilities and a timely manifesto on how to consume, manufacture, and design for a better future in the interest of humane and human communities and the public interest as a whole.

## **Green Product Buying Behavior**

Green product purchase decision revolves around environmentally concerned consumers who taken into consideration of the public consequences of their private consumption behavior and attempt to use their buying decision to bring about changes (Lai and Cheng, 2016). The consumer decision-making process involves five stages, namely need recognition, information search, evaluation of alternatives, purchase decision and post purchase decision.

When examining the consumer decisions to buy green products, the link between intention to purchase based on the evaluation of the alternatives (Stage 3) and actual buying decision (Stage 4) can be rather weak (Rosenbaum & Wong, 2015). Although consumers may express their concerns over the environment and appear committed to contribute to the protection of the environment by engaging in green products purchase. However, such concerns may not be consistently evident in their buying decisions, as the number of green products purchased is relatively smaller. Therefore, it is essential for the consumers to have a deeper understanding of the environmental impacts of the products they buy, for them to change their actual buying decisions (P. Wang, Liu, and Qi, 2014).

Consequently, without significant changes in the consumers' green buying decisions, the impacts of environmental technologies, production systems, economic policies and social initiatives on environmental sustainability can be undermined (Liobikiene, Grincevičienė, and Bernatoniene, 2016) To help resolve such issues, the notion of green product buying decisions has emerged as the focal point for policymakers and marketing strategists. Despite the increasing trend toward green

behavior, existing literature suggests that there is still limited understanding on how consumers interpret or make sense of green buying decisions in their everyday lives (Liobikiene et al., 2016)

Studies have shown that there are many variables which could lead consumers to have a particular purchase intention or different purchase intent based on brand, cost and quality which will help them decide what product to purchase after investigating and comparing the details of the product in the market (Laroche et al., 1996). While powerful consumer behavior is normally associated with human consciousness, knowledge can impact human choices or activities (McEachern and Warnaby, 2008). The connection between knowledge learning and consumer behavior is usually explained by Ajzen's Theory of Planned Behavior (TPB) which postulates that the state of mind of an individual and the trust he or she has are developed by knowledge. In this regard, multiple researchers have applied TPB to study and predict the ecological or green product purchasing behavior of people (K. Chan, 1998; S. C. Chen and Hung, 2016; Paul, Modi, and Patel, 2016).

The buying decision of green products depends on the consumer's intention to purchase green products, while avoiding those that may negatively impact the environment. Specifically, the consumer's intention conveys a willingness to purchase green products, and intention itself, according to Ramayah, Lee, and Mohamad (2010), can be considered as the motivational factors that influence consumer behavior towards buying/purchasing green products.

### **2.2.1 Gen-Y Consumer Behavior**

The Generation Y, or commonly known as Gen-Y, the millennials, next generation or generation next are individuals born between the years 1980 to 2000 (Viswanathan and Jain, 2013). It is believed that the Gen-Y consumers are particularly different in

many aspects compared to the Baby Boomers or Generation X (Pesquera, 2005). The Gen-Y consumers are perceived to be a diverse group who are technologically savvy and educated individuals. Also, they have been described as mature, sophisticated and structured (Syrett and Lammiman, 2003). Most importantly, their way of thinking and attitude are different from the previous generation before them (Kanchanapibul, Lacka, Wang, and Chan, 2014).

Various studies have shown that Gen-Y consumers are the most environmentally conscious (Vermillion and Peart, 2010). According to Y. J. Jang, Kim, and Bonn (2011), the Gen-Y consumers have the strongest opinions on environmental issues among all generational groups. In addition, they are more supportive of companies that are socially responsible (Furlow, 2011). The Gen-Y is a powerful and large consumer segment (Bhaduri and Ha-Brookshire, 2011) with significant impact on purchase decisions of their acquaintances (Y. J. Jang et al., 2011) and having a sizeable purchasing power to become the largest target group of customers for many businesses (Parment, 2013).

According to Mohamed (2007), purchasing environment-friendly products means consuming products that bring benefits to the environment, sensitive to the environment or/and recyclable. Although it seems that more consumers are becoming more concern to the environment, yet there are also recent researches that show the reasons which limit the growth of the green products industry (Borin et al., 2011; Tsen et al., 2006). Hence, it is very important to investigate the purchase behavior among the Gen-Y consumers after purchase intention is tested since, according to M. A. Fishbein and Ajzen (1975), the significance of intentions in determining behavior is the most common model. This is because when consumers have intention to purchase

environment-friendly products, then the tendency for them to perform such behavior will be higher.

### **2.2.2 Green Product**

Green products became increasingly important since 1970 and especially in the 1990s due to the concerns of environment and society. Normally, a product is defined as a bundle of features or qualities, and consumers may have different preferences over these characteristics (M. Fishbein, 1967; Lancaster, 1966). And green products with such qualities and differences of opinions, are commonly known as environment-friendly products which cause minimum effect to the environment. They are also defined as products which have minor impact on the environment and harmless to human health, with quality products criteria on protecting environment by using natural ingredients. Malaysia is one country which strongly support the concept of green and related practices.

In general, green product are designed or manufactured in a manner as to minimize the environmental impact in its production, distribution and consumption. They are products with less impact on the environment and less detrimental to human health than their alternatives. This is because they use recyclable materials, biodegradable elements and components. Nevertheless, there are several characteristics that a product must have to be regarded as a "green" product including easily reused materials made from natural or/and renewable resources, and recycled contents that are biodegradable, energy efficient or durable with low maintenance requirements (Tomasin, Pereira, Borchardt and Sellitto, 2013; Shrum, McCarty and Lowrey, 1995).Blengini, Fantoni, Busto, Genon and Zanetti, 2012; Tseng and Hung, 2013). Moreover, the growing public awareness of green products has resulted in the operation of green marketing or environment-responsible practices for companies in



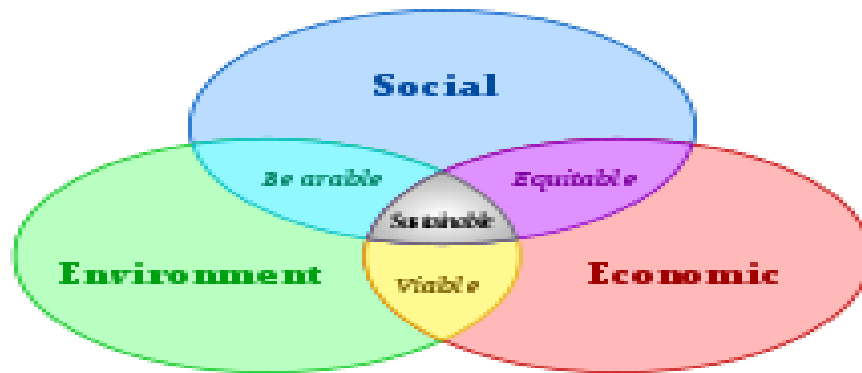
some industries. Some businesses engage in green marketing because such practices will enable them to make a profit.

### **2.2.3 Green Clothing Product**

Sustainable clothing refers to fabrics derived from eco-friendly resources, such as sustainably grown fiber crops or recycled materials. It also refers to how these fabrics are made. Historically, being environmentally conscious towards clothing meant (a) buying clothes from thrift stores or any shops that sell second-hand clothing, or (b) donating used clothes to shops previously mentioned, for reuse or resale. In modern times, the definition has been changed with a prominent trend towards sustainability and being 'green'. Sustainable clothing has expanded towards (a) reducing the amount of clothing discarded to landfills, and (b) decreasing the environmental impact of agro-chemicals in producing conventional fiber crops (e.g., cotton).

In the modern world, sustainable clothing has been described as 'clothing which incorporates one or more aspects of social and environmental sustainability' such as Fair- Trade manufacturing or fabric containing organically-grown raw material (Goworek, Fisher, Cooper, Woodward and Hiller, 2012), but how consumers subsequently care for and dispose of clothing also contribute to its environmental impact. Under the umbrella of sustainability, recycled clothing upholds the principle of the "Three R's of the Environment": Reduce, Reuse, and Recycle, and incorporated "Three Legs of Sustainability": Economics, Ecology, and Social Equity as shown in Figure 2.1.

**Figure 2.1: The "Three Pillars" of Sustainability Bounded by the Environment (Earth, Life)**



Source: Dimension of Sustainability, Johann Dréo, Sustainable Development, 2006

The utilization of recycled materials for the manufacturing of clothing provides an additional realm of economic world profit. Sustainable clothing will provide a new market for additional job opportunities, continuous net flow of money in the economy, and the reduction of raw materials and virgin resources. Source reduction or reducing the use of raw materials and virgin resources can ultimately reduce carbon emissions during the manufacturing process as well as the resources and carbon emissions that are related to the transportation process. This also prevents the unsustainable usage of extracting materials from the Earth by making use of what has already been used (i.e., recycling).

Among many green product categories, green clothing products have been chosen for this research study because they are related directly to the general consumers. Consumers nowadays are paying more attention to the materials of the clothes they buy, especially those that are not harmful to the environment. Another reason for this is related to the textile and clothing industry that generates much pollution and consumes many resources. Improper uses and disposals of clothing products may cause severe problems to the environment. Numerous consumer researches have also confirmed that while some consumers are informed and aware of the issues, others show little interest in sustainability aspects of fashion. Even though

the industry researches have shown the potential for promoting sustainability in the fashion supply chain but few communications have been transmitted to the consuming public all the time (Saicheua, Cooper and Knox, 2011).

Green products, in this study, are confined to green clothing products defined as sustainable fabric clothing produced from eco-friendly resources such as grown fiber crops or recycled materials including organic textiles and sustainable materials (for example) hemp, non-textiles (for example, bamboo or recycled plastic bottles) and recycled products (for example, clothes made from recycled clothing including vintage, textile and other materials and can also be termed re-used). In short, the issue of sustainable materials depends on some of above-mentioned natural or recycled materials. However, the renewability and source of a fiber, the process of how a raw fiber is turned into a textile, the impact of preparation and dyeing of the fibers, energy use in production and preparation, the working conditions of the people producing the materials, and the total carbon footprint of the materials, transportation between production plants, shipping to retail and consumer, how the material are handled and washed, the processes of repairs and updates, and what happens at the end of its life. Overall, diversity in the overall fiber mix is needed; cotton and polyester accounted for almost 85% of all fibers, and thus their impact was, and continues to be, disproportionately magnified (Fletcher,2012). Also, many fibers in the finished garments are mixed to acquire desired drape, flexibility or stretch, thus affecting both care and the possibility to recycle the material in the end. Below are some of the examples of green clothing materials.

1. Cellulose fibers - Natural fibers are fibers which are found in nature and are not petroleum-based. It can be categorized into two main groups, cellulose or plant fiber and protein or animal fiber. The most common plant-based fiber,

cellulose fibers include jute, flax, hemp, ramie, abaca, bamboo (used for viscose), soy, corn, banana, pineapple, beechwood (used for rayon). Alternative fibers such as bamboo (in yarn) and hemp (of a variety that produces only a tiny amount of the psychoactive component found in cannabis) are coming into greater use in green clothing.

- a) Cotton is also known as vegetable wool, is a major source of apparel fiber.

Cotton has many unique features such as excellent absorbency, durability, and intrinsic softness. It accounted for over 50% of all clothing produced worldwide. Bt cotton is a genetically modified organism (GMO) or genetically modified pest resistant plant cotton variety, which produces an insecticide to combat bollworm. According to report by University of Montana, Bt cotton is an insect-resistant transgenic crop designed to combat the bollworm. It was created by genetically altering the cotton genome to express a microbial protein from the bacterium *Bacillus thuringiensis*. In short, the transgene inserted into the plant's genome produces toxin crystals that the plant would not normally produce which, when ingested by a certain population of organisms, dissolves the gut lining, leading to the organism's death.

- b) Organic cotton is grown without the use of any genetically modification to the crops, without the use of any fertilizers, pesticides, and other synthetic agro-chemicals harmful to the land

- c) Naturally colored cotton - Cotton is naturally grown in varieties of colors.

Typically, cotton color can come as mauve, red, yellow, and orange hues. The use of naturally coloured cotton has long been historically suppressed, mainly due to the industrial revolution. It was much cheaper to have uniformly white cotton as a raw source for mass-producing cloth and fabric items. Currently, modern markets have revived a trend in using naturally colored cotton for its noted relevance in reducing harmful environmental impacts. In addition to that, naturally colored cotton is already colored, and thus do not require synthetic dyes during process. Furthermore, the color of fabrics made from naturally colored cotton does not become worn and fade away compared to synthetically dyed cotton fabrics.

- d) Soy fabrics is derived from the hulls of soybeans. Soy clothing is largely biodegradable, so it has a minimal impact on environment and landfills. It is a manufacturing byproduct. It can be blended (i.e. 30%) or made entirely out of soy fibers. Although not as durable as cotton or hemp fabrics, soy clothing has a soft, elastic feel. It is also known as the vegetable cashmere for its light and silky sensation. Soy fabrics are also moisture absorbent, anti-bacterial, and UV resistant.
- e) Hemp, like bamboo, is considered a sustainable crop. It requires little water to grow, and it is resistant to most pests and diseases. The hemp plant's broad leaves shade out weeds and other plant competitors, and its deep taproot system allows it to draw moisture deep in the soil. Unlike cotton, many parts of the hemp plant have a use. Hemp seeds,

for example, are processed into oil or food. Hemp fiber comes in two types: primary and secondary bast fibers. Hemp fibers are durable and are considered strong enough for construction uses. If compared to cotton fiber, hemp fiber is approximately 8 times the tensile strength and 4 times the durability. Hemp fibers are traditionally used for ropes rather than for clothing. However, modern technology and breeding practices have made hemp fiber more pliable, softer, and finer.

- f) Bamboo - Bamboo fabrics are made from heavily pulped bamboo grass. Making clothing and textile from bamboo is considered sustainable due to the lack of need for pesticides and agrochemicals. Naturally disease and pest resistant, bamboo is also fast growing. Compared to trees, certain varieties of bamboo can grow 1 to 4 inches long per day and can even branch and expand outward because of its underground rhizomes. Like cotton fibers, bamboo fibers are not naturally yellowish in color and are bleached white with chemicals during processing.
- g) Kombucha (SCOBY) - Inspired by a grant from the US Environmental Protection Agency, associate professor, Young-A-Lee, and her team are growing vats of gel-like film composed of cellulose fiber, a byproduct of the same symbiotic colonies of bacteria and yeast (abbreviated SCOBY) found in another of the world's popular "live culture" foods: kombucha. Once harvested and dried, the resulting material has a look and feel much like leather. This type of fibers is 100% biodegradable, they also foster a cradle- to-cradle cycle of reuse and regeneration that leaves behind virtually zero waste. However, this material takes a long time to grow about three to four weeks under lab-

controlled conditions. Hence, mass production is an issue. In addition, tests revealed that moisture absorption from the air softens this material makes it less durable. Researchers also discovered that cold conditions make it brittle.

- h) Qmilk - A German based company (Qmilch GmbH), has innovated a process to produce a textile fiber from casein in milk but it cannot be used for consumption. Qmilk fiber is made from 100% renewable resources. In addition, to produce 1 kg of fiber Qmilch the company needs only 5 minutes and max. 2 liters of water. This implies a particular level of cost efficiency and ensures a minimum of CO2 emissions. Qmilk fiber is biodegradable and leaves no traces. In addition, it is naturally antibacterial, especially against the bacterial strains, *Staphylococcus aureus* and *Pseudomonas aeruginosa* and is ideal for people that suffer from textile allergies. Fabrics made from Qmilk fiber provide high wearing comfort and a silky feel. This organic fiber is tested for harmful substances and dermatologically tested for the wearer's skin and body compatibility 0% chemical additives.
- i) S. Café - S. Café technology involves recycling used ground coffee beans into yarns. A piece of S. Café fabric is made with less energy in the process and can mask body odor. In addition, S. Café yarn offers 200% faster drying time compared to conventional cotton, with the ability to save energy in the process. S. Café coffee grounds come with numerous microscopic pores, which create a long-lasting natural and chemical free shield for yarn or fiber, reflecting UV rays and provide a comfortable outdoor experience

- j) Others cellulose fibers - Other alternative biodegradable fibers being developed by small companies includes leather alternative using pineapple leaves; bio-composites, fabrics, and leather alternative using various parts of coconut; fabric and paper made from banana plant stalks and stems.
2. Protein fibers – it originated from animal sources and are made up of protein molecules. The basic elements in these protein molecules being carbon, hydrogen oxygen and nitrogen. Natural protein fiber includes wool, silk, angora, camel, alpaca, llama, vicuna, cashmere, and mohair.
  3. Manufactured fibers – It can be categorized as manufactured cellulosic fibers, manufactured synthetic fibers and manufactured protein fiber (azlon). Manufactured cellulosic fibers include modal, Lyocell (also known under the brand name Tencel), rayon/viscose made from bamboo, rayon/viscose made from wood and polylactic acid (PLA). Manufactured synthetic fibers include polyester, nylon, spandex, acrylic fiber, polyethylene, and polypropylene (PP). Azlon is a manufactured protein fiber.
    - a) PET plastics are also known as Polyethylene terephthalate (PETE). PET's recycling code, the number within the three chasing arrows, is one. These plastics are usually beverage bottles (i.e. water, soda, and fruit juice bottles). According to the Environmental Protection Agency (EPA), plastic accounts for 12% of the total amount of waste we produce. Recycling plastic reduces air, water, and ground pollution. Recycling is only the first step; investing and purchasing products manufactured from recycled materials is the next of many steps to



living sustainably. Clothing can be made from plastics. Seventy percent of plastic-derived fabrics come from polyester, and the type of polyester most used in fabrics is polyethylene terephthalate (PET). The plastic clothing come from reused plastics, often recycled plastic bottles. The Coca-Cola Company had also created a "Drink2Wear" line of T-shirts made from recycled bottles. Generally, PET plastic clothing can made from recycled bottles as follows: plastic bottles are collected, compressed, baled, and shipped into processing facilities where they will be chopped into flakes, and melted into small white pellets. Then, the pellets are processed again, and spun into yarn-like fiber where it can be made into clothing. One main benefit of making clothes from recycled bottles is that it enables the bottles and other plastics from occupying landfill space. Another benefit is that it takes 30% less energy to make clothes from recycled plastics than from virgin polyesters.

#### **2.2.4 Development of Green Clothing Products**

The fashion industry today is a multi-billion dollars business affecting everyone around the world in some way. Fashion is the second dirtiest industry in the world, following right after oil. Due to speedy production and over consumption, the fashion industry has landed itself on an environmentally damaging path, much different than 100 years ago. Although, the industrial revolution and the creation of ready-to-wear in the early 1900's may have sparked the initial beginning. It was not until fast fashion took over our closets, that the real numbers started to show. The clothing unless specified as fair trade or organic, contains harmful dyes, toxins and pesticides that seep into the Earth's system when thrown away. The toxins also carry on into the garments as we wear and cherish them. Along with chemicals, the fashion industry also uses an

intense amount of water, from the start of the process to even the stages of home washing. This high number reality can be seen through the fact that to make one cotton t-shirt today, it uses up 2,700 gallons of fresh water.

According to the True Cost, a documentary highlighting the reality of the fashion industry, states that the average American throws away 82 pounds annually of garments, accessories, and shoes. Fast fashion (cheap trendy collections) bases its business model on high volume collections and speedy production. Because production is so fast and the clothing is right on trend, consumers cannot help to be constantly bombarded with the latest item they must have! The reality is though, we really do not need this much clothing in our lives. According to the documentary, worldwide, we consume 80 billion pieces of clothing a month, which is a 400% increase from two decades ago.

For starters the facade of trend desires and over consumption must evaporate. As a consumer it is important to shop responsible and realize they do not need to have every latest piece in the book to be considered fashionable. On brands perspective, the research believes that a shift towards high quality and sustainable methods is the important to help overcoming the environmental and waste issue. The fashion industry has evolved and there are many incredible brands around testing the limits of design and choosing to include green and sustainability in their clothing product. With retrospect to fashion, sustainability has been developed to reinvent the industry through environmentally focused production, design and consumption. From eco-friendly materials to new ideas in technology, sustainability is here to develop an industry that does not jeopardize the needs of future generations to come, for the ease of the present. Some of the brands which promotes sustainability in their business includes the follows:

1. The brand Boll & Branch make all their bedding products from organic cotton and have been certified by Fair Trade US.
2. The Hemp Trading Company is an ethically driven underground clothing label, specializing in environmentally friendly, politically conscious street wear made of hemp, bamboo, organic cotton and other sustainable fabrics
3. Pact, a brand that produced Fair Trade Factory Certified™ clothing made out of organic cotton.
4. Patagonia, a major retailer in casual wear, has been selling fleece clothing made from post-consumer plastic soda bottles since 1993.
5. Wrangler, a historic denim brand, launched a sustainable denim collection called Indigood that uses foam instead of water to dye denim, resulting in 100 per cent less water used, and 60 per cent less energy used.

Sustainability is incredibly important and on everyone's radar! Even companies such as H&M, Nike, Adidas, and Zara who are known for creating fast fashion collections around the world are even working to develop a sustainable shift. Although we have a long way to go, the industry is at least on the right path towards a common understanding and an honest reflection towards what needs to change. And the power is in consumers now to start aware and make purchase of green clothing product available in the market. H&M, Levi and Uniqlo had promoting their sustainable green clothing worldwide including Malaysia. There are also lot of consumers are under the impression that only the upper class can afford eco-friendly fashion and green clothing products.

Uniqlo is a fast fashion retailing company which has adopted a new sustainability mission statement that spells "Unlocking the power of Clothing". With a stream of products, supply chain, employees, stores, and communities, the company

intends to change the world in the fashion industry for the better through its sustainable initiatives including designing, making, selling clothing with the element of sustainability in order to make the world a better place. Good clothing means simple clothing, high in quality and built to last. It is clothing that enrich the lives of people who wear them with comfort, protection and pleasure. Good clothing should be produced in a way that is harmonious with nature, without excessive burden on the environment. It is made by people of diverse backgrounds working with energy and enthusiasm, under conditions in which their health, safety and human rights are respected and cared for. The promise of Uniqlo company is to always work toward a better and more sustainable society. It is committed to all aspects of its products, from function and quality to types of materials and how the clothing are made. It makes great clothing by sourcing ethically produced materials, minimizing environment impacts, developing new materials and technologies which incorporated “green” and “sustainability” concept. In addition to that, the company also promotes a second life for its clothing through recycling and reuse of clothing.

All Uniqlo clothing products and materials are ethically produced and there are also initiatives to use the recycle materials to produce fabric for clothing. Partnering with Better Cotton Initiative, it seeks to improve fame globally by making effort to determine the sources of wood material for cellulose, promote animal welfare by abolishing merino wool supplier, use the tradeable down and feathers certified by Responsible Down Standard (RDS), 2020, and not use fur to respect the welfare of animals. These are some of the good examples of sustainability practices that the company employs to promote sustainable clothing production by strictly managing the use of chemical and toxic substances, monitoring, and reducing GHC emissions, reduce water consumption. Besides that, the company also promotes the maximum use

of clothing through its recycling programs where the customer can drop the no-longer-wear clothing at recycling boxes located at its store. The recycle clothing especially the wearable items, in turn, are distributed to refugees, disaster victims and others in need worldwide to minimize waste. Clothing that are deemed unwearable are recycled back into new fabric, refuse paper and plastic fuel (RPF) pellets for fuel.

Levi Strauss & Co is another company which is involve in green clothing initiative. The fashion industry has significant impact on the environment this include the pesticides and chemicals used to crate textile and fabric for clothing. One way to reduce fashion footprint is to choose certified organic clothing. Levi is aggressively promoting the purchase of clothing certified by the Global Organic Textile Standards. This clothing is free from toxic chemicals and pollutants. The company takes initiative to showing customer ethical fashion labels making stylish, and quality organic clothing (green clothing). Levi's had started in 2012, to reduce the hazardous and chemical used to dye and treat their clothing and aiming for the elimination of hazardous chemicals by 2020. The company aim for 100% of their cotton use for clothing come from natural source or sustainable sources by 2020. Levi also started to promote the use of green clothing in their store since 2015. By 2020, Levi's goal id for 80% of all Levi's products to be made using water less innovation technologies. Levi actively working with supplier to adopt only per fluorinated compounds (PFC) – free technologies that provide a safer alternative for water repellency without making ant harmful impact to the environment. Tencel™ Lyocell is a soft fabric that has a similar consistency to viscose (rayon). It is made from certified responsible harvested forests which has a lower water, carbon, and chemical footprint than viscose, and it is produced in a way that is safe for humans and the environment.

H&M is also a fashion group which taken sustainability as main element of their corporate strategy. Its sustainability work is integrated into its corporate culture and values. The company ensures that sustainability is integrated into all aspects of everything that it does.

As a leader in the fashion industry, H&M actively innovates, influences, collaborates and leads the industry toward a truly sustainable fashion trend and future. It also aggressively ensures the supply chain activities (design, raw materials, fabric and yarn production, garment production, transport, sales, customer, and recycling) include the element of sustainability. The materials and looks chosen by its designers have incorporated the likely effect on human and environment. By making the right choices using a wide range of environment-friendly and sustainable-sourced materials (green) like recycled polyester or lyocell, the company has significantly reduced the negative impact on the environment. In short, the company aims to promote and use 100% recycled or sustainable-sourced materials to produce all its clothing by the year 2030.

The Chemical Restriction List has been implemented internally on its supplier in order to minimize the impact of fabric and yarn production to human and environment. Garment production aims to achieve fair living wages by reducing overtime and ensuring workplace safety. As much as 95% of all textiles discarded across the globe each year can be recycled, but far too many textiles end up in landfills without recycle. H&M is actively working with suppliers to reprocess the textile fibers in old clothes and recreate new fashion pieces. In the year 2013, it had launched the world's biggest retail garment collecting system and collections containing 20% recycled cotton from the program.

### **2.2.5 Purchase Intention**

According to (Blackwell, Miniard and Engel (2006), one of the most crucial skills a business should have is to predict consumer behavior. And intentions are important in predicting actual consumer purchase behavior. Purchase intention is defined as a consumer's likelihood to purchase certain product or visit a store for services (Grewal, Krishnan, Baker and Borin, 1998; Shao, Baker and Wagner, 2004). Hence, green purchase intention simply means the likelihood of purchasing environment-friendly products which have lower impact on the environment (Mei-Fang and Chia-Lin, 2015). According to Rashid, Jusoff and Kassim (2009), green purchase intention is the willingness and probability of an individual prioritizing his or her purchase in environment- friendly products over conventional products; whereas Chen and Chang (2012) have defined such intention as the possibility of purchasing a product based on the environmental needs of the consumers.

Purchase intention, according to Chandon, Morwitz and Reinartz (2005), Hill, Fishbein and Ajzen (1977) and Ferraz, Buhamra, Laroche and Veloso (2017), has always been widely used in marketing academic literatures and treated as a highly crucial variable due to its nature as a good proxy of a consumer's actual purchase behavior. Usually, a greater intention will lead to a greater possibility of a purchase (Berkman and Gilson., 1979). Although there might be possibilities where differences between intentions and behaviors may arise, yet there are many studies that show these two variables are correlated. By evaluating a consumer purchase intention, companies can adjust the positioning of its products and services by understanding the market trend better. According to K. Chan (2001), purchase intention of green products can be measured by three items that are key consideration to purchase green products, switch of brands due to environmental reasons, and switch to a greener version of the

product. M. Lee, Han and Willson (2011) had further added that intention in the green context can be defined as the likelihood of purchasing and recommending green products to others.

Fortunately, consumers who convert their environmental concerns into action are getting more attention based on apparently a raise of environmentalism as witnessed in the United States and Western Europe (Tsen, et al. 2006; Rabbar and Wahid, 2011). The report from the European Commission in 2013 had shown that 89% of Europeans had believed that purchasing environmental-friendly or green products was able to make a difference to the environment, and 95% of them had agreed that purchasing environmental-friendly products is the “right thing to do” (Barbarossa and Pastore, 2015). Generally, consumers in developed countries tend to take environmental impact into consideration on the products they purchase (Moon, Balasubramanian, and Rima, 2007).

However, there are also researchers who have offered causes and potential limits on the growth of environment-friendly products or green product market. Many consumers tend to purchase products with low environmental quality due to lack of knowledge and think environment-friendly products or green products are more expensive with inferior quality, resulting in consumers being reluctant to purchase environmental-friendly products or green products. These consumers may express an inclination to pay a premium price for environmental-friendly products, but their actions are inconsistent with their expressions (Borin et al., 2011; D’Souza, Taghian, and Lamb (2006); Thieme et al., 2015).

While exploring green purchase intention and behavior, many studies have reported a discrepancy or “gap” between consumer-expressed favorable attitudes and actual purchasing practices. According to Hughner, McDonagh, Prothero, Shultz, and



Stanton (2007), while many consumers have shown a positive attitude towards purchases of organic food products (67%), only a small number of consumers (4%) actually purchase those products. Similarly, according to The House of Commons (2007), 30% of the consumers in the United Kingdom (UK) have reported their concerns towards the environment, but rarely translated them into a green purchase. It is thus clear that there exists a gap between consumer thinking and actual (Aertsens, Mondelaers, Verbeke, Buysse, and Huylenbroeck, 2011; Booi Chen and Teck Chai, 2010; Wheale and Hinton, 2007). Moreover, Young, Hwang, McDonald, and Oates (2009) had observed that the increased willingness to purchase environment-friendly products or green products may not necessarily be converted into action, even though most consumers have the potential power to make a difference to environment-related matters. Furthermore, it is unfair for the government to face the challenge alone, as both business communities and consumers should cooperate to resolve the shared environmental issues. Hence, formulating law alone is not enough to address environmental issues effectively, but to make the society and people as a whole to becoming more aware of the environmental impacts related to their consumption patterns and, more importantly, convert their awareness into constructive actions as well (Laroche, Toffoli, Chankon, and Muller, 1996; Joshi and Rahman, 2016).

## **2.3 Review of Relevant Theoretical Models**

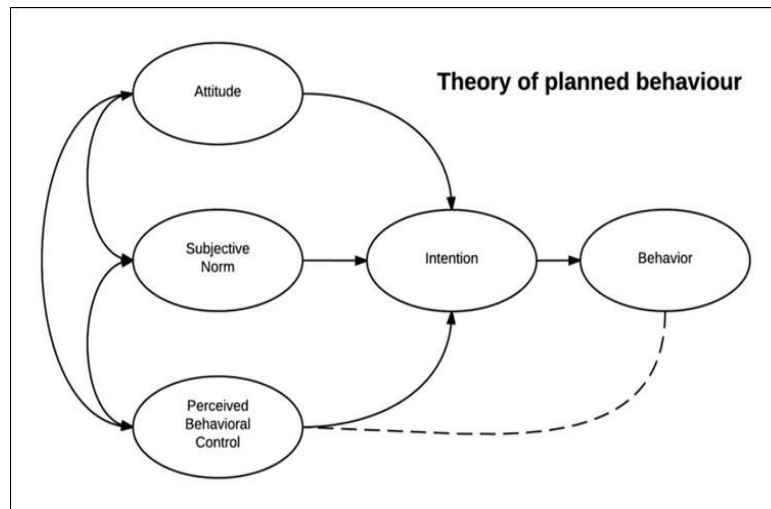
### **2.3.1 Theory of Planned Behavior (TPB)**

The TPB model is likened to the evolution of the theory of reasoned action (TRA), with the same purpose of examining consumer behavior (Ajzen and Fishbein, 1980). Compared to TRA, “perceived control” is added into the TPB model as a factor of intention (Ajzen and Madden, 1986). TPB explains that individuals will perform a behavior if they think it will deliver positive results (favorable attitudes), able to gain

social approval (subjective norms) and owning greater control in conducting the behavior (perceived control). In term of environment-related topics, consumer attitudes simply mean green consumerism (Albayrak, Aksoy and Caber, 2013). Favorable attitudes, subjective norms and perceived control will influence intention which is seen to be the only direct psychological factor of a behavior. The TPB has the history of being used to test various types of behavioral intentions and actions, for instance, leisure participation (Ajzen and Driver, 1991), unethical behaviors (Chang, 1998), sexual behaviors (Wilson, Zenda, McMaster, and Lavelle, 1992) and environment-friendly behaviors (H. Y. Kim and Chung, 2011; Vermeir and Verbeke, 2006). By the way, (Ajzen (1991) had earlier asserted that TPB is flexible to add in additional predictors as long justifications can be provided.

This research study applies the Ajzen TPB model, extended into the Theory of Reasoned Action which was proposed by Hill et al. (1977). The TPB predicts the behavioral intention which eventually influences individual behavior, and the behavioral intention is a form of subjective norm, perceived behavioral control and attitude as shown in Figure 3 below. In fact, according to Joshi and Rahman (2015), many studies have used this theory to study the consumer purchase behavior toward green products because it was specifically developed to predict the behavior of an individual.

**Figure 2.2: Theory of Planned Behavior**



Source: Adopted from Ajzen (1991)

Furthermore, multiple researchers have applied TPB to study and predict people's ecological or pro-environmental behavior (K. Chan, 1998; S. C. Chen and Hung, 2016; Paul et al., 2016). There are also numerous global studies done on green practices that have utilized TPB as the foundation of their theoretical framework (Chia-Jung, Kou-Sheng, and Yueh-Ying, 2012; Jeong, Jang, Day, and Ha, 2014). For instance, Han and Kim (2010) have adopted the TPB to investigate customer intention to patronize green hotels. Moreover, this theory has been applied in the study of Malaysian intention to purchase energy-saving household appliances (C. S. Tan, Ooi and Goh, 2017). Another study example has shown that consumer behavioral intention on electricity savings behavior has applied this theory (Z. Wang, Zhang and Li, 2014).

If customers feel socially esteemed to adopt green behaviors, this can affect their attitudes toward the purchase of green clothing products which show that they care about the well-being of the environment. It is also assumed that people with higher perceived behavioral control in maintaining green behaviors are more likely to purchase and use green clothing products. In this research study, subjective norm is

referred as an individual's perspective of the social pressure to purchase green clothing products. In other words, a person would raise his or her intention to follow suit when significant others think that purchase of green clothing products is the right thing to do (Chung, 2016). TPB has been criticized to be highly cognitive and lacking affective elements, particularly emotions (A.Klöckner, 2013; Russell and Fielding, 2010). People are assumed to be rational and make systematic decisions based on available information without measuring their feeling associated with that information (Joshi and Rahman, 2016). Emotions signal the importance of an issue which may influence information processing and trigger responses to persuasive appeals as well as initiation of goal setting (Russell, Young, Unsworth and Robinson, 2017). It is then more likely for people to motivate themselves by translating his or her emotions into an actual behavior (Morris, Woo, Geason and Kim, 2002). Hence, in this study, emotion is incorporated as internal factors to improve the explanatory power of TPB on Gen-Y consumer purchase intention (Kaufmann, Panni, & Orphanidou, 2012) explained that individuals who possess environmental knowledge are individuals who emphasize on matters related to producing a product, the influence of a product on the environment and the desired responsibility for maintaining environmental sustainability. The consumer's knowledge about nature includes the greenhouse effect, waste management, chemical waste and recycling (Mohd Suki, 2013). (D'Souza, Taghian, Lamb and Peretiatko, 2007) stated that knowledge about environmental issues influences a person's awareness about brands and a positive attitude towards green products.

Besides, TPB has ignored the external effects of situational factors as intention should be the formation of (internal) attitudinal variables and (external) contextual variables (Carrington, Neville and Whitwell, 2010; Joshi & Rahman, 2016).

Situational factors refer to the objective environment encountered by the individuals when they opt for a particular environmental behavior. The situational environments will either trigger or hinder environmental behaviors of the individuals (Li et al., 2016). In the case of green clothing products, the marketing mix – product attributes, price, place and green advertising prominent forces of situational factors which are possibly influencing Gen-Y consumers' purchase intention towards green clothing products in Selangor. In addition to that, subjective norm is referred as an individual's perspective of the social pressure to visit green restaurants. In other words, a person would raise his or her intention to follow suit when significant others think that purchase and use of green clothing product is the right thing to do (Chung, 2016).

The three constructs in the model of TPB together with the newly incorporated six constructs which are used to explain Gen-Y consumer purchase intention are discussed in Table 1 shown below:

**Table 2.1: Definition of Variables**

| <b>Variables</b>             | <b>Definition</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Attitude                     | According to (Ajzen, 1991), the formation of attitude is derived reasonably from behavioral beliefs and outcome evaluation.                                                                                                                                                                                                                                                                                                                                                                                                   |
| Subjective Norm              | Subjective norm is a social factor which refers to perceived social pressure to perform or not to perform the action in order to gain approval from their circle of influence (Ajzen, 1991). The desire to act is highly influenced by the reference groups such as close friends, relatives, and colleagues who are important to the actor. In another words subjective norm refers to a person's total belief that as an individual or group they should perform the behavior under investigation (Ajzen and Driver, 1991). |
| Perceived Behavioral Control | Perceived behavioral control is defined as "the perceived ease or difficulty of conducting a behavior" (Ajzen, 1991). It is an evaluation of the response towards certain non-volitional elements such as time and opportunities that promote or restrict a person to perform in a particular circumstance (Cheng and Lam, 2008).                                                                                                                                                                                             |

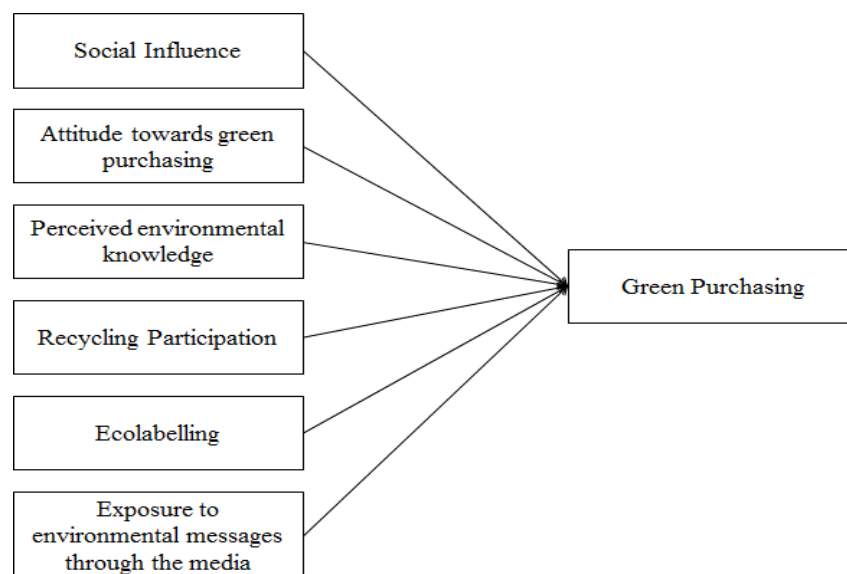
|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Emotion                 | Emotions are affective response towards emotion-eliciting objects or events and are involved in every purchase decision (Moons and De Pelsmacker, 2015). They can be either positive or negative which are such as frustrated, guilty, proud, and content (Russell et al., 2017).                                                                                                                                                                                                                                                                           |
| Environmental Knowledge | Knowledge is defined in a context of seeking, maintaining and using information in life. Whereas, according to (Fryxell and Lo, 2003) knowledge in the context of consumers is defined as a character that influences the whole decision-making process. Environmental knowledge could be defined as general knowledge about facts, concepts and the relationship between the natural environment and the eco system.                                                                                                                                       |
| Price                   | Price can be defined as the amount of money expected, required, or given in payment for something. As the consideration given in exchange for transfer of ownership, price forms the essential basis of commercial transactions. In commerce, price is determined by what a buyer is willing to pay, a seller is willing to accept, and the competition                                                                                                                                                                                                     |
|                         | is allowing to be charged. With product, promotion, and place of marketing mix, it is one of the business variables over which organizations can exercise some degree of control.                                                                                                                                                                                                                                                                                                                                                                           |
| Product Attributes      | A product is defined as a bundle of features or qualities, and consumers may have different preferences over these characteristics (M. Fishbein, 1967; Lancaster, 1966). Product attributes describe the main product features and the major benefits received by those using the product. Characteristics of finished goods that make it distinct from other goods. Eco-labelling or eco-certification informs consumers about the green characteristics of the product and motivates them to purchase green products (Y. J. Kim, Njite and Hancer, 2013). |
| Place                   | Kotler and Keller define place in the last marketing mix factor as the location, inventory and distribution channel. It can be further explained as the method used to deliver the product or services from the producer to the end customer (Pelsmacker, 2005).                                                                                                                                                                                                                                                                                            |
| Green Advertising       | Advertising is an effective tool for communicating the identity of brands and the proposed value, through which the brand equity may be developed (Alden, Steenkamp and Batra, 1999). Green advertising includes promotional activities, which convey the relationship between green products and the environment, encourage green lifestyles or depict a corporate image of environmental responsibility (Banerjee, Gulas and Iyer, 1995; P. Kumar and Ghodeswar, 2010)                                                                                    |
| Purchase Intention      | Purchase intention is defined as a consumer's likelihood in purchasing certain product or visiting a store for services (Grewal et al., 1998; Shao et al., 2004). Hence, green purchase intention simply means the likelihood of purchasing environmentally friendly products, which have lower impact to the environment (Mei-Fang and Chia-Lin, 2015).                                                                                                                                                                                                    |

Source: Developed for the research

### 2.3.2 Predictors of Young Consumer's Green Purchase Behavior

The model, illustrated in Figure 4 below, was proposed by Joshi and Rahman, (2016) with the purpose of determining the factors that influence green purchase behavior among young educated consumers in Delhi, India. The proposed model was influenced by the new approach provided by Phipps et al. (2013) in understanding consumer sustainable behavior by combining the theory of reciprocal determinism with social cognitive theory (SCT). The strength of the model is its ability to predict a consumer's future green behavior by looking from three main perspectives: the consumer personal factors, his or her current sustainable behavior and sociocultural environment. It was found that the prediction power of the factors mentioned in descending order are social influence, attitude towards green purchase, perceived environmental knowledge, recycling participation, eco-labelling and exposure to environmental messages through the media. Even though this research contributes a lot to the body of knowledge as the first research to integrate the theory of reciprocal determinism and “exposure to environmental message through the media” in predicting green behavior, it overlooked defining “young consumers” such as Gen-Y consumers.

**Figure 2.3: Predictors of Young Consumer Green Purchase Behavior**



Source: (Joshi & Rahman, 2016)

## **2.4 Review of Prior Empirical Studies**

### **2.4.1 The Relationship between Attitude and purchase Intention**

Tih and Zainol (2012) had defined attitude as the overall evaluation a person makes toward a behavior. Han, Hsu and Sheu (2010) had pointed out positive attitude toward a behavior will more probably influence a person to engage in a specific behavior. Yadav and Pathak (2017) had highlighted that attitude has positively influenced consumer green purchase intention and behavior to buy green products. Maichum, Parichatnon and Peng (2016) had collected data from Thai consumers and discovered that attitude was the most influential factor affecting consumer purchase intention. In scientific literature, attitude has received mixed evidences for its moderating effect of the attitude-behavior relationship (Karpinski, Steinman and Hilton, 2005).

According to Schubert, Kandampully, Solnet, and Kralj (2010), attitude was found to have a direct impact on the patronage intention toward green restaurants if the consumers knew that the restaurants were adopting green practices. Another research indicated that attitude was positively related with purchase intention and green consumption behaviors (Lien, Huang and Chang, 2012). The study of Ahmad and Thyagaraj (2015) had also showed a positive association between attitude and consumer purchase intention toward the green brand. According to Ajzen (1991), the formation of attitude is derived reasonably from behavioral beliefs and outcome evaluation. Attitude defines a clear role in making decision to purchase green clothing products if the consumers showed positive attitude toward the purchase intention. Consumer positive attitude toward green products and their buying decisions may be delimited by several other factors including lack of alternative, cost and inconsistent information (Hiller, 2010; Vermeir and Verbeke, 2006). Young consumers who have shown higher green attitude are more likely to engage in an ecologically friendly



behavior, such as avoiding disposable products, looking for recyclable products, and buying biodegradable goods. As strong attitude is expected to cause consumers to perform ecologically, it is expected therefore that attitudes will have positive relationship purchasing intention of environment-friendly products (Barber, Taylor and Strick, 2009; L. Xu, Prybutok and Blankson, 2019). The more positive an attitude a consumer has, the stronger the intention to perform certain behavior (Akbar, Hassan, Khurshid, Niaz and Rizwan, 2014). Hence, the following hypothesis was tendered.

**HA1: There is positive relationship between attitudes and Gen-Y consumer purchase intention towards green clothing products**

#### **2.4.2 The Relationship between Perceived Behavioral Control and Purchase Intention**

Perceived behavioral control is defined as “the perceived ease or difficulty of conducting a behavior” (Ajzen, 1991). It is an evaluation of the response towards certain non-volitional elements such as time and opportunities that promote or restrict a person to perform in a particular circumstance (Cheng and Lam, 2008). Perceived behavioral control (PBC) is the extent of control in which a person own in order to predict behavior intention such as patronize green restaurants (Numraktrakul, P., Ngarmyarn, A., and Panichpathom (2012) and S. C. Chen and Hung (2016) have identified determinants of acceptance for green products by incorporating social impression, environmental ethics and environmental consciousness to extend the TPB. This study supported that PBC positively affects intentions to purchase and use green products when they increase their resources and confidence.

The study conducted by Masi, Karatu, Kamariah and Mat (2015) in Nigerian universities had explored factors including perceived green knowledge, green availability, green price sensitivity as well as PBC. The results stated that PBC is positively related to green purchase intention due to consumers who are highly affected

to perform this kind of behavior. According to Chia-Jung et al. (2012), PBC had a positive effect on behavioral intention and it was the most influential factor in predicting the likelihood of green adoption. Both studies of Verma and Chandra (2018) and Mei-Fang and Pei-Ju (2014) have established that PBC has a positive impact on patronizing green hotels during travel. Hence, the following hypothesis was tendered.

**H2: There is positive relationship between perceived behavioral control and Gen- Y consumer purchase intention towards green clothing products.**

#### **2.4.3 The Relationship between Emotion and Purchase Intention**

Emotion refers to various affective states or feelings associated with consumption (J. Lee, Lee, and Choi, 2011). Emotions are affective response toward emotion-eliciting objects or events that are involved in every purchase decision (Moons and De Pelsmacker, 2015). They can be either positive or negative, and as such are frustrating, guilty, proud, and content (Russell et al., 2017). Ou and Verhoef (2017) had mentioned that emotion has a positive influence on loyalty intentions. Studies have also shown that emotion has a positive relationship with consumer sustainable food consumption intention as it involves the cognitive, rational, affective and emotional elements when confronting environmental issues such as sustainable food consumption (S. Y. Kim, Yoon, and Choi, 2016). Another study has also found a positive association between client emotion and clinic patronage intention (Ladhari, Souiden and Dufour, 2017). According to Y. J. Kim et al. (2013), emotion has a significant positive impact on consumer intention to select an environment-friendly restaurant. This result is aligned with the research project of H. Bin Chen, Yeh and Huan (2014) which showed a positive correlation between emotion and nostalgic-themed restaurant consumption intention.

Anticipated emotions had apparently driven the formation of consumer intention, and eventually it was the crucial motivator in decision making. It will not only contribute to people-satisfaction level, but also the prediction of behaviors (J. Lee et al., 2011; Rivis, Sheeran, and Armitage, 2009). Consumers used their emotions to identify their unconscious needs and initiate actions that will satisfy them. Hence, behavioral intention will be better explained by the addition of emotion in the context of eco-friendly restaurant selection. Hence, the following hypothesis was tendered:

**H3: There is positive relationship between emotions and Gen-Y consumer purchase intention to towards green clothing products**

#### **2.4.4 The Relationship between Environmental Knowledge and Purchase Intention**

Knowledge is defined in the context of seeking, maintaining and using information in life. According to Fryxell and Lo (2003), knowledge in the context of consumers is defined as a character that influences the whole decision-making process. Environmental knowledge could be defined as general knowledge about facts, concepts and the relationship between the natural environment and the eco system. It has a positive influence on a person's attitude towards green consumptions (Azizan and Suki, 2013; Mohamed, 2007). However, a study conducted by Vazifehdoust et al.(2013) had established that environmental knowledge had no significance on green purchase decision. Another study has also shown that there is a significant effect between environment knowledge and purchase intention (Goh and Balaji, 2016; Mohamed, 2007). According to Cherian and Jacob (2012), the majority of consumers lack green knowledge because of low of awareness toward the green product. But knowledge, as a whole, has significant influence over all phases in the decision-making process. Specifically, knowledge is a relevant and significant construct that affects how consumers gather and organize information (Alba and Hutchinson, 1987), how

much information is used in decision making and how consumers evaluate products and services (Murray and Schlacter, 1990).

Another study has presented environmental knowledge as one of the major determinants of green purchase intention and behavior (Young et al., 2009). Yet another study in China had used ecological knowledge as one of the predictors in green purchase research; its results showed that the higher ecological knowledge has eventually influence green purchase behavior (R. Y. K. Chan and Lau, 2000). There are more studies conducted on green purchase behavior using environmental knowledge as one of the predictors which have found a significant relationship between environmental knowledge and green purchase intention (Mei, Ling and Piew, 2012; Rahbar and Wahid, 2011) These results support the acceptance of the following hypothesis:

**H4: There is positive relationship between environmental knowledge and Gen-Y consumer purchase intention towards green clothing products**

#### **2.4.5 The Relationship between Subjective Norm and Purchase Intention**

Subjective norm is a social factor which refers to perceived social pressure to perform or not to perform the action in order to gain approval from its circle of influence (Ajzen, 1991). The desire to act is highly influenced by the reference groups such as close friends, relatives, and colleagues who are important to the actor. In other words, subjective norm refers to a person's total belief that as an individual or group he or she should perform the behavior under investigation (Martin Fishbein and Ajzen, 2006). If consumer purchase intention and behavior are accepted by those who are important to them, they are more likely to perform that behavior (Armitage and Conner, 2001).

According to the study of Y. J. Kim et al. (2013), subjective norm was the best predictor of consumer intention to choose an environment-friendly restaurant.

Subjective norms such as environmentalist, green society, government, parents and friends measure how social pressure on consumers can motivate them to purchase or not to purchase green products. The findings revealed that the created social pressure was more likely to affect the consumers' selection on a green restaurant. In the study by Shin, Im, Jung and Severt, (2018), subjective norm has been found to positively affect the consumer intention to select organic menu items which is consistent with the study of S. C. Chen and Hung (2016) that showed positive correlation between subjective norm and energy saving intention. Other researchers have also proved that subjective norm is a significant factor of intention to consume organic food (Dean, Raats and Shepherd, 2012) and positively related to green hotel revisit intention (Mei-Fang and Pei-Ju, 2014). Hence, further researches are required to study the significance of subjective norm on consumer purchase intention toward green clothing products. These results support the acceptance of the following hypothesis:

**H5: There is positive relationship between subjective norms and Gen-Y consumer's purchase intention towards green clothing products**

#### **2.4.6 The Relationship between Product Attributes and Purchase Intention**

A product is defined as a bundle of features or qualities, and consumers may have different preferences over these characteristics (M. Fishbein, 1967; Lancaster, 1966). Product attributes describe the main product features and the major benefits received by those using the product. According to Azzone and Bertelè (1994), consumers will consider the environmental compatibility of the products when making their purchases. In addition, Karjaluoto and Chatterjee (2009) had mentioned that consumers will tend to purchase eco-friendly products as they are able to generate higher level of environmental effect. Eco-label is known as form of environmental labelling and has a seal of approval (D'Souza, 2004). Consumer identify products

information based on what they read on the product labels and the information will eventually influence their purchasing decision (Azizan and Suki, 2013). A research to find relationship between eco-label and green purchase intention has established that eco-label strongly influenced consumer intention to purchase green product (Sammer and Wüstenhagen, 2006). Another study found that teenagers don't give priority to eco-label during purchasing especially when the price of the product is expensive (Sharaf et al., 2015). Furthermore, Barber (2010) had also stated that environmental packaging has become a concern to consumers in making their purchasing decisions. And Rashid (2009) earlier had found that eco-labelling can enhance customer environmental knowledge which eventually would create favorable customer purchasing intention as well.

Since the Gen-Y group is seen as educated individuals (Lu, Bock, and Joseph, 2013; Syrett and Lammiman, 2003) and they are more environmentally conscious (Vermillion and Peart, 2010), product attributes are predicted to have positive significant relationship with Gen-Y's willingness to purchase environmentally products. This is because this group of consumers will look at the environmental attributes that align with their understanding of the products. Besides, consumers will also tend to purchase environment-friendly products if they perceive the value of the products to be useful (Akbar et al., 2014). According to L. Xu et al. (2019), perceived quality is positively related to purchasing environment-friendly products. Hence, the consumer buying decision can be shaped by his or her inclination to acquire sufficient knowledge needed to assess both the product's attributes and its novelty (Tanner and Kast, 2003). These results support the acceptance of the following hypothesis:

**H6: There is positive relationship between product attributes and Gen-Y consumer purchase intention towards green clothing products**

#### **2.4.7 The Relationship between Price and Purchase Intention**

Price can be defined as the amount of money expected, required, or given in payment for something. As the consideration given in exchange for transfer of ownership, price forms the essential basis of commercial transactions. In commerce, price is determined by what a buyer is willing to pay, a seller is willing to accept, and the competition is allowing to be charged. With product, promotion, and place of marketing mix, it is one of the business variables over which organizations can exercise some degree of control. According to Smith and Paladino, (2010), price was a significant variable and many consumers considered price as the essential determinant of green consumption. Since green purchase often involves greater costs, the purchase of such items creates a social dilemma for consumers (Gleim, Smith, Andrews and Cronin, 2013; Jin, Line and Merkebu, 2016).

Price is also one of the major barriers for the adoption of green (Gadenne, Sharma, Kerr and Smith, 2011). Consumers, who are price-sensitive, deem that the price of products is the most salient factor affecting their buying decision (Eze and Ndubisi, 2013). However, price premium may not be a major purchase barrier as people increasingly seem to be prepared to incur higher cost in consuming environment-friendly products, especially for heavy users (Suki, 2015). People seem to be more interested in other factors, probably the benefits attached to the surcharges, and thus they are willing to pay a higher price when comes to green consumption (Eze and Ndubisi, 2013). This finding is compatible with the study of Marian, Chrysochou, Krystallis and Thøgersen (2014) when they stated that price was not only a cost, but it also contained other cues which affected the overall evaluation of the product and intention as well. Therefore, price can positively influence the consumption intention in some context.

According to Irianto (2015), consumers were quite tolerant to premium prices in green consumption, as they uphold the other values such as environmental and health benefits, the latter positively affects their behavioral intention. Nevertheless, the effect of price on consumer buying decision is more likely to vary owing to his or her perception of the products. A survey of consumer spending on recycled products has revealed that consumers are willing to pay more on green products such as eco-labelled goods (Essoussi and Linton, 2010). Thus, consumer decision on paying a premium for green products is associated with the perception of value rather than the actual price of the products (Moser, 2015). Moreover, Petrescu, Oncioiu and Petrescu (2017) had also explained that price has a positive relationship with behavioral intention because people believe that the product itself can influence intention. These results support the acceptance of the following hypothesis:

**H7: There is positive relationship between prices and Gen-Y consumer purchase intention towards green clothing products**

#### **2.4.8 The Relationship between Place and Purchase Intention**

The marketing mix component helps the organizations choose the best markets to offer their products and how convenient their products could provide (Blackwell et al., 2006). Kotler and Lane (2016) had defined place in the last marketing mix factor as the location, inventory and distribution channel. It can be further explained as the method used to deliver the product or services from the producer to the end customer. Besides, a point of buying is the area where the buying is made (Kotler and Lane, 2016) yet there are two levels of point of purchase and point of sale. Point of purchase is full-scale level incorporating the shopping mall, the city, the business sector. Point of sale is the miniaturized-scale level incorporating the interior of the store that displays the product. Customers who initially intended to only do window shopping will have the desire or purchase intention when they see the product being displayed



in the store. This also helps to remind the consumer of a promotion he or she had seen before which then leads him or her to purchase the product (Blackwell et al., 2006).

Accessibility in marketing mix element place is defined as to what extent a customer is able to easily purchase and use the products, and it has two dimensions: availability and convenience (Sheth, Sisodia and Sharma, 2000). Distribution channel is an important tool for the product to be accessible, reach each customer and meet his or her demands especially on green clothing products. Thøgersen and Zhou (2012) had pointed out that low availability is one of the barriers for consumer purchase of organic food. Even though the consumers are motivated to purchase organic products, low accessibility of the goods can be a big barrier for this purchase intention in daily life (Vermeir and Verbeke, 2006). Moreover, in countries with many organic food stores, high accessibility is the major contribution to a considerable organic market share (Thøgersen, 2010).

Previous studies mostly concentrated on shops or places that support green products that consumers prefer to buy (Wanninayake and Randiwela, 2008). However, this study looks into green product that are displayed in stores instead of only eco-friendly distribution channels. The purpose of this is to evaluate if consumers will effortlessly consider purchasing green products in these stores if the products are available. The consumer behavior on the point of purchase and store contributes strongly when consumers look for products from common brands and they add additional information to the customers when preparing to purchase in the store (Anselmsson and Johansson, 2007). These results support the acceptance of the following hypothesis:

**H8: There is positive relationship between place and Gen-Y consumer's purchase intention towards green clothing products**

**2.4.9 The Relationship between Green Advertising and Purchase Intention**

Advertising is an effective tool for communicating the identity of brands and the proposed value, through which the brand equity may be developed (Alden et al., 1999; Keller, 2009). The credibility of an advertisement may help determine the extent to which the consumers perceive the claims made to be truthful and believable (Khare, 2015). Green advertising includes promotional activities which convey the relationship between green products and the environment, encourage green lifestyles or depict a corporate image of environmental responsibility (Banerjee et al., 1995; P. Kumar and Ghodeswar, 2015). Thus, “green” advertising is capable of drawing consumer attention in a more persuasive way as it has the potential to improve the brand image of green products and provide young consumers with familiar concepts of green products (Chekima, B., Wafa, S. A., Igau, O. A., Chekima, S., and Jr., 2016).

Another recent study also viewed the roles of advertising as a means to increase demand, yet more marketers and brands, both green and traditional, are recognizing the troubling implications of over consumption (Reich and Soule, 2016). According to Cheah and Phau (2011), consumers do not only respond to green advertising but also assess the credibility of the advertised brand. Hence, the way the message is communicated and perception of the source may shape consumer responses to advertisements (V. Kumar, 2017). The credibility of the source may be enhanced by incorporating environmentally conscious images into the advertisements (Mathur and Mathur, 2000). With the wider spread penetration of green movements worldwide and the increasing public attention given to environment issues, most companies have opted for green advertising and Kotler and Lane (2016) had stated that promotion

includes public relations, direct marketing, advertising, and sale promotion. In this study, the promotion factor will focus on advertising in relation to purchase behavior and purchase intention. Advertising is a component of marketing communication mix. It can be categorized as any kind of presentation, ideas or even labels in merchandises (Kotler and Lane, 2016). Advertisements help organization spread information to buyers and attract consumer attention to products. Promotion includes the method for an organization to draw its target groups and partners to its product or the organization as a whole. Consumers are concerned about the promotion of green products and they believe that the promotion of green products is the reason to control environmental preservation. Green advertising takes place when the green product is promoted in a way that declares the advertised products or services to be natural and environment-friendly. Green advertisement also indicates that the production process maintains or reduces resources and energy (Chingching, 2011).

The promotion on green products helps to improve consumer awareness on the go-green concepts. This can indirectly help consumers find the relevant green product that they are looking for. Promoting customer purchase decision and also where to purchase what is important because this helps to develop green products interest and the willingness to purchase. Green advertising plays a pivotal role especially when organization looks after the natural environment, products which are environment-friendly. These can help improve the corporate-image campaign and give more importance to the environmental certification of the organizations (Hartmann and Apaolaza-Ibañez, 2008). From the perspective of a consumer, an organization's corporate image is seen as a desired feature of that organization (Bathmanathan and Hironaka, 2016). The main objective of green advertisement is to portray the company's eco-focus, provide customer with choices that allow them to act in

environment-friendly way and to direct attention to the positive consequences of purchasing behavior (Cherian and Jacob, 2012). The results of the advertisements, as a strategy to attracting consumer to purchase green product, support the acceptance of the following hypothesis:

**H9: There is positive relationship between green advertising and Gen-Y consumer's purchase intention towards green clothing products**

## **2.5 Theoretical Framework**

Despite the theory of planned behavior (TPB) commonly used in environmental research, considered as the most effective and inclusive theory in predicting intentions and behavior as stated earlier by Conner and Armitage (1998), but Y. F. Wang and Wang, (2016) mentioned that there are some studies showing that TPB is underserving because only the concepts of self-identity and ethical contributions are used to establish prediction of purchase intentions and behavior. Hence, it is necessary to combine some extra elements such as the emotion, environmental knowledge, product attributes, price, place and green advertising into the TPB model to provide a broader perspective of purchase intention study. Hence, the following theoretical framework is developed from the review of theories, models, and concepts in consumer behavior and purchase intention for green products, identified the relevant variables which may influence the purchase intention toward green clothing products, shown in Figure 2.4 below:

**Figure 2.4: Theoretical Framework**



Source: Developed for the research

## **2.6 Development of Hypothesis**

The following hypotheses developed and tendered here are based on the above-mentioned literature on the theories, concepts and variables enunciated as having direct and indirect relationships with the focus of this study on determining the factors influencing consumer purchase intention especially among the Gen-Y consumers in the State of Selangor.

Ha1: There is positive relationship between attitudes and Gen-Y consumer purchase intention toward green clothing products.

Ha2: There is positive relationship between perceived behavioral control and Gen-Y consumer purchase intention toward green clothing products.

Ha3: There is positive relationship between emotions and Gen-Y consumer purchase intention to toward green clothing products.

Ha4: There is positive relationship between environmental knowledge and Gen-Y consumer purchase intention toward green clothing products.

Ha5: There is positive relationship between subjective norms and Gen-Y consumer purchase intention toward green clothing products.

Ha6: There is positive relationship between product attributes and  
Gen-Y consumer purchase intention toward green clothing products.

Ha7: There is positive relationship between price and Gen-Y consumer purchase intention towards green clothing products.

Ha8: There is positive relationship between place and Gen-Y consumer purchase intention towards green clothing products.

Ha9: There is positive relationship between green advertising and Gen-Y Consumer purchase intention toward green clothing products.

## **CHAPTER 3**

### **METHODOLOGY**

#### **3.1 Introduction**

Based on existing circumstances including improvements needed by business companies, the government and public consumers, individually or in combined effort, to review and strategize, among others, targets and market segmentation, policy enforcement and compliance and more discriminating practices of consumption and disposal habits respectively, on anti-environment degradation products, it is timely for a study like this research undertaking to focus on the importance and use of green products especially green clothing. A logical step forward in this study therefore is to focus on the purchase intention of green products, especially green clothing products, among Malaysian consumers; the latter being directed at the Gen-Y consumers whose agile youth and changing consumption tastes and patterns may increasingly differ from those of their parents and grandparents before them. Apparently, rightly or wrongly, they may be more receptive to adopting and practicing green consumption inclinations to combat the alarming challenges of indiscriminate degradation and destruction of environment in carefree supply-demand over-production that, wittingly or unwittingly, reinforces over- consumption contributions to disruptive environmentalism of quality health and safety issues.

#### **3.2 Research Design**

Research design is viewed as a master plan that explains all the methods in obtaining and analyzing the data (Zikmund, 2003). Research design also can be referred to as the purpose of carrying out the research study, such as the discovery, and the descriptive or hypothesis testing (Uma Sekaran and Bougie, 2016). Basically, it is seen as the foundation in conducting research. There are three types of research designs, which

are causal research, descriptive research, and exploratory research. The purpose of causal research is to determine the causal – effect relationships among variables, whereas exploratory research describes the nature of certain issues (Zikmund, 2003). Meanwhile, (Hair, Bush and Ortinau, 2009) defined descriptive research as the numerical data collected to answer the research questions.

This research aims to identify the factors that affect Gen-Y consumers' purchase intention towards green clothing products in Selangor. Survey method will be used for data collection because it can obtain large amount of data in a relatively short period of time at lower cost (Kelly, Clark, Brown and Sitzia, 2003). Meanwhile, our research was a cross-sectional study since the data collection was conducted only at a single point in time. According to (Mann, 2012), it will be cost saving as less resources and no follow up cost is required. Furthermore, the unit of analysis for the research was the Gen-Y consumers in Selangor whereby the survey questionnaires were self-administered to the target respondents.

The purpose of this study is to identify determine the relationship of the nine independent variables (Attitude, subjective norm, perceived behavioral, emotion, environmental knowledge, product attributes, price, place and green advertising) and Gen-Y consumers' purchase intention towards green clothing products in Selangor. Both descriptive research and causal – effect research will be used in this research study. The descriptive research will be used to examine the demographic profiles of the respondents and answer the research questions. For causal-effect relationship, it is important to prove the cause-and-effect relationship between the independent variables with the purchase intention as dependent variable.



### **3.3 Justification of the Study**

In fact, not many related or updated studies have been done on these issues in the Malaysian context although Malaysia is one of the developing countries in Asia, according to Konuk (2015) and Yadav and Pathak (2016). Malaysia ranks the 18th most competitive economy among 140 economies, according to the World Economic Forum Competitiveness Report (WEF) 2015, and this is the highest-ranking position among all developing Asian economies during that time (Akoum, 2016). Additionally, the Nielson Global Online Environmental and Sustainability Survey in 2011 showed that nine out of ten Malaysians are alert with the negative consequences of environmental issues (The Edge, 2011), with the Malaysian government trying to implement various environmental policies recently to raise awareness and educate the people, for instance, enforcing a smoking ban at hawker stalls, public areas, restaurants and coffee shops nationwide from January 01, 2019, to charting a zero-waste plan aimed at abolishing single-use plastics by year 2030 (Zein, 2018). Due to these reasons, it is believed that there are promising opportunities for green products such as green clothing products in the country where the Gen-Y group, as individuals born between the 1980s to 2000s, are deemed as the future potential market of environment-friendly products (Cheah and Phau, 2011; D'Souza, 2004; Viswanathan and Jain, 2013). And there are statistics to support the claim that socio- demographic factors in terms of generation gap could be one of the critical influencing factors of constructive change in green consumption lifestyles (Cheah and Phau, 2011).

### **3.4 Research Philosophy**

Two basic philosophies underline a research undertaking, that is, phenomenology and positivism. On the one hand, phenomenology, literally means a study of a phenomenon. It is a philosophy and a discipline portrays an assembly of experience or

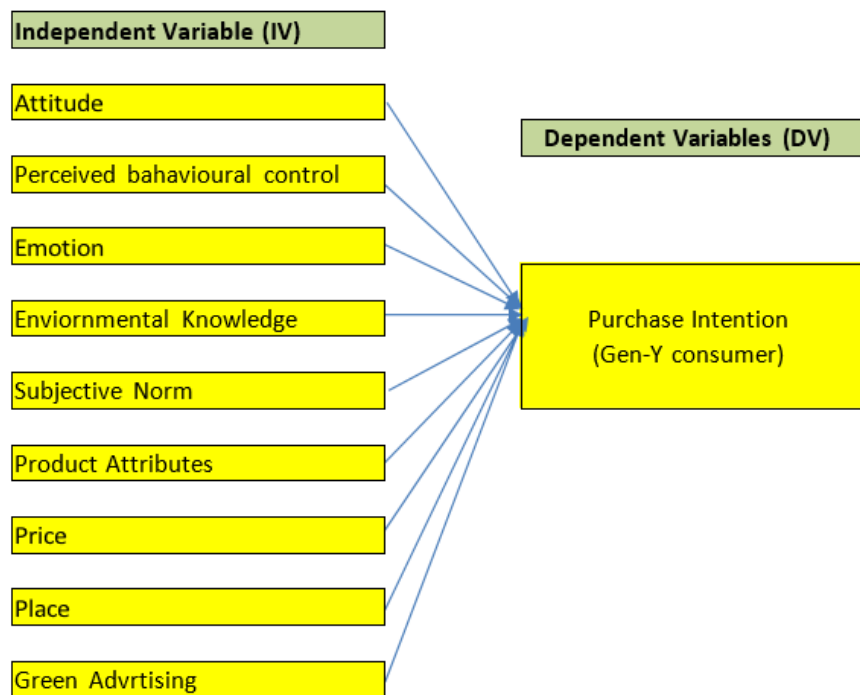
consciousness founded on the identification and interpretation of a thing, happening or event, in reality. It is associated with the principle of qualitative research that emphasizes the subjectivity elements of the research. On the other hand, positivism is often associated with quantitative research that emphasizes objectivity founded on empirical evidences elicited from the survey responses. It is a philosophical theory that emphasizes the derivation of knowledge through the experience of a phenomenon and not from the true definition of a particular entity or thing. The use of dependent and independent variables to predict the future scenario is also evident in the view of the positivists.

Also, positivism generates explanatory or causal relationships to be able to make the prediction of a phenomenon being inquired. More specifically, it follows the principles and logic of sampling, making inferences using the elicited sample responses. In this study, positivism is used because of the large sample represented to generalize and predict tendencies. As such, theories in positivism focus on the result discussion based on the hypothetical statements and the deductions therefrom.

### **3.5 Conceptual Framework**

The proposed conceptual framework is shown in Figure 3.1 below:

**Figure 3.1: Conceptual Framework**



Source: Developed for the research

Figure 6 shows the relationship between the independent and dependent variables in this research study. The following independent variables selected - attitude, subjective norm and perceived behavioral control in TPB, and others relevant variable such as emotion, environmental knowledge, product attributes, price, place and green advertising - are commonly cited in researches and published works as explained in Chapter One and also reviewed in parts of Chapter Two. Similarly, the dependent variable of Gen-Y consumer purchase intention is also discussed briefly in Overview of Chapter One and the theoretical framework and development of hypotheses in Chapter Two. Thus, to address these issues, this study is conducted to identify and explain the factors influencing purchase intention of green clothing products among Gen-Y consumers in Selangor, Malaysia and to identify the relationship between attitude, perceived behavioral control, emotion, environmental

knowledge, subjective norms, product attributes, price, place and green advertising towards Gen-Y consumer purchase intention.

### **3.6 Population, Sample and Sampling Technique**

#### **3.6.1 Sampling Design**

Zikmund (2003) had defined sampling process as the procedure of using a smaller number of items to conclude an entire population. A sampling design was applied to identify the suitable target respondents to participate in the survey, and the prerequisite was to decide the demographic profiles of the research sample comprising the target population, sampling location, sampling frame, sampling elements, sampling size and sampling techniques.

#### **3.6.2 Target Population**

Population refers to the whole set of individuals of interest, while a sample means the small number of people within the larger population (Weiers, 2007). In this study context, the population refers to residents in the State of Selangor from which the Gen-Y consumers aged between 25 to 42 years old constitute a part thereof the research sample.

#### **3.6.3 Sampling Frame and Location Limit**

A sampling frame means the elements within a population (Malhotra, 2010). The questionnaires were distributed to 396 respondents at Selangor. Selangor is chosen to distribute the questionnaires because based on the information by the Department of Statistics Malaysia in the second quarter of 2019 as shown in Figure 7 below. Selangor had the most population among all states in Malaysia and the questionnaires were distributed through the Internet to reach respondents residing in the key district areas of the Selangor states as shown in Table 3.1 below:

**Figure 3.2: Demographics Statistics by State, (Q2, 2019), Malaysia**



**Table 3.1:Source: Department of Statistics Malaysia**

| Name                         | Status            | Population<br>Census<br>2000-07-05 | Population<br>Census<br>2010-07-06 |
|------------------------------|-------------------|------------------------------------|------------------------------------|
| <b>Selangor</b>              | <b>State</b>      | <b>4,176,636</b>                   | <b>5,462,141</b>                   |
| Gombak                       | District          | 569,081                            | 682,226                            |
| Klang                        | District          | 681,724                            | 861,189                            |
| Kuala Langat                 | District          | 204,255                            | 224,648                            |
| Kuala Selangor               | District          | 170,198                            | 209,590                            |
| Petaling                     | District          | 1,254,846                          | 1,812,633                          |
| Sabak Bernam                 | District          | 119,535                            | 105,777                            |
| Sepang                       | District          | 103,384                            | 211,361                            |
| Ulu Langat (Hulu Langat)     | District          | 915,677                            | 1,156,585                          |
| Ulu Selangor (Hulu Selangor) | District          | 157,936                            | 198,132                            |
| <b>Malaysia</b>              | <b>Federation</b> | <b>23,274,690</b>                  | <b>28,334,135</b>                  |

Source: Department of Statistics Malaysia

### 3.6.4 Sampling Elements

The sampling element is also a very important aspect in a research (Malhotra, 2010).

The sampling elements in this research are Gen-Y individuals that have stable income stream, able to make decision on their purchasing behavior and then justify it.

According to (Rahbar and Wahid, 2011) this group of people are familiar in making purchase decisions.

### **3.6.5 Sampling Techniques**

Sampling techniques will affect the research results. Therefore, it needs to be selected carefully. There are two kinds of sampling methods, which are probability sampling and the non-probability sampling (Weiers, 2007). Their main difference is whether every individual have an equal chance in participating the survey. Probability method is inappropriate in this research because it is not possible for every respondent in this country to have an equal opportunity to participate in the survey. Hence, non – probability method will be used in this research study. Besides, it is used due to its simplicity in obtaining the information rapidly, more convenient and inexpensive (Malhotra and Peterson, 2006; Malhotra and Peterson, 2006).

The types of non-probability sampling include snowball sampling, convenience sampling, judgement sampling and quota sampling. Convenience sampling is a non- probability sampling technique where subjects are selected because of their convenient accessibility and proximity to the researcher. Convenience sampling is a type of nonprobability sampling in which people are sampled simply because they are "convenient" sources of data for researchers. In probability sampling, each element in the population has a known non-zero chance of being selected through the use of a random selection procedures. Convenience sampling is chosen because it is easy to carry out with few rules governing how the sample should be collected. The relative cost and time required to carry out a convenience sample are small in comparison to probability sampling techniques.

### **3.6.6 Sampling Size**

The sample size will be set as 396 respondents in this research. According to (Hair, Tatham, Anderson and Black, 1998) the number of respondents is sufficient if the estimated parameter ratio is 15:1 to 20:1. Since this research has 9 independent variables and the numbers of questionnaire distribute will be about 396, then the ratio is about 44:1. As such, 396 copies of questionnaires will be sufficient. More questionnaires will be distributed compare with the numbers of sufficient questionnaires by the standard ratio to prevent any uncomplete questionnaires by respondents. (Malhotra and Peterson, 2006) also stated that the result will be more accurate when the sample size is bigger. Besides, (Bagozzi and Yi, 2012) also mentioned that a sample size can be accepted as long it was more than 100, or 200 if possible. (Krejcie and Morgan, 1970) also came up with a table for determining sample size for a given population for easy reference. From the Table developed by Krejcie and Morgan (1970), the sample size suggested for sampling frame more than 1 million will be at 384 and above.

## **3.7 Data Collection, Processing and Analysis**

### **3.7.1 Data Collection Method**

Primary data is the fresh data collected for solving a specific problem (Malhotra, 2010). It is known as unformatted data also, as they are directly collected through contacts with the research samples in order to solve some specific problems. The primary data is needed because they are more relevant to the problem, specific, and up to date (Onkvisit and Shaw, 2004) Primary data can be collected from individuals, focus groups, panels and unobtrusive methods (U. Sekaran, 2003). For this research study, the researchers will survey the targeted individuals (Gen-Y consumer) by distributing questionnaires to the appropriate respondents. According to the percentage

of population by district in Selangor area in Table 3.2 below, the number of survey questionnaires will be distributed to each district shown as follows:

**Table 3.2: Allocation of Survey Questionnaires by District in Selangor**

| DISTRICT       | POPULATION       | %           | CALCULATION             | NUMBER OF SURVEY QUESTIONNAIRES ALLOCATED |
|----------------|------------------|-------------|-------------------------|-------------------------------------------|
| GOMBAK         | 682,226          | 12%         | $396 \times 12\% = 49$  | 49                                        |
| KLANG          | 861,189          | 16%         | $396 \times 16\% = 62$  | 62                                        |
| KUALA LAMGAT   | 224,648          | 4%          | $396 \times 4\% = 16$   | 16                                        |
| KUALA SELANGOR | 209,590          | 4%          | $396 \times 4\% = 16$   | 16                                        |
| PETALING JAYA  | 1,812,633        | 33%         | $396 \times 33\% = 131$ | 131                                       |
| SABAK BERNAM   | 105,777          | 2%          | $396 \times 2\% = 8$    | 8                                         |
| SEPANG         | 211,361          | 4%          | $396 \times 4\% = 15$   | 15                                        |
| HULU LANGAT    | 1,156,585        | 21%         | $396 \times 21\% = 84$  | 84                                        |
| HULU SELANGOR  | 198,132          | 4%          | $396 \times 4\% = 15$   | 15                                        |
| <b>TOTAL</b>   | <b>5,462,141</b> | <b>100%</b> |                         | <b>396</b>                                |

Source: Developed for the research

Secondary data is the data collected from previous researches, which ultimately can be obtained by accessing the internal and external records of published sources (U. Sekaran, 2003; Zikmund, 2003). Secondary data was used in forming the literature review and theoretical framework. The sources were mainly from online databases which including Emerald, JSTOR, Pro-quest, and search engines especially Google. In addition, textbooks, newspaper articles, and conference papers were crucial sources of secondary data for this research study.

### 3.7.2 Research Instrument

Research instrument means the survey research method serving as the foundation of a research, and typically associate itself with both descriptive and causal research. A survey is defined a set of questions targeting at a particular group of people (L. J.



McIntyre, 2004). Generally, there are four types of survey methods, which are person – administered survey, online survey, telephone administrated survey and self – administrated survey.

The people-administered survey involves trained interviewers asking the respondents questions and record the answers given (Hair et al., 2009) and the methods including executive interviews, in-home interviews, mall-intercept interviews and purchase-intercept interviews. Online survey is a survey that conducted through fax, internet and electronic mail while telephone administrated survey is conducted through the phone. Next, the self-administrated survey is a survey that the questionnaires are completed by the respondents themselves (Zikmund, 2003). In this research, online survey will be applied to get the respondents to answer the online questionnaire accordingly. The online survey is being selected due to reasons such as increase response rate by reaching out to target respondents faster and cheaper; get real-time results for quick and easy analyze; more accurate - margin of error can be reduced because respondent enter their answer directly into the system; easy to use for survey participant – flexible for participant to choose a suitable time to answer the questionnaire; easy to use for researcher – data can be instantly available and can easily be transferred into statistical software and spreadsheets; and some of the market researcher also have found that participants prefer to complete online survey rather than take part in written questionnaire or telephone interview which is usually taking longer time and more detailed answered.

### **The Questionnaire**

By designing and sending relevant and targeted surveys, the participants are more likely to respond with honest answers. In addition to that, there are two types of survey questions, which are open-ended and close-ended questions. Open-ended questions are

the questions that allow the respondents to provide their own answers, while close – ended questions are questions that provided multiple options for the respondents to choose their answers (D. McIntyre, 2005). The researcher applied close-ended question in this research. The close-ended questions will be rated with the Statistical Package for Social Science (SPSS) version 24.0 program. The researcher separated the questionnaire into three parts, which were section A, B, and C. Section A is asking the respondents' demographic profiles which are gender, age, marital status, education level and personal monthly income. For section B, the questions are related to independent variables, while questions in section C is related to dependent variable.

The questionnaires for this study were administered to 396 Gen-Y consumers ages 25-45 in various district according to the table 2. Due to COVID-19 situation happening in Malaysia, the face-to-face questionnaire answering was change to online questionnaire. The research questionnaire has been further translated into 3 languages to ensure that the respondents are fully understand the instructions and question before answering the questionnaires. Below are the related links:

English Version:

[https://docs.google.com/forms/d/e/1FAIpQLSchSL8EEghD0F4JCSQtxf6hqKykws5NoyL8VfenRqWtW-jJhA/viewform?usp=pp\\_url](https://docs.google.com/forms/d/e/1FAIpQLSchSL8EEghD0F4JCSQtxf6hqKykws5NoyL8VfenRqWtW-jJhA/viewform?usp=pp_url)

Version Malay

[https://docs.google.com/forms/d/e/1FAIpQLSdVz\\_CY6pVaAUwC6ARE2W\\_RO4V0NoQ73OxrUYdvB78tT-fYdg/viewform?usp=pp\\_url](https://docs.google.com/forms/d/e/1FAIpQLSdVz_CY6pVaAUwC6ARE2W_RO4V0NoQ73OxrUYdvB78tT-fYdg/viewform?usp=pp_url)

Chinese Version

[https://docs.google.com/forms/d/e/1FAIpQLSePxJygA3dMbhu5-pHOBgqdYiiYs1XTA5JBV7vwTQ5H3DW-A/viewform?usp=pp\\_url](https://docs.google.com/forms/d/e/1FAIpQLSePxJygA3dMbhu5-pHOBgqdYiiYs1XTA5JBV7vwTQ5H3DW-A/viewform?usp=pp_url)

### **The Pilot Study**

A pre-test was conducted to eliminate any inconsistency that are associated with survey research and also to improve the validity of the questionnaire items, based on the advice of five Master and PhD postgraduates who assisted in reviewing and commenting the sustainability items in the draft questionnaires. This pre-test instrument was conducted to verify the relevance of the itemized categories and contents, sourced from actual market-sourced materials on green products and green clothing in available company databases acknowledged in the References. This includes those marketing materials of the researcher's traditional medicine and consumer products marketing company. Acknowledging that the pilot study, not totally original but a compilation of different market-survey reports, can help to improve any ambiguities in the questionnaires and clarify doubts that can only enhance the reliability of the final finding-results of the research study. According to Kothari (2004), and confirmed by Radhakrishna (2007), a pilot test is required to be conducted in order to detect the cross-cultural language errors, and also to discover the possible flaws in questionnaire items. Consequently, the validity and reliability of survey questionnaires can be enhanced. The draft questionnaire was distributed to selected 30 associates in marketing to read and authenticate items that were suitable or/and can elicit appropriate responses to the issues raised. Once verified, and the items in the final questionnaire were ready. However, the so-called pilot study results were not included because partly the 30 responses were only reviewing and making suggested changes as needed, and also their input was not included in the final 396 Gen-Y respondents targeted.

### **3.7.3 Statistical Method**

### 3.7.3.1 Construct Measurement

Trochim (2007) had defined the level of measurement as the relationship among values that are assigned to the attributes of certain variables. Thus, it is crucial to understand the level of measurement to interpret the data from the variables. According to Weiers (2007), the assignment of numerical value to a variable is a process of measurement. Zikmund (2003) had defined a scale as any series of items organized gradually according to a magnitude or value to represent the quantitative value of an item, a person, or a place in the spectrum. There is a total of four scales, which are nominal scale, ordinal scale, interval scale and ratio scale (Weiers, 2007). Nominal scale and interval scales are applied in the building of the questionnaire.

For Section A which consists of demographic related questions, nominal scale will be applied. For Section B, and C that consist of independent variables, dependent variables related questions, interval scale was applied. The researcher used “5 – Likert Scale” measurement in the questionnaire. The value 1 and 2 means strongly disagree and disagree respectively, value 3 means neutral, whereas value 4 and 5 means agree and strongly agree respectively. The questions were all adopted from past research by different authors as shown in the Table 3.3:

**Table 3.3: Origin of Constructs in the Questionnaires**

| Section A                     |       |                         |                                          |
|-------------------------------|-------|-------------------------|------------------------------------------|
| Information                   | Items | Measurement             | Source*                                  |
| Demographic Profile           | 7     | Nominal Scale           | Self-developed by Researcher             |
| Section B                     |       |                         |                                          |
| Independent Variables (IV)    | Items | Measurement             | Source*                                  |
| Attitude                      | 6     | Five-point Likert scale | (C. Xu, Jie, Xiaojun, & Jiangshan, 2016) |
| Subjective Norm               | 4     | Five-point Likert scale | (Paul et al., 2016)                      |
| Perceived Behavioural Control | 6     | Five-point Likert scale | (Y. J. Kim et al., 2013)                 |

|                                 |              |                         |                                             |
|---------------------------------|--------------|-------------------------|---------------------------------------------|
| Emotion                         | 3            | Five-point Likert scale | (S. Jang & Namkung, 2009)                   |
| Environmental knowledge         | 6            | Five-point Likert scale | (Joshi & Rahman, 2016; Y. K. Lee, 2017)     |
| Price                           | 3            | Five-point Likert scale | (Mohd Suki, 2013)                           |
| Product Attributes              | 4            | Five-point Likert scale | (K. Lee, 2009; Pickett-Baker & Ozaki, 2008) |
| Place                           | 4            | Five-point Likert scale | (Sheth et al., 2000)                        |
| Green Advertising               | 5            | Five-point Likert scale | (Phau & Ong, 2007)                          |
| <b>Section C</b>                |              |                         |                                             |
| <b>Dependent Variables (DV)</b> | <b>Items</b> | <b>Measurement</b>      | <b>Source*</b>                              |
| Purchase Intention              | 4            | Five-point Likert scale | (Y. K. Lee, 2017; C. Xu et al., 2016)       |
| Total                           | 45           |                         |                                             |

**\*NB: Source** in column 4 refers to (a) researcher's own work; and (b) 'concepts or variables' adopted from cited authors and their work. This Table is the result of Researcher's summary of concepts or variables used in the theoretical framework. Source: Developed for the research

### 3.8 Data Processing

In this stage, data will be converted into a form that the computer is able to process, which involves questionnaire checking, data editing, data coding, data transcribing and data cleaning. Data obtained from the survey will be converted into quantitative information.

#### 3.8.1 Questionnaire Checking

Questionnaire checking is needed to check the quality of the questionnaire. After the questionnaire was completed, the comprehensiveness of the questionnaire was evaluated by doing pilot study in determining the errors in the questionnaire for improvements.

#### 3.8.2 Data Editing

In data editing, raw data will be checked to determine whether any mistakes done by respondents. Questionnaires that were not properly completed such as existence of missing data will be rejected to maintain the quality of analysis.

### **3.8.3 Data Coding**

The coding process makes the data entry process into the SPSS system more convenient as numerical values will be assigned to each individual response for all the questions within the questionnaire. In the first part of the questionnaire, the gender “male” will be coded with 1.0 while ‘female’ will be coded with 2.0. The same will be done to the other four variables as well which are age, marital status, level of education and personal monthly income. For Part B and Part C, the option “strongly disagree” was coded 1.0, “disagree” will be coded 2.0, “neutral” will be coded 3, “agree” will be coded 4 and “strongly agree” will be coded 5.

### **3.8.4 Data Transcription**

Data transcription involved transferring the coded data from the questionnaires directly into the computer. Data collected from the questionnaires will be keyed into the SPSS software in order to interpret the results.

### **3.8.5 Data Cleaning**

Data Cleaning will be done after information is transfer into the computer, which involved the checking of the consistency of the completed questionnaires. Despite a consistency check was done in the beginning at the editing stage, the inspection at this stage is more trustworthy because it was done by the computer. In other words, data cleaning is an utterly check of the completed questionnaires to confirm their consistency including missing answer treatment.

### **3.8.6 Data Analysis**

The analysis stage involves certain procedures performed by the researcher in order to convert all the data collected into meaningful format (Zikmund, 2003). Data evaluation using logical and analytical reasoning will be involved in this stage. Data analysis will be conducted in order to produce information that is able to contribute in addressing

the research questions. SPSS version 24.0 will be used to code the data that will derive from the completed questionnaire. After the researcher conducted all the relevant analyses, eventually the result desired from the research will be obtained.

#### **3.8.6.1 Descriptive Analysis**

Descriptive analysis is considered as the initial stage of the data analysis process, as it transforms raw data into a more understandable form (Zikmund, 2003). Descriptive analysis will be applied to examine the similarity of the basic characteristics of the current data with the previous data by other researchers (Heppner & Heppner, 2004). The characteristics mentioned consist of standard deviations, means, skewness of data and percentages. The information is then summarized, categorized, rearranged so that it can go through other forms of analysis. After all the analyses is completed, the information obtained will be presented in a form of table. In this research, frequency analysis and central tendency analysis will be conducted.

#### **3.8.6.2 Frequency Analysis**

Frequency analysis shows the rate of recurrence of all variables (Zikmund, 2003). The frequency analysis data will be reported in percentage forms, and the analysis summarized all the demographic information of the respondents, independent variables and dependent variable in table form. The highest and lowest values of each item in every part will be presented.

#### **3.8.6.3 Central Tendency Analysis**

The highest and lowest mean for each variable will be studied in this research. Mean can be considered as a very common measure of central tendency since it is a simple arithmetic average of statistical data that just add all the values and divide the total

number of items in a set (Zikmund, 2003). Hence, the mean of every item in the questionnaire will be studied and analyzed.

### **3.9 Scale Measurement**

#### **3.9.1 Reliability Analysis**

Zikmund (2003) had defined reliability as the extent of consistency and the degree of a measurement is free from errors. The internal consistency reliability indicates the homogeneity of the items under measurements in reflecting the constructs being utilized. Meanwhile, (Uma Sekaran and Bougie, 2016) mentioned that the homogeneity can be tested through Cronbach's alpha. The purpose of examining the internal consistency is to find out whether the measurements used in a particular study are reliable compared to the previous studies (Heppner and Heppner, 2004). When the reliability coefficient is closer to the value of 1.0, then the result will be more reliable and vice versa, especially when the results are more than 0.6. Furthermore, (Uma Sekaran and Bougie, 2016) added that if the data has the value between 0.7 to 0.8, then the reliability is acceptable, and the measurement is good if the value goes beyond 0.8.

#### **3.9.2 Inferential Analysis**

The researcher used inferential analysis to investigate whether the hypotheses formed were true and then drew conclusion. Descriptive statistic will be employed to analyze the basic features of data in the research. Frequency and percentage analysis were carried out to describe the characteristics of the target respondents. Besides, the mean and standard deviation will be computed and interpreted for each item listed in the survey questionnaire to ensure that they are within the appropriate Likert scale (Yin, Othman, Sulaiman, Mohamed-Ibrahim and Razha-Rashid, 2016). In this research, the inferential analyses will be used are validity analysis, and linear regression analysis.



### **3.9.3 Validity Analysis**

The review of inter-correlations among variables as an option to spot the potential errors and unusual variable correlations in the data set was found by (Heppner and Heppner, 2004). The Pearson Correlation analysis will be applied in order to determine the strength of a linear relationship between two variables (Hair et al., 2009). The range of correlation coefficient that can be gained from the Pearson Correlation is between -1.00 to +1.00 units, which measuring the relationships between the variables by indicating positive or negative relationships (Hair et al., 2009). If the correlation is between -1.0 to -0.7 units and +1.0 to +0.7 units, then it represents the relationship between variables is strong while if the units are between -0.7 to -0.3 and +0.7 to +0.3, then the relationship is weak. If the result is between -0.3 to +0.3 units, then there are little or no relationships. The test will be done at 0.05 significant levels, and the hypothesis will be supported if the significant value, p, obtained is less than 0.01.

### **3.9.4 Linear Regression Analysis**

The researcher applied linear regression analysis to examine the linear relationship between the independent variables and the dependent variable. Both simple linear regression analysis and multiple linear regressions analysis will be applied. For simple linear regression analysis, the relationship of only one independent variable will be tested with the dependent variable. The simple linear regression formula that was applied to calculate the relationship between the dependent variable and independent variable is as below:

$$Y = a + bx$$

For multiple linear regressions analysis, it allows the investigation of the effect between two or more independent variables and a single dependent variable simultaneously. The general formula for multiple regression formula is as below:

$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + \dots + b_nx_n$ , where

“Y” stands for the dependent variable; “a” stands for the constant while “b” stands for the weight of the data. From the formula, the positive symbol in “b” value indicates a positive relationship between the dependent variables and independent variables, and vice versa.

### 3.9.5 Ordinal Regression Analysis

Ordinal regression or Ordinal logistic regression is normally used to predict the dependent variable with “order” multiple categories and independent variables, it is also considered as either a generalization of multiple linear regression or as a generalization of binomial logistic regression. Ordinal regression can also use interaction between independent variables to predict the dependent variable. It is a type of regression analysis mainly used for predicting an ordinal value (a variable whose value exists on an arbitrary scale where only the relative ordering between the variable is significant).

#### 3.9.5.1 Fitting An Ordinal Logit Model

To fit a binary logistic regression model, there is a need to estimate a sets of regression coefficients that predict the probability of the outcome of interest. The below logistic model below shows what functions of probabilities results in a linear combination of parameter.

$$\ln\left(\frac{\text{prob(event)}}{(1 - \text{prob(event)})}\right) = \beta_0 + \beta_1X_1 + \beta_2X_2 + \dots + \beta_kX_k$$

The quantity to the left of the equal sign is called a logit. It is the log of the odds that event occurs. (The odds that an event occurs is the ratio of the number of people who experience the event to the number of people who do not). The coefficients in the logistic.

### 3.9.5.2 Defining the Event

In the ordinal logistic regression, the event of the interest is observing a particular score or less. For the rating of judges, we can model the following odds:

$$\begin{aligned}\theta_1 &= \text{prob}(\text{score of } 1) / \text{prob}(\text{score greater than } 1) \\ \theta_2 &= \text{prob}(\text{score of } 1 \text{ or } 2) / \text{prob}(\text{score greater than } 2) \\ \theta_3 &= \text{prob}(\text{score of } 1, 2, \text{ or } 3) / \text{prob}(\text{score greater than } 3)\end{aligned}$$

The last category doesn't have an odds associated with it since the probability of scoring up to and including the last score is 1.

All of the odds are of the form:

$$\theta_j = \text{prob}(\text{score} \leq j) / \text{prob}(\text{score} > j)$$

You can also write the equation as

$$\theta_j = \text{prob}(\text{score} \leq j) / (1 - \text{prob}(\text{score} \leq j)),$$

since the probability of a score greater than  $j$  is  $1 - \text{probability of a score less than or equal to } j$ .

### 3.9.5.3 Fitting an Ordinal Model

The ordinal logistic model for a single independent variable is then as follows:

$$\ln(\theta_j) = \alpha_j - \beta X$$

where  $j$  goes from 1 to the number of categories minus 1.

It is not a typo sign that there is a “-” minus sign before the coefficients for the predictor variables, instead of customary plus sign. This is done so that larger coefficients indicate an association with larger score. When there is a positive coefficient for a dichotomous factor, it indicates that higher scores more likely for the first category. A negative coefficient indicates that lower scores are more likely. For a continuing variable, a positive coefficient indicates that as the values of the variable increase, the likelihood of larger score increases. An association with higher scores

means smaller cumulative probabilities for lower scores, since they are less likely to occur. Each logic  $\alpha_j$  term but the same coefficient  $\beta$ . This means that the effect of the independent variable is the same for different logit functions. That's an assumption to check. This is also the reason the model is called the proportional odds model. The  $\alpha_j$  terms, called the threshold value, often aren't of much interest. Their value does not depend on the value of independent variable for a particular case. They are like the intercept in a linear regression, except that each logit has its own. They're used in the calculation of the predicted values. From the previous equations, it shows that combining adjacent scores into a single category won't change the results for the group that aren't involved in the merge. That is a desirable feature.

### **3.10 Ethical Consideration**

Any citation or adapted materials are duly acknowledged; the research work is undertaken purely to fulfil the requirements of the Doctor of Business Administration degree.

## CHAPTER 4

### RESULTS AND DISCUSSION

#### 4.1 Introduction

This chapter includes the techniques which the researcher used to obtain and analyses the data gathered descriptive analysis, scale measurement and inferential analysis. The descriptive analysis describes the respondent demographic data, and scale measurement is performed through reliability test, whereas inferential analysis consists of validity test, and linear regression. A total 450 questionnaires were sent out but only 396 respondents returned the questionnaire with their complete answers captured for further data analysis. The overall response rate for this research study was 88%.

#### 4.2 Descriptive Analysis

##### 4.2.1 Gender

**Table 4.1: Respondents Characteristic (Gender)**

|       |        | Gender    |         |               | Cumulative<br>Percent |
|-------|--------|-----------|---------|---------------|-----------------------|
|       |        | Frequency | Percent | Valid Percent |                       |
| Valid | Female | 208       | 52.5    | 52.5          | 52.5                  |
|       | Male   | 188       | 47.5    | 47.5          | 100.0                 |
|       | Total  | 396       | 100.0   | 100.0         |                       |

**Figure 4.1: Bar Chart of Respondents Characteristic (Gender)**

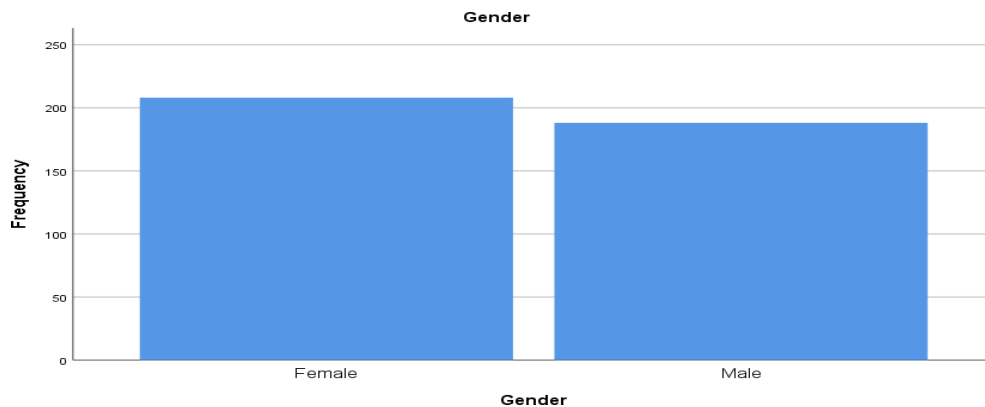


Table 4.1 and Figure 4.1 show the gender of the respondents. Majority of the respondent to this survey is female, which constitute of 52.5% among 396 respondents. Total female which participated this survey is 208 respondents compared to male respondents which is 188 respondents, or equivalent to 47.5% from the total number of samples.

#### 4.2.1.1 Age

**Table 4.2: Respondents Characteristic (Age)**

|       |                        | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|------------------------|-----------|---------|---------------|--------------------|
| Valid | 25 years old and below | 10        | 2.5     | 2.5           | 2.5                |
|       | 26 - 30 years          | 50        | 12.6    | 12.6          | 15.2               |
|       | 31 - 35 years          | 112       | 28.3    | 28.3          | 43.4               |
|       | 36 - 40 years          | 119       | 30.1    | 30.1          | 73.5               |
|       | 41 - 45 years          | 105       | 26.5    | 26.5          | 100.0              |
|       | Total                  | 396       | 100.0   | 100.0         |                    |

**Figure 4.2: Bar Chart of Respondents Characteristic (Age)**

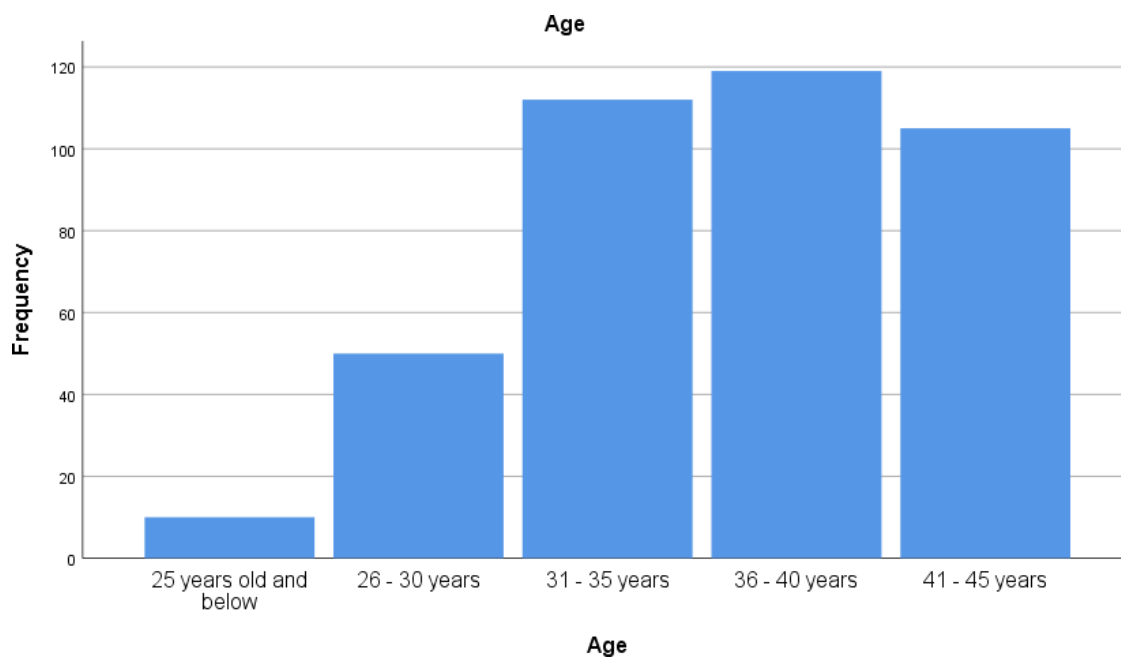


Table 4.2 and Figure 4.2 show the age of the respondents. For age group, the respondents are mainly from Gen-Y, age between 25 -45 years old. Majority of the

respondents are from age group of 36-40 years old, which consist of 119 respondents, and constitute 30.1% from the total respondents. It is then followed by respondents in age group of 31-35 years old, which consist of 112 respondents and 28.3% form the overall 396 respondents. 105 respondents are from age group of 41-45 years old, which is at 26.5%. 50 respondents are from age group of 26-30 years old, which is at 12.6%. Lastly is the age group of 25 years old and below, which is only 10 respondents in total or 2.5% from the overall respondents.

#### 4.2.1.2 Marital Status

**Table 4.3: Respondents Characteristic (Marital Status)**

|       |          | Marital status |         |               |                    |
|-------|----------|----------------|---------|---------------|--------------------|
|       |          | Frequency      | Percent | Valid Percent | Cumulative Percent |
| Valid | Divorced | 1              | .3      | .3            | .3                 |
|       | Married  | 323            | 81.6    | 81.6          | 81.8               |
|       | Single   | 72             | 18.2    | 18.2          | 100.0              |
|       | Total    | 396            | 100.0   | 100.0         |                    |

**Figure 4.3: Bar Chart of Respondents Characteristic (Marital Status)**

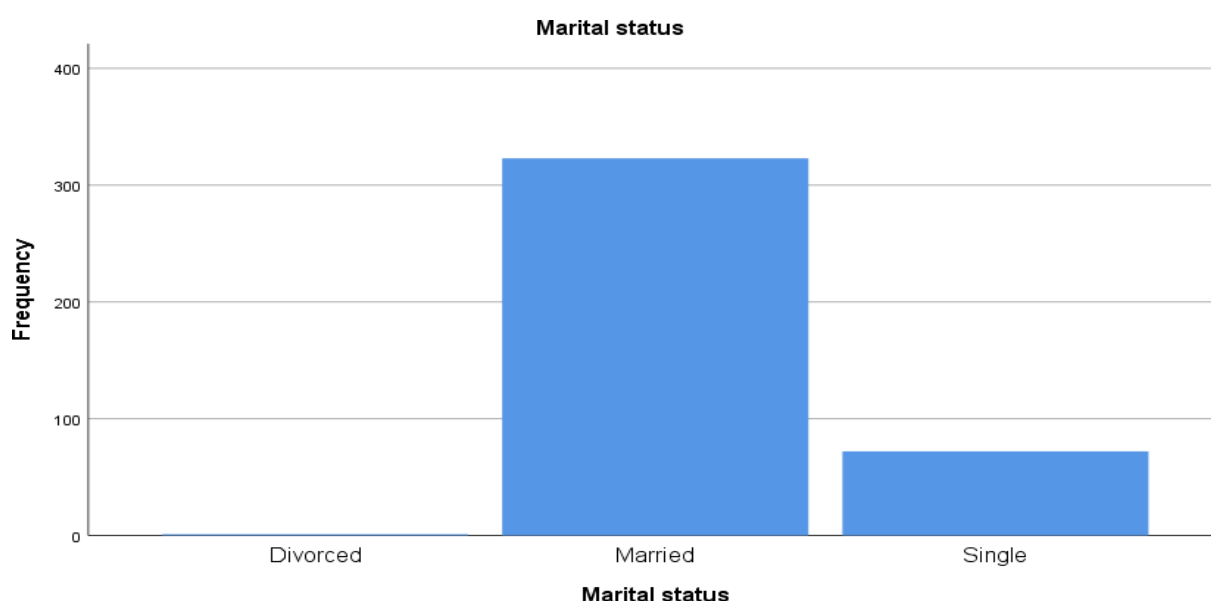


Table 4.3 and Figure 4.3 show the marital status of the respondents. Majority of the respondent to this survey is married adults, which constitute of 81.6% among 396 respondents. The second group of respondents is single which is consists of 18.2% from the total number of respondents. Only 1 respondent is from divorced status, consisting of 0.3% from the total of 396 respondents.

#### 4.2.1.3 Ethic Group

**Table 4.4: Respondents Characteristic (Ethic Group)**

|       |         | Ethic group |         |               |                    |
|-------|---------|-------------|---------|---------------|--------------------|
|       |         | Frequency   | Percent | Valid Percent | Cumulative Percent |
| Valid | Chinese | 255         | 64.4    | 64.4          | 64.4               |
|       | Indian  | 18          | 4.5     | 4.5           | 68.9               |
|       | Malay   | 122         | 30.8    | 30.8          | 99.7               |
|       | Others  | 1           | .3      | .3            | 100.0              |
|       | Total   | 396         | 100.0   | 100.0         |                    |

**Figure 4.4: Bar Chart of Respondents Characteristic (Ethic Group)**

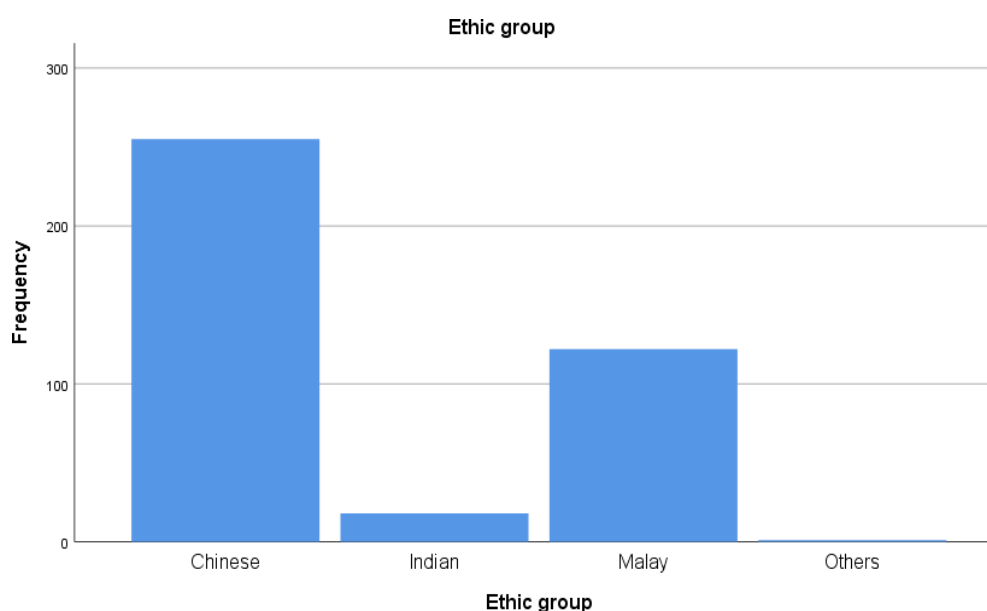


Table 5.4 and Figure 8.4 show the ethic group of the respondents. Most of the respondents which response to the survey is Chinese, consist of 255 respondents, and constitute of 64.4%. It is then followed by Malay, which consist of 122 respondents and 30.8% form the total 396 respondents. The next ethic group is Indian, consists of



18 respondents and 4.5% and only 1 respondent or at 0.3% from Sikh ethnic group participate this survey.

#### 4.2.1.4 Income Level

**Table 4.5: Respondents Characteristic (Income Level)**

|       |           | Income in RM |         |               |                    |
|-------|-----------|--------------|---------|---------------|--------------------|
|       |           | Frequency    | Percent | Valid Percent | Cumulative Percent |
| Valid | 1001-2000 | 12           | 3.0     | 3.0           | 3.0                |
|       | 2001-3000 | 250          | 63.1    | 63.1          | 66.2               |
|       | 3001-4000 | 119          | 30.1    | 30.1          | 96.2               |
|       | 4001-5000 | 15           | 3.8     | 3.8           | 100.0              |
|       | Total     | 396          | 100.0   | 100.0         |                    |

**Figure 4.5: Bar Chart of Respondents Characteristic (Income Level)**

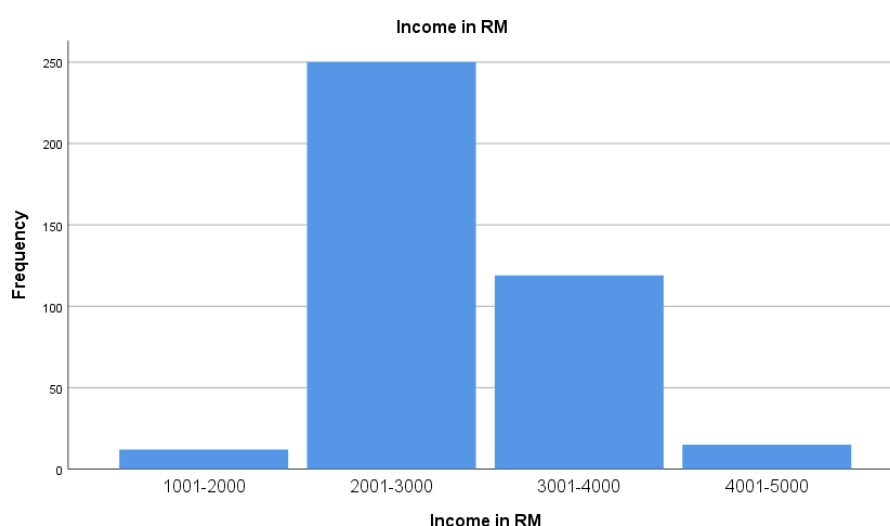


Table 4.5 and Figure 4.5 show the income level (in RM) of the respondents.

Majority of the respondent to this survey has a personal monthly income level of RM 2001- RM 3000, which consists of 250 respondents, a total of 63.1%. It is followed by 119 respondents that earn in between RM 3001- RM 4000, which consist of a total 30.1%. For the respondents who earn an income in between RM 4001 – RM 5000 is at a total of 3.8%, which are 15 respondents. Lastly, there are 12 respondents, a total of 3.0% who earn an income in between RM1001 – RM2000.

#### 4.2.1.5 Education Level

**Table 4.6: Respondents Characteristic (Educational Level)**

**Educational level**

|       |                                            | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------------------------------------------|-----------|---------|---------------|--------------------|
| Valid | Bachelor Degree / Professional Certificate | 2         | .5      | .5            | .5                 |
|       | STPM / A-Level / Diploma                   | 84        | 21.2    | 21.2          | 21.7               |
|       | UPSR / PT3 / PMR / SPM / O-Level           | 310       | 78.3    | 78.3          | 100.0              |
|       | Total                                      | 396       | 100.0   | 100.0         |                    |

**Figure 4.6: Bar Chart of Respondents Characteristic (Educational Level)**

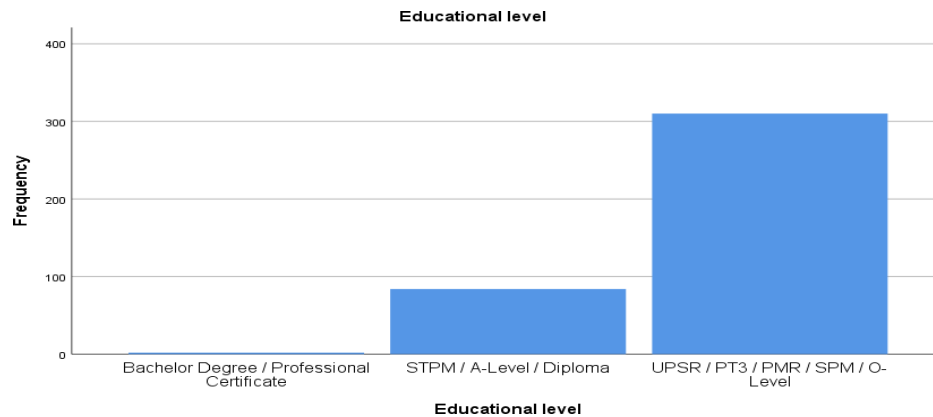


Table 4.6 and Figure 4.6 show the educational level of the respondents. Majority of the respondents are UPSR, PT3/ PMR, SPM or O-level, which is a total of 310 respondents, and consists of 78.3% of the total sample size. Next, it is followed by STPM, A-Level, or Diploma level, which is consists of a total of 21.2%, or equivalent to 84 respondents. Lastly, there is only 2 respondents, or 0.5% of the total sample size which has qualification of bachelor's degree or Professional Certificate level.

#### 4.2.1.6 Employment Position

**Table 4.7: Respondents Characteristic (Employment Position)**

|       |               | Employment position |         |               |                    |
|-------|---------------|---------------------|---------|---------------|--------------------|
|       |               | Frequency           | Percent | Valid Percent | Cumulative Percent |
| Valid | Full-time     | 164                 | 41.4    | 41.4          | 41.4               |
|       | Part-Time     | 1                   | .3      | .3            | 41.7               |
|       | Self-employed | 231                 | 58.3    | 58.3          | 100.0              |
|       | Total         | 396                 | 100.0   | 100.0         |                    |

**Figure 4.7: Bar Chart of Respondents Characteristic (Employment Position)**

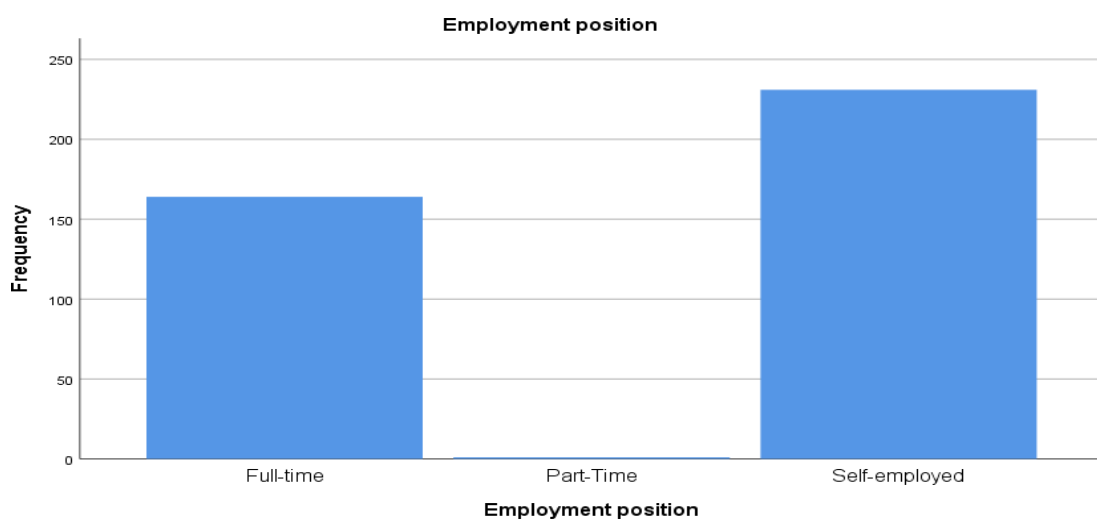


Table 4.7 and Figure 4.7 show the employment position of the respondents. Majority of the respondent to this survey is self-employed, which consists of 231 respondents, a total of 58.3%. It is followed by 164 respondents that having full-time job and employment, which consist of a total 41.4% from total sample size. Lastly, only 1 respondent is having employment position as part-time, which consist of a total of 0.3% from total respondents.

#### **4.2.1.7 Respondents Areas/Location**

**Table 4.8: Respondents Characteristic (Respondent Areas / Location)**

|       |                                                                                                      | Area / Location |         |               | Cumulative<br>Percent |
|-------|------------------------------------------------------------------------------------------------------|-----------------|---------|---------------|-----------------------|
|       |                                                                                                      | Frequency       | Percent | Valid Percent |                       |
| Valid | Gombak (Rawang,<br>Selayang, Batu Caves,<br>Gombak, Batu Arang,<br>Kundang, Kuang, Kepong)           | 49              | 12.4    | 12.4          | 12.4                  |
|       | Hulu Langat (Bandar Baru<br>Bangi, Kajang, Bangi,<br>Semenyih, Batu 14 Hulu<br>Langat, Cheras)       | 84              | 21.2    | 21.2          | 33.6                  |
|       | Hulu Selangor (Kuala Kubu<br>Baharu, Batang Kali,<br>Serendah, Bukit Beruntung,<br>Hulu Bernam)      | 15              | 3.8     | 3.8           | 37.4                  |
|       | Klang (Klang, Port Klang,<br>Kapar)                                                                  | 62              | 15.7    | 15.7          | 53.0                  |
|       | Kuala Langat (Teluk<br>Panglima Garang, Jeniarom,<br>Banting, Jugra, Morib,<br>Bandar Saujana Putra) | 16              | 4.0     | 4.0           | 57.1                  |
|       | Kuala Selangor (Kuala<br>Selangor, Tanjung Karang,<br>Bestari Jaya, Ijok, Jeram,<br>Puncak Alam)     | 16              | 4.0     | 4.0           | 61.1                  |
|       | Petaling Jaya (Damansara,<br>Sungai Buloh, Kelana Jaya,<br>city centre, Sungai Way)                  | 131             | 33.1    | 33.1          | 94.2                  |
|       | Sabak Bernam (Sekinchan,<br>Sabak, Sungai Besar,<br>Sungai Ayer Tawar)                               | 8               | 2.0     | 2.0           | 96.2                  |
|       | Sepang                                                                                               | 15              | 3.8     | 3.8           | 100.0                 |
|       | Total                                                                                                | 396             | 100.0   | 100.0         |                       |

**Figure 4.8: Bar Chart of Respondents Characteristic (Respondent Areas / Locations)**

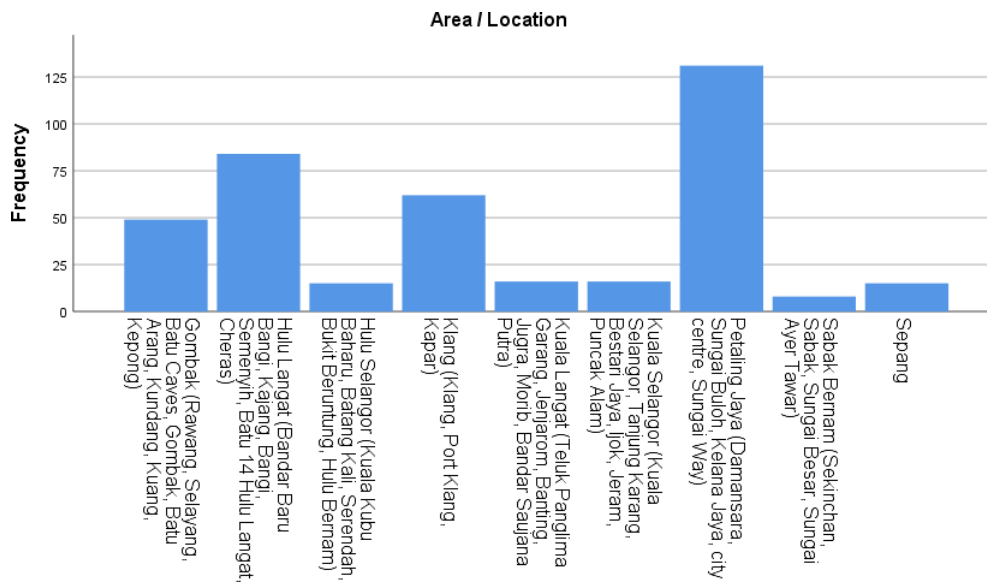


Table 4.8 and Figure 4.8 show the areas and location of the respondents. Majority of the respondents are from Petaling Jaya (Damansara, Sungai Buloh, Kelana Jaya, city centre, Sungai Way), which is a total of 131 respondents, and consists of 33.1% of the total sample size. It is followed by Hulu Langat (Bandar Baru Bangi, Kajang, Bangi, Semenyih, Batu 14 Hulu Langat, Cheras), which is consists of a total of 21.2%, or equivalent to 84 respondents. The next is followed by Klang (Klang, Port Klang, Kapar), there are 62 respondents, or 15.7% of the total sample size. The next areas is from Gombak (Rawang, Selayang, Batu Caves, Gombak, Batu Arang, Kundang, Kuang, Kepong), which consist of 49 respondents, or 12.4% of the total sample size. 4% of the total sample size is from Kuala Langat (Teluk Panglima Garang, Jenjarom, Banting, Jugra, Morib, Bandar Saujana Putra) area and Kuala Selangor (Kuala Selangor, Tanjung Karang, Bestari Jaya, Ijok, Jeram, Puncak Alam) area, equivalent to 16 respondents. Respondents from Hulu Selangor (Kuala Kubu Bharu, Batang Kali, Serendah, Bukit Beruntung, Hulu Bernam) area and Sepang areas is about 3.8% or consist of 15 respondents. Lastly, respondents from Sabak Bernam (Sekinchan, Sabak, Sungai Besar, Sungai Ayer Tawar) is about 2.0% or consist of 8

respondents. For this research study, the targeted individuals (Gen-Y consumer) are recruited according to the percentage of population by district in Selangor area in Figure 6, the number of survey questionnaires will be distributed to each district shown in Table 3, so that the result is representing the total population of Selangor.

#### 4.2.1.8 Green Product Purchase Before

**Table 4.9: Respondents Experience (Green Product Purchased Before)**

| Green Product Purchased Before |                                                                                                                                                            |           |         |               |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------|---------------|
|                                |                                                                                                                                                            | Frequency | Percent | Valid Percent |
| Valid                          | Clothings (underwear, undergarment, t-shirt, shorts, dress, sock, office wear, etc)                                                                        | 221       | 55.8    | 55.8          |
|                                | Electrical appliances (Electrical appliance with eco label certification such as Myhijau, energy saving, energy efficiency rating & labelling scheme, etc) | 126       | 31.8    | 31.8          |
|                                | Furniture (furniture items certified with eco-label such as FSC, Greenguard, etc)                                                                          | 46        | 11.6    | 11.6          |
|                                | Personal Care product (shampoo, hand and hair care product made from bio-degradable materials, etc)                                                        | 3         | .8      | .8            |
|                                | Total                                                                                                                                                      | 396       | 100.0   | 100.0         |

**Figure 4.9: Bar Chart of Respondents Experience (Green Product Purchase Before)**

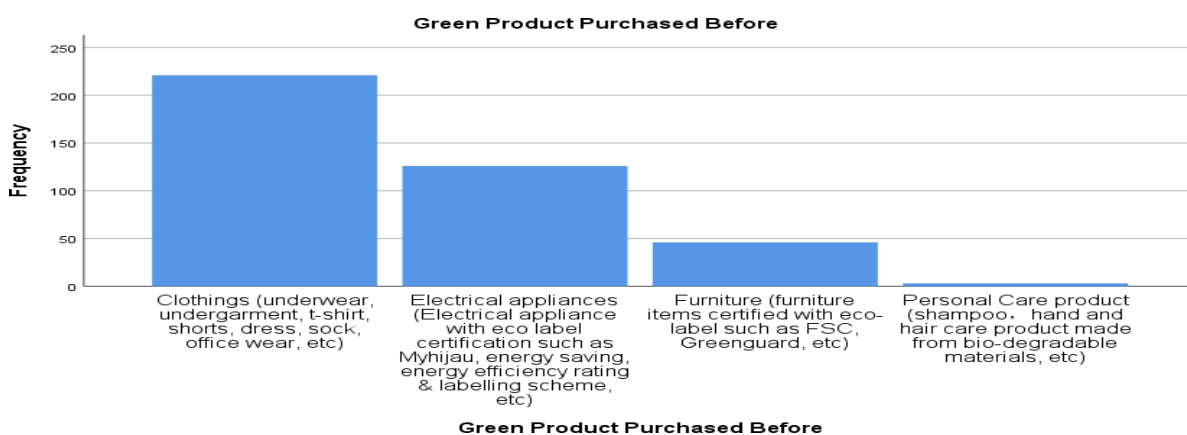


Table 4.9 and Figure 4.9 show the respondents experience on green product purchased before. All the respondents are having experience and purchased green product before answering the survey questionnaire. Majority of the respondent had purchase green product - Clothing's (underwear, undergarment, t-shirt, shorts, dress, sock, office wear, and others) before this survey, which consists of 221 respondents, a total of 55.8%. It is followed by purchase green product - Electrical appliances (Electrical appliance with eco label certification such as Myhijau, energy saving, energy efficiency rating & labelling scheme, and others) before this survey, which consist of 126 respondents or a total 31.8% from total sample size. The next is by purchase green product- Furniture (furniture items certified with eco-label such as FSC, Greenguard, and others) before this survey, which consist of 46 respondents or a total 11.6% from total sample size. Lastly, only 3 respondent is having experience and purchased green product in Personal Care product (shampoo, hand and hair care product made from bio- degradable materials, and others) before answering the survey questionnaire or equivalent to 0.8% from total respondents.

#### 4.2.2 Central Tendencies Measurement of Constructs

This paper employed 5 points Likert scare for all measures, ranging from “Strongly Disagree” to “Strongly Agree”. The result of the measures are as follows:

##### 4.2.2.1 Attitude (AT)

**Table 4.10: Central Tendency of Attitude**

| No             | Questions | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean | Ranking |
|----------------|-----------|-------------------|----------|---------|-------|----------------|------|---------|
| Attitudes (AT) |           |                   |          |         |       |                |      |         |

|     |                                                                                                          |     |     |      |      |     |      |   |
|-----|----------------------------------------------------------------------------------------------------------|-----|-----|------|------|-----|------|---|
| AT1 | Green clothing product purchase will give more benefits compared to non-green clothing product purchase. | 0.0 | 0.0 | 96.0 | 4.0  | 0.0 | 3.04 | 6 |
| AT2 | Green clothing product is a good idea.                                                                   | 0.0 | 0.0 | 53   | 92.2 | 2.5 | 3.97 | 2 |
| AT3 | I am interested in purchasing green clothing products.                                                   | 0.0 | 0.0 | 68   | 91.9 | 1.3 | 3.94 | 4 |
| AT4 | Green clothing products will improve the quality of my life.                                             | 0.0 | 0.0 | 44.7 | 54.0 | 1.3 | 3.57 | 5 |
| AT5 | I will consider how it will affect the environment when purchasing a green clothing product.             | 0.0 | 0.0 | 58   | 92.9 | 1.3 | 3.95 | 3 |
| AT6 | There is a need for me to start purchasing green clothing products.                                      | 0.0 | 0.0 | 33   | 93.4 | 3.3 | 4.0  | 1 |

Table 4.10 show the means value, percentage of responses and ranking of each of the question under the same independent variable, which is “attitude”. For the first item

“Green clothing product purchase will give more benefits compared to non-green clothing product purchase”, 96.0% of respondents choose neutral for this item and 4.0% of the respondents agree that green clothing product purchase will give more benefits compared to non-green clothing product purchase. For the second item “Green clothing product is a good idea”, 5.3% of respondents choose neutral for this item. However, 92.2% of respondents and 2.5% of respondents agree and strongly agree that green clothing product is a good idea. For the third item “I am interested in purchasing



green clothing products”, 6.8% of respondents choose neutral for this item. However, 91.9% of respondents and 1.3% of respondents agree and strongly agree that they are interested in purchasing green clothing products. For the fourth item “Green clothing products will improve the quality of my life”, 44.7% of respondents choose neutral for this item. However, 54.0% of respondents and 1.3% of respondents agree and strongly agree that green clothing products will improve the quality of my life. For the fifth item “I will consider how it will affect the environment when purchasing a green clothing product”, 5.8% of respondents choose neutral for this item. However, 92.9% of respondents and 1.3% of respondents agree and strongly agree that they will consider how it will affect the environment when purchasing a green clothing product. For the sixth item “There is a need for me to start purchasing green clothing products”, 3.3% of respondents choose neutral for this item. However, 93.4% of respondents and 3.3% of respondents agree and strongly agree that there is a need for me to start purchasing green clothing products green clothing products.

The Table shows that the item “There is a need for me to start purchasing green clothing products” with the mean value of 4.00 is ranked in the first place. It is then followed by the item “Green clothing product is a good idea” with the mean value of 3.97 in the second rank. For item “I will consider how it will affect the environment when purchasing a green clothing product” and item “I am interested in purchasing green clothing products” is ranked in the third place and fourth place with respective mean value of 3.95 and 3.94. The item ranked in fifth place is “Green clothing products will improve the quality of my life”, with mean value of 3.57. Lastly, for the item “Green clothing product purchase will give more benefits compared to non-green clothing product purchase”, with mean of 3.04 is ranked at the last place.

#### 4.2.2.2 Perceived Behavioral Control (PBC)

**Table 4.11: Central Tendency of Perceived Behavioral Control**

| No                                        | Questions                                                                                                                                        | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean | Ranking |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|---------|-------|----------------|------|---------|
| <b>Perceived Behavioral Control (PBC)</b> |                                                                                                                                                  |                   |          |         |       |                |      |         |
| PB C1                                     | I believe that I am capable of selecting green clothing products when making purchases.                                                          | 0.0               | 0.0      | 1.8     | 97.2  | 1.0            | 3.99 | 4       |
| PB C2                                     | If it is my own choice, I am confident that I will select green clothing products when making purchase compared to a non-green clothing product. | 0.0               | 0.5      | 20.5    | 77.0  | 2.0            | 3.81 | 5       |
| PB C3                                     | I trust myself in making the right decision to purchase green clothing products.                                                                 | 0.0               | 0.0      | 2.3     | 95.4  | 2.3            | 4.00 | 3       |
| PB C4                                     | I have the time to decide my resources to make purchases of the green clothing products.                                                         | 0.0               | 0.0      | 1.8     | 96.0  | 2.2            | 4.01 | 2       |
| PB C5                                     | I take available opportunities to make purchases of green clothing products.                                                                     | 0.0               | 0.0      | 1.8     | 95.5  | 2.7            | 4.01 | 2       |
| PB C6                                     | I feel that making purchases of green clothing products is totally within my control.                                                            | 0.0               | 0.0      | 1.0     | 94.4  | 4.6            | 4.04 | 1       |

Table 4.11 show the means value, percentage of responses and ranking of each of the question under the same independent variable, which is “perceived behavioral control”. For the first item “I believe that I am capable of selecting green clothing products when making purchases, 1.8% of respondents choose neutral for this item. However, 97.2% of respondents and 1.0% of respondents agree and strongly agree that they believe that they can select green clothing products when making purchases. For the second item “If it is my own choice, I am confident that I will select green clothing products when making purchase compared to a non-green clothing product”, 0.5% of the respondent is disagree and 20.5% of the respondent choose neutral for this item. However, 77.0% of respondents and 2.0% of respondents agree and strongly agree that when given their own choice, they are confident that they will select green clothing products when making purchase compared to a non-green clothing product. For the third item “I trust myself in making the right decision to purchase green clothing products”, 2.3% of respondents choose neutral for this item. However, 95.4% of respondents and 2.3% of respondents agree and strongly agree that they trust themselves in making the right decision to purchase green clothing products. For the fourth item “I have the time to decide my resources to make purchases of the green clothing products”, 1.8% of respondents choose neutral for this item. However, 96.0% of respondents and 2.2% of respondents agree and strongly agree that they have the time to decide my resources to make purchases of the green clothing products. For the fifth item “I take available opportunities to make purchases of green clothing products”, 1.8% of respondents choose neutral for this item. However, 95.5% of respondents and 2.7% of respondents agree and strongly agree that they take available opportunities to make purchases of green clothing products. For the sixth item “I feel that making purchases of green clothing products is totally within my control”, 1.0%

of respondents choose neutral for this item. However, 94.4% of respondents and 4.6% of respondents agree and strongly agree that they feel that making purchases of green clothing products is totally within their control.

From the table shows that the item “I feel that making purchases of green clothing products is totally within my control” with the mean value of 4.04 is ranked in the first place. The item “I have the time to decide my resources to make purchases of the green clothing products” and the item “I take available opportunities to make purchases of green clothing products” has the same mean value of 4.01 ranked in second placed. It is followed by the item “I trust myself in making the right decision to purchase green clothing products” and the item “I believe that I am capable of selecting green clothing products when making purchases” is ranked in the third place and fourth place with respective mean value of 4.00 and 3.99. Lastly, for the item “If it is my own choice, I am confident that I will select green clothing products when making purchase compared to a non-green clothing product” with mean of 3.81 is ranked at the last place.

#### 4.2.2.3 Emotion (EM)

**Table 4.12: Central Tendency of Emotion**

| Emotion (EM) |                                                                                 |     |     |      |      |     |      |   |
|--------------|---------------------------------------------------------------------------------|-----|-----|------|------|-----|------|---|
| EM 1         | I feel joyful whenever I am making purchases of green clothing products.        | 0.0 | 0.0 | 10.1 | 87.1 | 2.8 | 3.93 | 1 |
| EM 2         | I am excited whenever I make a purchase of green clothing products.             | 0.0 | 0.0 | 16.9 | 81.3 | 1.8 | 3.85 | 3 |
| EM 3         | I enjoy a sense of peace whenever I make a purchase of green clothing products. | 0.0 | 0.0 | 12.9 | 83.6 | 3.5 | 3.91 | 2 |

Table 4.12 show the means value, percentage of responses and ranking of each of the question under the same independent variable, which is “emotion”. For the first item “I feel joyful whenever I am making purchases of green clothing products”, 10.1% of respondents choose neutral for this item. However, 87.1% of respondents and 2.8% of respondents agree and strongly agree that they believe that they feel joyful whenever they are making purchases of green clothing products. For the second item “I am excited whenever I make a purchase of green clothing products”, 16.9% of the respondents choose neutral for this item. However, 81.3% of respondents and 1.8% of respondents agree and strongly agree that they are excited whenever they make a purchase of green clothing products. For the third item “I enjoy a sense of peace whenever I make a purchase of green clothing products”, 12.9% of respondents choose neutral for this item. However, 83.6% of respondents and 3.5% of respondents agree and strongly agree that they enjoy a sense of peace whenever I make a purchase of green clothing products.

The table shows that the item “I feel joyful whenever I am making purchases of green clothing products” with the mean value of 3.93 is ranked in the first place. The item “I enjoy a sense of peace whenever I make a purchase of green clothing products”, has the mean value of 3.91 ranked in second placed. Lastly, for the item “I am excited whenever I make a purchase of green clothing products” with mean of 3.85 is ranked at the last place.

#### 4.2.2.4 Environmental Knowledge (EK)

**Table 4.13: Central Tendency of Environmental Knowledge**

| No | Questions | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean | Ranking |
|----|-----------|-------------------|----------|---------|-------|----------------|------|---------|
|    |           |                   |          |         |       |                |      |         |

| Environmental Knowledge(EK) |                                                                                                                                                         |     |     |     |      |      |      |   |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|------|------|------|---|
| EK 1                        | I know the importance of conserving the environment without damaging it.                                                                                | 0.0 | 0.0 | 0.8 | 92.2 | 7.0  | 4.06 | 6 |
| EK 2                        | I know plastic materials in various forms such as                                                                                                       | 0.0 | 0.0 | 0.5 | 15.9 | 83.6 | 4.83 | 1 |
|                             | bottles and grocery bags take years to decompose, hence causing pollution to the environment.                                                           |     |     |     |      |      |      |   |
| EK 3                        | I know the causes and effects of global warming and green issues.                                                                                       | 0.0 | 0.0 | 1.0 | 16.7 | 82.3 | 4.81 | 2 |
| EK 4                        | I know the importance of recycling used materials to protect damaging the environment.                                                                  | 0.0 | 0.0 | 0.8 | 19.4 | 79.8 | 4.79 | 3 |
| EK 5                        | I know how to choose green clothing products that are environmentally friendly.                                                                         | 0.0 | 0.0 | 1.0 | 31.6 | 67.4 | 4.66 | 4 |
| EK 6                        | I appreciate and understand the use of environmental symbols and phrases on the product packaging to educate the consumers on greening the environment. | 0.0 | 0.0 | 0.3 | 58.6 | 41.1 | 4.41 | 5 |

Table 4.13 show the means value, percentage of responses and ranking of each of the question under the same independent variable, which is “environmental knowledge”. For the first item “I know the importance of conserving the environment without damaging it”, 0.8% of respondents choose neutral for this item. However, 92.2% of respondents and 7.0% of respondents agree and strongly agree that they know the importance of conserving the environment without damaging it. For the second item “I know plastic materials in various forms such as bottles and grocery bags take years to decompose, hence causing pollution to the environment”, 0.5% of

the respondent choose neutral for this item. However, 15.9% of respondents and 83.6% of respondents agree and strongly agree that they know plastic materials in various forms such as bottles and grocery bags take years to decompose, hence causing pollution to the environment. For the third item “I know the causes and effects of global warming and green issues”, 1.0% of respondents choose neutral for this item. However, 16.7% of respondents and 82.3% of respondents agree and strongly agree that they know the causes and effects of global warming and green issues. For the fourth item “I know the importance of recycling used materials to protect damaging the environment”, 0.8% of respondents choose neutral for this item. However, 19.4% of respondents and 79.8% of respondents agree and strongly agree that they know the importance of recycling used materials to protect damaging the environment. For the fifth item “I know how to choose green clothing products that are environmentally friendly”, 1.0% of respondents choose neutral for this item. However, 31.6% of respondents and 67.4% of respondents agree and strongly agree that they know how to choose green clothing products that are environmentally friendly. For the sixth item “I appreciate and understand the use of environmental symbols and phrases on the product packaging to educate the consumers on greening the environment”, 0.3% of respondents choose neutral for this item. However, 58.6% of respondents and 41.1% of respondents agree and strongly agree that they appreciate and understand the use of environmental symbols and phrases on the product packaging to educate the consumers on greening the environment.

The table shows that the item “I know plastic materials in various forms such as bottles and grocery bags take years to decompose, hence causing pollution to the environment” with the mean value of 4.83 is ranked in the first place. The item “I know the causes and effects of global warming and green issues” has the mean value of 4.81

ranked in second placed. It is followed by the item “I know the importance of recycling used materials to protect damaging the environment” is ranked in the third place and the item “I know how to choose green clothing products that are environmentally friendly” is in the fourth place with respective mean value of 4.79 and 4.66. The item “I appreciate and understand the use of environmental symbols and phrases on the product packaging to educate the consumers on greening the environment” is ranked in fifth place with mean value of 4.41. Lastly, for the item “I know the importance of conserving the environment without damaging it” with mean of 4.06 is ranked at the last place.

#### 4.2.2.5 Subjective Norm (SN)

**Table 4.14: Central Tendency of Subjective Norm**

| No                          | Questions                                                                                                     | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean | Ranking |
|-----------------------------|---------------------------------------------------------------------------------------------------------------|-------------------|----------|---------|-------|----------------|------|---------|
| <b>Subjective Norm (SN)</b> |                                                                                                               |                   |          |         |       |                |      |         |
| SN1                         | Most people who are important to methink that I should continue to make purchases of green clothing products. | 0.0               | 0.0      | 9.1     | 81.6  | 9.4            | 4.0  | 1       |
| SN2                         | Most people who are important to me would want me to make purchases of green clothing products.               | 0.0               | 0.0      | 9.8     | 82.1  | 8.1            | 3.98 | 2       |
| SN3                         | People whose opinions I value would prefer that I make purchases of greenclothing products.                   | 0.0               | 0.0      | 14.4    | 78.3  | 7.3            | 3.93 | 3       |
| SN4                         | My friends share positive opinions about the importance of making purchases of green clothing products.       | 0.0               | 0.0      | 27.3    | 67.2  | 5.5            | 3.78 | 4       |

Table 4.14 shows the means value, percentage of responses and ranking of each of the question under the same independent variable, which is “subjective norm”. For the first item “Most people who are important to me think that I should continue to



make purchases of green clothing products”, 9.4% of respondents choose neutral for this item. However, 81.6% of respondents and 7.0% of respondents agree that most people who are important to them think that they should continue to make purchases of green clothing products. For the second item “Most people who are important to me would want me to make purchases of green clothing products”, 9.8% of the respondent choose neutral for this item. However, 82.1% of respondents and 8.1% of respondents agree and strongly agree that most people who are important to them would want them to make purchases of green clothing products. For the third item “People whose opinions I value would prefer that I make purchases of green clothing products”, 14.4% of respondents choose neutral for this item. However, 78.3% of respondents and 7.3% of respondents agree and strongly agree that people whose opinions is being valued by respondent would prefer that they make purchases of green clothing products. For the fourth item “My friends share positive opinions about the importance of making purchases of green clothing products”, 27.3% of respondents choose neutral for this item. However, 67.2% of respondents and 5.5% of respondents agree and strongly agree that they friends share positive opinions about the importance of making purchases of green clothing products.

The Table shows that the item “Most people who are important to me think that I should continue to make purchases of green clothing products”, with the mean value of 4.00 is ranked in the first place. The item “Most people who are important to me would want me to make purchases of green clothing products” has the mean value of 3.98 ranked in second placed. It is followed by the item “People whose opinions I value would prefer that I make purchases of green clothing products” is ranked in the third place with mean value of 3.93. Lastly, for the item “My friends share positive

opinions about the importance of making purchases of green clothing products” with mean of 3.78 is ranked at the last place.

#### 4.2.2.6 Product Attributes (PA)

**Table 4.15: Central Tendency of Product Attributes**

| No                             | Questions                                                                                                                                         | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean | Ranking |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|---------|-------|----------------|------|---------|
| <b>Product Attributes (PA)</b> |                                                                                                                                                   |                   |          |         |       |                |      |         |
| PA1                            | I usually purchase green clothing products that have the ‘eco’ label.                                                                             | 0.0               | 0.3      | 1.5     | 97.2  | 1.0            | 3.99 | 3       |
| PA2                            | I will look for certified eco- labelling when considering purchase of green clothing products.                                                    | 0.0               | 0.0      | 0.5     | 97.0  | 2.5            | 4.02 | 1       |
| PA3                            | Green clothing products are not harmful to user compared to non-green clothing products.                                                          | 0.0               | 0.0      | 7.8     | 90.2  | 2.0            | 3.94 | 4       |
| PA4                            | I usually purchase green clothing products which the packaging includes eco- friendly elements (e.g. recycled materials or recyclable packaging). | 0.0               | 0.5      | 2.0     | 93.7  | 3.8            | 4.01 | 2       |

Table 4.15 show the means value, percentage of responses and ranking of each of the question under the same independent variable, which is “product attributes”. For the first item “I usually purchase green clothing products that have the ‘eco’ label”, 0.3% of respondents choose to disagree and 1.5% of respondents choose neutral for this item. However, 97.2% of respondents and 1.0% of respondents agree that they

usually purchase green clothing products that have the 'eco' label. For the second item "I will look for certified eco-labelling when considering purchase of green clothing products", 0.5% of the respondent choose neutral for this item. However, 97.0% of respondents and 2.5% of respondents agree and strongly agree that they will look for certified eco-labelling when considering purchase of green clothing products. For the third item "Green clothing products are not harmful to user compared to non-green clothing products", 7.8% of respondents choose neutral for this item. However, 90.2% of respondents and 2.0% of respondents agree and strongly agree that green clothing products are not harmful to user compared to non-green clothing products. For the fourth item "I usually purchase green clothing products which the packaging includes eco-friendly elements (e.g., recycled materials or recyclable packaging)", 0.5% of respondents choose to disagree and 2.0% of respondents choose neutral for this item. However, 93.7% of respondents and 3.8% of respondents agree and strongly agree they usually purchase green clothing products which the packaging includes eco-friendly elements (e.g., recycled materials or recyclable packaging).

The Table shows that the item "I will look for certified eco-labelling when considering purchase of green clothing products", with the mean value of 4.02 is ranked in the first place. The item "I usually purchase green clothing products which the packaging includes eco-friendly elements (e.g., recycled materials or recyclable packaging)" has the mean value of 4.01 ranked in second placed. It is followed by the item "I usually purchase green clothing products that have the 'eco' label" is ranked in the third place with mean value of 3.99. Lastly, for the item "Green clothing products are not harmful to user compared to non-green clothing products" with mean of 3.94 is ranked at the last place.

#### 4.2.2.7 Price (PR)

**Table 4.16: Central Tendency of Price**

| No                | Questions                                                                                                                          | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean | Ranking |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|---------|-------|----------------|------|---------|
| <b>Price (PR)</b> |                                                                                                                                    |                   |          |         |       |                |      |         |
| PR1               | I would choose green clothing products over non-green products if the price is similar.                                            | 0.0               | 0.0      | 4.3     | 92.2  | 3.5            | 3.99 | 2       |
| PR2               | I am willing to pay slightly more for a purchase of green clothing products.                                                       | 0.0               | 0.8      | 69.9    | 28.3  | 1.0            | 3.30 | 3       |
| PR3               | If the price of a green clothing product is less expensive, I'm willing to purchase it every time in order to change my lifestyle. | 0.0               | 0.0      | 1.5     | 96.0  | 2.5            | 4.01 | 1       |

Table 4.16 shows the means value, percentage of responses and ranking of each of the question under the same independent variable, which is “price”. For the first item “I would choose green clothing products over non-green products if the price is similar”, 4.3% of respondents choose neutral for this item. However, 92.2% of respondents and 3.5% of respondents agree and strongly agree that they would choose green clothing products over non-green products if the price is similar. For the second item “I am willing to pay slightly more for a purchase of green clothing products”, 0.8% of the respondents choose to disagree and 69.9% of the respondents choose neutral for this item. However, 28.3% of respondents and 1.0% of respondents agree and strongly agree that they willing to pay slightly more for a purchase of green

clothing products. For the third item “If the price of a green clothing product is less expensive, I'm willing to purchase it every time in order to change my lifestyle”, 1.5% of respondents choose neutral for this item. However, 96.0% of respondents and 2.5% of respondents agree and strongly agree that If the price of a green clothing product is less expensive, they willing to purchase it every time in order to change their lifestyle.

The Table shows that the item “If the price of a green clothing product is less expensive, I'm willing to purchase it every time in order to change my lifestyle” with the mean value of 4.01 is ranked in the first place. The item “I would choose green clothing products over non-green products if the price is similar” has the mean value of 3.99 ranked in second placed. Lastly, for the item “I am willing to pay slightly more for a purchase of green clothing products” with mean of 3.30 is ranked at the last place.

#### 4.2.2.8 Place (PL)

**Table 4.17: Central Tendency of Place**

| No                | Questions                                                                                                                    | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean | Ranking |
|-------------------|------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|---------|-------|----------------|------|---------|
| <b>Place (PL)</b> |                                                                                                                              |                   |          |         |       |                |      |         |
| PL1               | I would make purchases of green clothing products if they are available in fashionretail stores.                             | 0.3               | 0.0      | 10.6    | 86.6  | 2.5            | 3.91 | 3       |
| PL2               | I would make purchases ofgreen clothing products if the fashion retail outlet is accessible to me easily.                    | 0.0               | 0.0      | 10.1    | 85.9  | 4.0            | 3.94 | 2       |
| PL3               | I would make purchases ofgreen clothing products if the products are displayedvisibly on shelf in the fashion retail outlet. | 0.0               | 0.0      | 13.4    | 84.6  | 2.0            | 3.89 | 4       |

|     |                                                                                                                               |     |     |     |      |      |          |   |
|-----|-------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|------|------|----------|---|
| PL4 | I would purchase green clothing products from fashion retails stores whichspecializes in selling greenclothing products only. | 0.0 | 0.0 | 4.5 | 53.6 | 41.9 | 4.3<br>7 | 1 |
|-----|-------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|------|------|----------|---|

Table 5.17 shows the means value, percentage of responses and ranking of each of the question under the same independent variable, which is “place”. For the first item “I would make purchases of green clothing products if they are available in fashion retail stores”, 0.3% of respondents choose to strongly disagree and 10.6% of respondents choose neutral for this item. However, 86.6% of respondents and 2.5% of respondents agree that they would make purchases of green clothing products if they were available in fashion retail stores. For the second item “I would make purchases of green clothing products if the fashion retail outlet is accessible to me easily”, 10.1% of the respondent choose neutral for this item. However, 85.9% of respondents and 4.0% of respondents agree and strongly agree that they would make purchases of green clothing products if the fashion retail outlet were accessible to me easily. For the third item “I would make purchases of green clothing products if the products were displayed visibly on shelf in the fashion retail outlet”, 13.4% of respondents choose neutral for this item. However, 84.6% of respondents and 2.0% of respondents agree and strongly agree that they would make purchases of green clothing products if the products were displayed visibly on shelf in the fashion retail outlet. For the fourth item “I would purchase green clothing products from fashion retails stores which specializes in selling green clothing products only”, 4.5% of respondents choose neutral for this item. However, 53.6% of respondents and 41.9% of respondents agree and strongly agree that they would purchase green clothing products from fashion retails stores which specializes in selling green clothing products only.

The table shows that the item “I would purchase green clothing products from fashion retailers stores which specializes in selling green clothing products only” with the mean value of 4.37 is ranked in the first place. The item “I would make purchases of green clothing products if the fashion retail outlet were accessible to me easily” has the mean value of 3.94 ranked in second place. It is followed by the item “I would make purchases of green clothing products if they were available in fashion retail stores” is ranked in the third place with mean value of 3.91. Lastly, for the item “I would make purchases of green clothing products if the products were displayed visibly on shelf in the fashion retail outlet” with mean of 3.89 is ranked at the last place.

#### 4.2.2.9 Green Advertising (GA)

**Table 4.18: Central Tendency of Green Advertising**

| No.                           | Questions                                                                                                                                 | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean | Ranking |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|---------|-------|----------------|------|---------|
| <b>Green Advertising (GA)</b> |                                                                                                                                           |                   |          |         |       |                |      |         |
| GA1                           | Advertising leads me to be more socially responsible in making purchases of green clothing products.                                      | 0.0               | 0.0      | 4.3     | 87.6  | 8.1            | 4.04 | 3       |
| GA2                           | Advertising is a good source of information for me in making purchases of green clothing products.                                        | 0.0               | 0.0      | 1.5     | 90.2  | 8.3            | 4.07 | 2       |
| GA3                           | I plan to switch to advertised green clothing products more so than non-advertised ones when making purchases of green clothing products. | 0.0               | 0.0      | 2.5     | 91.9  | 5.6            | 4.03 | 4       |

|     |                                                                                                                                     |     |     |     |      |      |      |   |
|-----|-------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|------|------|------|---|
| GA4 | I believe that the claims made on advertising are truthful to influence my decision to purchase green clothing products.            | 0.0 | 0.0 | 0.5 | 95.2 | 4.3  | 4.04 | 3 |
| GA5 | Advertising presents a true picture of the nature of the product that enables me to decide to purchase the green clothing products. | 0.0 | 0.0 | 0.8 | 87.1 | 12.1 | 4.11 | 1 |

Table 4.18 show the means value, percentage of responses and ranking of each of the question under the same independent variable, which is “green advertising”. For the first item “Advertising leads me to be more socially responsible in making purchases of green clothing products”, 4.3% of respondents choose neutral for this item. However, 87.6% of respondents and 8.1% of respondents agree and strongly agree that advertising leads them to be more socially responsible in making purchases of green clothing products. For the second item “Advertising is a good source of information for me in making purchases of green clothing products”, 1.5% of the respondent choose neutral for this item. However, 90.2% of respondents and 8.3% of respondents agree and strongly agree that advertising is a good source of information for me in making purchases of green clothing products. For the third item “I plan to switch to advertised green clothing products more so than non-advertised ones when making purchases of green clothing products”, 2.5% of respondents choose neutral for this item. However, 91.9% of respondents and 5.6% of respondents agree and strongly agree that they plan to switch to advertised green clothing products more so than non-advertised ones when making purchases of green clothing products. For the fourth item “I believe that the claims made on advertising are truthful to influence my decision to purchase green clothing products”, 0.5% of respondents choose neutral for this item.



However, 95.2% of respondents and 4.3% of respondents agree and strongly agree that they believe that the claims made on advertising are truthful to influence their decision to purchase green clothing products. For the fifth item “Advertising presents a true picture of the nature of the product that enables me to decide to purchase the green clothing products”, 0.8% of respondents choose neutral for this item. However, 87.1% of respondents and 12.1% of respondents agree and strongly agree that advertising presents a true picture of the nature of the product that enables them to decide to purchase the green clothing products.

The Table shows that the item “Advertising presents a true picture of the nature of the product that enables me to decide to purchase the green clothing products”, with the mean value of 4.11 is ranked in the first place. The item “Advertising is a good source of information for me in making purchases of green clothing products” has the mean value of 4.07 ranked in second place. It is followed by the item “I believe that the claims made on advertising are truthful to influence my decision to purchase green clothing products” and the items “Advertising leads me to be more socially responsible in making purchases of green clothing products” both are ranked in the third place with the same mean value of 4.04. Lastly, for the item “I plan to switch to advertised green clothing products more so than non-advertised ones when making purchases of green clothing products” with mean of 4.03 is ranked at the last place.

#### 4.2.2.10 Purchase Intention (PI)

**Table 4.19: Central Tendency of Purchase Intention**

| No                      | Questions | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean | Ranking |
|-------------------------|-----------|-------------------|----------|---------|-------|----------------|------|---------|
| Purchase Intention (PI) |           |                   |          |         |       |                |      |         |

|     |                                                                                                             |     |     |      |      |     |          |   |
|-----|-------------------------------------------------------------------------------------------------------------|-----|-----|------|------|-----|----------|---|
| PI1 | I choose to purchase green clothing products because they are less environmentally harmful.                 | 0.0 | 0.0 | 4.8  | 94.4 | 0.8 | 3.9<br>6 | 3 |
| PI2 | I pay more attention to green clothing products when shopping for clothing.                                 | 0.0 | 0.0 | 4.5  | 94.2 | 1.3 | 3.9<br>7 | 2 |
| PI3 | I expect to purchase greenclothing products in future because they contribute toconserving the environment. | 0.0 | 0.0 | 1.0  | 96.7 | 2.3 | 4.0<br>1 | 1 |
| PI4 | I plan to purchase greenclothing products rather than non- green clothingproducts.                          | 0.0 | 0.3 | 93.9 | 5.3  | 0.5 | 3.0<br>6 | 4 |

Table 4.19 show the means value, percentage of responses and ranking of each of the question under the same independent variable, which is “purchase intention”. For the first item “I choose to purchase green clothing products because they are less environmentally harmful”, 4.8% of respondents choose neutral for this item. However, 94.4% of respondents and 0.8% of respondents agree that they choose to purchase green clothing products because it is less environmentally harmful. For the second item “I pay more attention to green clothing products when shopping for clothing”, 4.5% of the respondent choose neutral for this item. However, 94.2% of respondents and 1.3% of respondents agree and strongly agree that they pay more attention to green clothing products when shopping for clothing. For the third item “I expect to purchase green clothing products in future because they contribute to conserving the environment”, 1.0% of respondents choose neutral for this item. However, 96.7% of respondents and 2.3% of respondents agree and strongly agree that they expect to purchase green clothing products in future because it contributes to conserving the environment. For

the fourth item “I plan to purchase green clothing products rather than non- green clothing products”, 0.3% of the respondents choose to disagree and 93.9% of respondents choose neutral for this item. However, 5.3% of respondents and 0.5% of respondents agree and strongly agree that they plan to purchase green clothing products rather than non- green clothing products.

The table shows that the item “I expect to purchase green clothing products in future because they contribute to conserving the environment” with the mean value of 4.01 is ranked in the first place. The item “I pay more attention to green clothing products when shopping for clothing” has the mean value of 3.97 ranked in second placed. It is followed by the item “I choose to purchase green clothing products because they are less environmentally harmful” is ranked in the third place with mean value of 3.96. Lastly, for the item “I plan to purchase green clothing products rather than non- green clothing products” with mean of 3.06 is ranked at the last place.

### 4.3 Scale Management

#### 4.3.1 Reliability Test

**Table 4.20: Internal Reliability Analysis**

| No | Construct                          | Cronbach's Alpha | Number of items | Ranking | Mean  | Standard Deviation |
|----|------------------------------------|------------------|-----------------|---------|-------|--------------------|
| 1  | Attitudes (AT)                     | 0.481            | 6               | 7       | 3.746 | 0.166              |
| 2  | Perceived Behavioral Control (PBC) | 0.545            | 6               | 4       | 3.975 | 0.140              |
| 3  | Emotion (EM)                       | 0.736            | 3               | 3       | 3.894 | 0.311              |
| 4  | Environmental Knowledge (EK)       | 0.792            | 6               | 2       | 4.595 | 0.301              |

|    |                            |       |   |    |       |       |
|----|----------------------------|-------|---|----|-------|-------|
| 5  | Subjective Norm<br>(SN)    | 0.823 | 4 | 1  | 3.924 | 0.371 |
| 6  | Product Attributes<br>(PA) | 0.450 | 4 | 8  | 3.990 | 0.146 |
| 7  | Price (PR)                 | 0.261 | 3 | 9  | 3.766 | 0.217 |
| 8  | Place (PL)                 | 0.541 | 4 | 5  | 4.028 | 0.259 |
| 9  | Green Advertising<br>(GA)  | 0.488 | 5 | 6  | 4.058 | 0.170 |
| 10 | Purchase Intention<br>(PI) | 0.165 | 4 | 10 | 3.750 | 0.122 |

Source: Developed for research

Based on the Table 4.20, the value of Cronbach's Alpha for each construct should be more than 0.7, which mean the reliability is good. However, if less than 10 items, it should be more than 0.5. The independent variable of "Subjective Norm" has the highest alpha value of 0.823 with 4 items. The second highest alpha value is 0.792 from independent variable "Environmental Knowledge" measured by 6 items. The third highest alpha value is 0.736 from independent variable "Emotion" measured by 3 items. The fourth highest alpha value is 0.545 from independent variable "Perceived Behavioral Control" measured by 6 items. The fifth highest alpha value is 0.541 from independent variable "Place" measured by 4 items. The sixth highest alpha value is 0.488 from independent variable "Green Advertising" measured by 5 items. The seventh highest alpha value is 0.481 from independent variable "Attitude" measured by 6 items. The eight highest alpha value is 0.450 from independent variable "Product Attributes" measured by 4 items. The nine highest alpha value is 0.261 from independent variable "Price" measured by 3 items. Lastly, it is followed by dependent variable of "Purchase Intention" which measured by 4 items and value of 0.165. The

result of Table 4.20 concluded that only five of the measures have acceptable level of reliability.

Table 4.20 shows the means and standards deviation of the ten measures. The Table reveals that Gen-Y consumer in Selangor is concerned on factors influencing purchase intention toward green clothing products. For the attitudes (mean=3.746, standard deviation=0.166), for perceived behavioral control (mean=3.975, standard deviation=0.140), for emotion (mean=3.894, standard deviation=0.3110), for environmental knowledge (mean=4.595, standard deviation=0.301), for subjective norm (mean=3.924, standard deviation=0.371), for product attributes (mean=3.990, standard deviation=0.146), for price (mean=3.766, standard deviation=0.217), for place (mean=4.028, standard deviation=0.259), for green advertising (mean=4.058, standard deviation=0.170), and for purchase intention (mean=3.750, standard deviation=0.122).

#### 4.3.2 Normality Test

**Table 4.21: Normality Statistic (Skewness & Kurtosis)**

| No | Variable                           | Items | Skewness | Kurtosis |
|----|------------------------------------|-------|----------|----------|
| 1  | Attitudes (AT)                     | 6     | -1.007   | 3.098    |
| 2  | Perceived Behavioral Control (PBC) | 6     | -0.685   | 11.869   |
| 3  | Emotion (EM)                       | 3     | -1.600   | 2.635    |
| 4  | Environmental Knowledge (EK)       | 6     | -1.371   | 1.924    |
| 5  | Subjective Norm (SN)               | 4     | -0.179   | 2.437    |
| 6  | Product Attributes (PA)            | 4     | -2.202   | 19.012   |
| 7  | Price (PR)                         | 3     | 0.782    | 3.510    |
| 8  | Place (PL)                         | 4     | -0.637   | 2.336    |
| 9  | Green Advertising (GA)             | 5     | 1.179    | 11.5444  |
| 10 | Purchase Intention (PI)            | 4     | -0.526   | 9.958    |

Source: Developed for research

Skewness examines the extent to which a variables distribution is symmetrical. If the distribution of responses for a variable stretches toward the right or left tail of distribution, then the distribution is referred to as skewed while kurtosis is a measures of whether the distribution is too peaked (a very narrow with distribution with most of the responses in the center). Table 5.21 illustrated the skewness and kurtosis value for each variable. Among the variable, Green Advertising (GA) has the greatest skewness value of +1.179 and Product Attributes (PA) has the lowest skewness value of -2.202. On the other hands, Perceived Behavioral Control (PBC) achieved the greatest kurtosis value of 11.869 whereas Environmental Knowledge (EK) has the lowest value of kurtosis of 1.924. All the kurtosis value is greater than +1, it shown the distribution is too peaked.

**Table 4.22: Normality Statistic Test (Kolmogorov-Smirnov & Shapiro-Wilk)**

| <b>Tests of Normality</b> |                                 |     |      |              |     |      |
|---------------------------|---------------------------------|-----|------|--------------|-----|------|
|                           | Kolmogorov-Smirnov <sup>a</sup> |     |      | Shapiro-Wilk |     |      |
|                           | Statistic                       | Df  | Sig. | Statistic    | df  | Sig. |
| AT                        | .238                            | 396 | .000 | .830         | 396 | .000 |
| PBC                       | .342                            | 396 | .000 | .706         | 396 | .000 |
| EM                        | .426                            | 396 | .000 | .655         | 396 | .000 |
| EK                        | .268                            | 396 | .000 | .815         | 396 | .000 |
| SN                        | .296                            | 396 | .000 | .798         | 396 | .000 |
| PA                        | .447                            | 396 | .000 | .487         | 396 | .000 |
| PR                        | .359                            | 396 | .000 | .750         | 396 | .000 |
| PL                        | .316                            | 396 | .000 | .812         | 396 | .000 |
| GA                        | .380                            | 396 | .000 | .638         | 396 | .000 |
| PI                        | .417                            | 396 | .000 | .556         | 396 | .000 |

a. Lilliefors Significance Correction

The two sample Kolmogorov-Smirnov test is a non-parametric test that compare the cumulative distributions of two date sets. The Kolmogorov-Smirnov report the maximum difference between the two cumulative distributions and calculate

the P-value from that and the samples size. It tests any violation of the null hypotheses – different medians, different variances, or different distribution. Table 5.22 shows the P-value is small, therefore it concluded that the two groups were sampled from populations with different distributions.

#### **4.4 Inferential Analysis**

##### **4.4.1 Spearman Correlation Coefficient Analysis**

Spearman rank correlation ( $r_s$ ) is a non-parametric test that used to measure the degree of association between two variables. Spearman correlation evaluates the monotonic relationship. The Spearman correlation is based on ranked value for each variable rather than raw data. The Spearman rank correlation is used there are two ranked variable and the researcher want to see whether the two variables co-vary, whether, as one variable increases, the other variable tends to increase or decrease. The test was applied in this analysis due to Likert scale data found to be not normally distributed. The p-value (or probability) is a measure of how likely or probable it is that nay observed correlation is due to chance. P-values of range between 0 (0%) and (100%). A p-value closed to 1 suggests no correlation other than due to chance and that the null hypothesis assumption is correct. The degree of freedom (df) is calculated as  $N - 2$ . Due to the value of kurtosis is too peak, therefore the Spearman Correlation Coefficient is further analysis the degree of association between two variables.

**Table 4.23: Correlation Matrix for purchase intention towards green clothing products among Gen-Y Consumer in Selangor, Malaysia**

|                |     |                         | Correlations |        |        |        |        |        |        |        |        |        |
|----------------|-----|-------------------------|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                |     |                         | AT           | PBC    | EM     | EK     | SN     | PA     | PR     | PL     | GA     | PI     |
| Spearman's rho | AT  | Correlation Coefficient | 1.000        | .147** | .095   | .029   | .022   | .038   | .030   | .219** | .054   | -.022  |
|                |     | Sig. (2-tailed)         |              | .003   | .059   | .560   | .668   | .447   | .553   | .000   | .285   | .656   |
|                |     | N                       | 396          | 396    | 396    | 396    | 396    | 396    | 396    | 396    | 396    | 396    |
|                | PBC | Correlation Coefficient | .147**       | 1.000  | .331** | .231** | .321** | .243** | .181** | -.029  | .006   | .189** |
|                |     | Sig. (2-tailed)         | .003         |        | .000   | .000   | .000   | .000   | .000   | .561   | .900   | .000   |
|                |     | N                       | 396          | 396    | 396    | 396    | 396    | 396    | 396    | 396    | 396    | 396    |
|                | EM  | Correlation Coefficient | .095         | .331** | 1.000  | .080   | .380** | .213** | .100*  | -.070  | .029   | .115*  |
|                |     | Sig. (2-tailed)         | .059         | .000   |        | .113   | .000   | .000   | .046   | .164   | .562   | .023   |
|                |     | N                       | 396          | 396    | 396    | 396    | 396    | 396    | 396    | 396    | 396    | 396    |
|                | EK  | Correlation Coefficient | .029         | .231** | .080   | 1.000  | .172** | .145** | .070   | .016   | .108*  | .066   |
|                |     | Sig. (2-tailed)         | .560         | .000   | .113   |        | .001   | .004   | .162   | .757   | .032   | .188   |
|                |     | N                       | 396          | 396    | 396    | 396    | 396    | 396    | 396    | 396    | 396    | 396    |
|                | SN  | Correlation Coefficient | .022         | .321** | .380** | .172** | 1.000  | .261** | .263** | -.027  | .016   | .147** |
|                |     | Sig. (2-tailed)         | .668         | .000   | .000   | .001   |        | .000   | .000   | .594   | .755   | .003   |
|                |     | N                       | 396          | 396    | 396    | 396    | 396    | 396    | 396    | 396    | 396    | 396    |
|                | PA  | Correlation Coefficient | .038         | .243** | .213** | .145** | .261** | 1.000  | .095   | -.075  | -.028  | .167** |
|                |     | Sig. (2-tailed)         | .447         | .000   | .000   | .004   | .000   |        | .060   | .136   | .576   | .001   |
|                |     | N                       | 396          | 396    | 396    | 396    | 396    | 396    | 396    | 396    | 396    | 396    |
|                | PR  | Correlation Coefficient | .030         | .181** | .100*  | .070   | .263** | .095   | 1.000  | .020   | .142** | .147** |
|                |     | Sig. (2-tailed)         | .553         | .000   | .046   | .162   | .000   | .060   |        | .690   | .005   | .003   |
|                |     | N                       | 396          | 396    | 396    | 396    | 396    | 396    | 396    | 396    | 396    | 396    |
|                | PL  | Correlation Coefficient | .219**       | -.029  | -.070  | .016   | -.027  | -.075  | .020   | 1.000  | .202** | -.094  |
|                |     | Sig. (2-tailed)         | .000         | .561   | .164   | .757   | .594   | .136   | .690   |        | .000   | .061   |
|                |     | N                       | 396          | 396    | 396    | 396    | 396    | 396    | 396    | 396    | 396    | 396    |
|                | GA  | Correlation Coefficient | .054         | .006   | .029   | .108*  | .016   | -.028  | .142** | .202** | 1.000  | .018   |
|                |     | Sig. (2-tailed)         | .285         | .900   | .562   | .032   | .755   | .576   | .005   | .000   |        | .724   |
|                |     | N                       | 396          | 396    | 396    | 396    | 396    | 396    | 396    | 396    | 396    | 396    |
|                | PI  | Correlation Coefficient | -.022        | .189** | .115*  | .066   | .147** | .167** | .147** | -.094  | .018   | 1.000  |
|                |     | Sig. (2-tailed)         | .656         | .000   | .023   | .188   | .003   | .001   | .003   | .061   | .724   |        |
|                |     | N                       | 396          | 396    | 396    | 396    | 396    | 396    | 396    | 396    | 396    | 396    |

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

\* . Correlation is significant at the 0.05 level (2-tailed).

#### 4.4.1.1 Test of Significance

**Ha1: There is positive relationship between attitudes and Gen-Y consumer purchase intention toward green clothing products.**

Based on Table 4.23, the correlation between attitudes on Gen-Y consumer's purchase intention towards green clothing products is at  $r_s = -.022$  ( $p > 0.05$ ). It shows that attitudes have negative weak relationship on Gen-Y consumer's purchase intention towards green clothing products. Thus, Ha1 is not supported.



**Ha2: There is positive relationship between perceived behavioral control and Gen- Y consumer purchase intention toward green clothing products.**

Based on Table 4.23, the correlation between perceived behavioral control on Gen-Y consumer's purchase intention towards green clothing products is at  $r_s = .189$ , ( $p < 0.05$ ). It shows that perceived behavioral control has positive significant relationship on Gen-Y consumer's purchase intention towards green clothing products. Thus, Ha2 is supported.

**Ha3: There is positive relationship between emotions and Gen-Y consumer purchase intention to toward green clothing products.**

Based on Table 4.23, the correlation between emotions on Gen-Y consumer's purchase intention towards green clothing products is at  $r_s = .115$ , ( $p < 0.05$ ). It shows that emotions have positive significant relationship on Gen-Y consumer's purchase intention towards green clothing products. Thus, Ha3 is supported.

**Ha4: There is positive relationship between environmental knowledge and Gen-Y consumer purchase intention toward green clothing products.**

Based on table 5.23, the correlation between environmental knowledge on Gen-Y consumer's purchase intention towards green clothing products is at  $r_s = .066$  ( $p > 0.05$ ). It shows that environmental knowledge has very weak relationship on Gen-Y consumer's purchase intention towards green clothing products. Thus, Ha4 is not supported.

**Ha5: There is positive relationship between subjective norms and Gen-Y consumer purchase intention toward green clothing products.**

Based on Table 4.23, the correlation between subjective norms on Gen-Y consumer's purchase intention towards green clothing products is at  $r_s = .147$ , ( $p < 0.05$ ). It shows that subjective norms have positive significant relationship on Gen-Y consumer's purchase intention towards green clothing products. Thus, Ha5 is supported.

**Ha6: There is positive relationship between product attributes and Gen-Y consumer purchase intention toward green clothing products.**

Based on Table 4.23, the correlation between product attributes on Gen-Y consumer's purchase intention towards green clothing products is at  $r_s = .167$ , ( $p < 0.05$ ). It shows that product attributes have positive significant relationship on Gen-Y consumer's purchase intention towards green clothing products. Thus, Ha6 is supported.

**Ha7: There is positive relationship between prices and Gen-Y consumer purchase intention toward green clothing products.**

Based on Table 4.23, the correlation between prices on Gen-Y consumer's purchase intention towards green clothing products is at  $r_s = .147$ , ( $p < 0.05$ ). It shows that product prices have positive significant relationship on Gen-Y consumer's purchase intention towards green clothing products. Thus, Ha7 is supported.

**Ha8: There is positive relationship between place and Gen-Y consumer's purchase intention toward green clothing products.**

Based on Table 4.23, the correlation between place on Gen-Y consumer's purchase intention towards green clothing products is at  $r_s = -.094$  ( $p > 0.05$ ). It shows that place have negative weak relationship on Gen-Y consumer's purchase intention towards green clothing products. Thus, Ha8 is not supported.

**Ha9: There is positive relationship between green advertising and Gen-Y consumer purchase intention toward green clothing products.**

Based on Table 4.23, the correlation between green advertising on Gen-Y consumer's purchase intention towards green clothing products is at  $r_s = .018$  ( $p > 0.05$ ). It shows that green advertising has very weak relationship on Gen-Y consumer's purchase intention towards green clothing products. Thus, H9 is not supported.

#### 4.4.2 Model Fit Test Results

**Table 4.24: Marginal Percentage for Test**

|         |      | N   | Marginal Percentage | Cumulative Percentage |
|---------|------|-----|---------------------|-----------------------|
| PI      | 3.00 | 2   | 0.5%                | 0.5%                  |
|         | 3.50 | 31  | 7.8%                | 8.3%                  |
|         | 3.75 | 330 | 83.3%               | 91.6%                 |
|         | 4.00 | 29  | 7.3%                | 98.9%                 |
|         | 4.25 | 4   | 1.0%                | 100.0%                |
| Valid   |      | 396 | 100.0%              |                       |
| Missing |      | 0   |                     |                       |
| Total   |      | 396 |                     |                       |

**Table 4.25: Model Fitting Information**

| Model          | -2 Log Likelihood | Chi-Square | Df | Sig. |
|----------------|-------------------|------------|----|------|
| Intercept Only | 465.647           |            |    |      |
| Final          | 419.810           | 45.838     | 9  | .000 |

Link function: Logit.

**Table 4.26: Goodness-of-Fit**

|          | Chi-Square | Df   | Sig.  |
|----------|------------|------|-------|
| Pearson  | 1124.650   | 1247 | .994  |
| Deviance | 406.385    | 1247 | 1.000 |

Link function: Logit.

**Table 4.27: Pseudo R-Square****Pseudo R-Square**

|               |      |
|---------------|------|
| Cox and Snell | .109 |
| Nagelkerke    | .154 |
| McFadden      | .094 |

Link function: Logit.

**Table 4.28: Parameter Estimates Table**

|           |             | Estimate | Std. Error | Wald   | df | Sig. | 95% Confidence Interval |             |
|-----------|-------------|----------|------------|--------|----|------|-------------------------|-------------|
|           |             |          |            |        |    |      | Lower Bound             | Upper Bound |
| Threshold | [PI = 3.00] | 20.903   | 5.778      | 13.090 | 1  | .000 | 9.579                   | 32.227      |
|           | [PI = 3.50] | 24.486   | 5.870      | 17.402 | 1  | .000 | 12.981                  | 35.990      |
|           | [PI = 3.75] | 29.825   | 5.952      | 25.112 | 1  | .000 | 18.160                  | 41.490      |
|           | [PI = 4.00] | 32.048   | 5.981      | 28.717 | 1  | .000 | 20.327                  | 43.770      |
| Location  | AT          | -1.676   | .859       | 3.811  | 1  | .051 | -3.359                  | .007        |
|           | PBC         | 3.242    | 1.030      | 9.906  | 1  | .002 | 1.223                   | 5.261       |
|           | EM          | .401     | .489       | .673   | 1  | .412 | -.557                   | 1.359       |
|           | EK          | -.055    | .476       | .013   | 1  | .908 | -.989                   | .879        |
|           | SN          | .257     | .428       | .360   | 1  | .549 | -.582                   | 1.096       |
|           | PA          | 2.654    | .893       | 8.835  | 1  | .003 | .904                    | 4.405       |
|           | PR          | 1.274    | .660       | 3.724  | 1  | .054 | -.020                   | 2.567       |
|           | PL          | -.855    | .537       | 2.535  | 1  | .111 | -1.907                  | .198        |
|           | GA          | 1.550    | .870       | 3.170  | 1  | .075 | -.156                   | 3.256       |

Link function: Logit.

In the above case processing Summary Table, it shows the number and percentage of cases at each level of response variable. No missing value was found and all the 396 observations of the data were used in the analysis. Next is the model fitting information, which provides the -2-Log likelihood for the intercept-only and final models; followed by Goodness of Fit and Pseudo R-Square results. In the model Fit Table, chi- square test will return in a p-value, the p-value is 45.838 shows it is larger than the significant value. And the Goodness of Fit Table, chi-square test will return in a p-value, the p-value is 1124.65 shows it is larger than the significant value. Therefore, it is concluded that the data supported the null hypotheses, and they are well

accepted. The McFadden's pseudo R<sup>2</sup> shows 0.1, suggesting that the model explains 10% of variation within the data and it is good model fit.

The Parameter Estimates Table shows the coefficients, standard errors, Wald test and associated p-value (Sig.) and the 95% confident interval of the coefficients.

From the Wald test results show that all the explanatory variables in a model is more than zero, therefore, all the variable in a model are significant.

**Table 4.29: Test of Parallel Lines**

| <b>Test of Parallel Lines<sup>a</sup></b> |                      |                     |    |      |
|-------------------------------------------|----------------------|---------------------|----|------|
| Model                                     | -2 Log Likelihood    | Chi-Square          | Df | Sig. |
| Null Hypothesis                           | 419.810              |                     |    |      |
| General                                   | 389.331 <sup>b</sup> | 30.478 <sup>c</sup> | 27 | .293 |

The null hypothesis states that the location parameters (slope coefficients) are the same across response categories.

a. Link function: Logit.

b. The log-likelihood value cannot be further increased after maximum number of step-halving.

c. The Chi-Square statistic is computed based on the log-likelihood value of the last iteration of the general model. Validity of the test is uncertain.

When the relationships between the independent variables and the logits are same for all logit, then it fit the ordinal regression. This mean that the results are a set of parallel lines or planes-one of each category of the outcome variable. The result of testing parallelism is in table 5.29. The row labeled Null Hypothesis contains -2 log Likelihood for the constraints model, the model assumes the line are parallel. The row labeled General is for model with separates lines. We would like to know whether the general model result is a sizeable improvement in fit from the null hypothesis model. The table shows the Null Hypothesis and General has a value of -2 Log Likelihood

value of 419.81 and 389.331b respectively. The null hypotheses state the location parameters (slope coefficients) are the same across responses categories.

The entry labeled Chi-square is the difference between the two -2log Likelihood value. If the lines are parallel, the observed significant level for the change should be larger, since the general model doesn't improve the fit very much. The parallel model is adequate. The figures shown Chi square value of 30.478c,, df value of 27 and Sig. value of 0.293. Thus, the parallel model is adequate.

#### 4.4.3 Generalizer Linear Model

The ordinal logistic is one of models subsumed under the rubric of the generalized linear models for ordinal data. The model is based on assumption that there is a latent continues outcome variable and that the observed ordinal outcome arises from discretizing the underlying continuum into j-ordered groups. The thresholds estimate these cut-off values.

The basic form of generalized linear model is

$$\text{link}(\gamma_j) = \frac{\theta_j - [\beta_1 x_1 + \beta_2 x_2 + \dots + \beta_k x_k]}{\exp(\tau_1 z_1 + \tau_2 z_2 + \dots + \tau_m z_m)}$$

The scale component accounts for differences in variability for different values of the predictor variables. In our research study, the dependent variable is purchase intention (PI) and total number of 396 respondents using multi-nominal probability distribution and link function of cumulative logit. The test results are shown as follows:

**Table 4.30: Categorical Variable Information**

|                    |    |      | N   | Percent |
|--------------------|----|------|-----|---------|
| Dependent Variable | PI | 3.00 | 2   | 0.5%    |
|                    |    | 3.50 | 31  | 7.8%    |
|                    |    | 3.75 | 330 | 83.3%   |
|                    |    | 4.00 | 29  | 7.3%    |

|       |      |     |        |
|-------|------|-----|--------|
|       | 4.25 | 4   | 1.0%   |
| Total |      | 396 | 100.0% |

**Table 4.31: Continuous Variable Information**

|           |     | N   | Minimum | Maximum | Mean   | Std. Deviation |
|-----------|-----|-----|---------|---------|--------|----------------|
| Covariate | AT  | 396 | 3.00    | 4.17    | 3.7462 | .16620         |
|           | PBC | 396 | 3.00    | 4.83    | 3.9747 | .14005         |
|           | EM  | 396 | 3.00    | 4.67    | 3.8939 | .31103         |
|           | EK  | 396 | 3.00    | 5.00    | 4.5951 | .30108         |
|           | SN  | 396 | 3.00    | 5.00    | 3.9242 | .37095         |
|           | PA  | 396 | 2.75    | 4.50    | 3.9899 | .14634         |
|           | PR  | 396 | 3.00    | 5.00    | 3.7660 | .21663         |
|           | PL  | 396 | 3.00    | 5.00    | 4.0278 | .25874         |
|           | GA  | 396 | 3.00    | 5.00    | 4.0576 | .16994         |

**Table 4.32: Goodness of Fit**

|                                      | Value    | Df   | Value/df |
|--------------------------------------|----------|------|----------|
| Deviance                             | 406.385  | 1247 | .326     |
| Scaled Deviance                      | 406.385  | 1247 |          |
| Pearson Chi-Square                   | 1124.650 | 1247 | .902     |
| Scaled Pearson Chi-Square            | 1124.650 | 1247 |          |
| Log Likelihood <sup>b</sup>          | -209.905 |      |          |
| Akaike's Information Criterion (AIC) | 445.810  |      |          |
| Finite Sample Corrected AIC (AICC)   | 446.763  |      |          |
| Bayesian Information Criterion (BIC) | 497.568  |      |          |
| Consistent AIC (CAIC)                | 510.568  |      |          |

Dependent Variable: PI

Model: (Threshold), AT, PBC, EM, EK, SN, PA, PR, PL, GA<sup>a</sup>

- a. Information criteria are in smaller-is-better form.
- b. The full log likelihood function is displayed and used in computing information criteria.

**Table 4.33: Omnibus Test**

### Omnibus Test<sup>a</sup>

| Likelihood Ratio |    |      |
|------------------|----|------|
| Chi-Square       | df | Sig. |
| 45.838           | 9  | .000 |

Dependent Variable: PI

Model: (Threshold), AT, PBC, EM, EK, SN,

PA, PR, PL, GA<sup>a</sup>

a. Compares the fitted model against the thresholds-only model.

**Table 4.34: Test of Model Effects**

Type III

| Source | Likelihood Ratio<br>Chi-Square | Df | Sig. |
|--------|--------------------------------|----|------|
| AT     | 3.665                          | 1  | .056 |
| PBC    | 8.830                          | 1  | .003 |
| EM     | .652                           | 1  | .419 |
| EK     | .013                           | 1  | .911 |
| SN     | .338                           | 1  | .561 |
| PA     | 7.493                          | 1  | .006 |
| PR     | 3.461                          | 1  | .063 |
| PL     | 2.374                          | 1  | .123 |
| GA     | 2.937                          | 1  | .087 |

Dependent Variable: PI

Model: (Threshold), AT, PBC,

EM, EK, SN, PA, PR, PL, GA

**Table 4.35: Parameter Estimates and Expected Value**

| Parameter | B         | Std. Error | 95% Wald Confidence Interval |        | Hypothesis Test |        |      | Exp(B) | 95% Wald Confidence Interval for Exp(B) |               |                          |
|-----------|-----------|------------|------------------------------|--------|-----------------|--------|------|--------|-----------------------------------------|---------------|--------------------------|
|           |           |            | Lower                        | Upper  | Wald Chi-Square | df     | Sig. |        | Lower                                   | Upper         |                          |
| Threshold | [PI=3.00] | 20.903     | 6.0159                       | 9.112  | 32.694          | 12.073 | 1    | .001   | 1197057844.875                          | 9064.207      | 158088571288448.470      |
|           | [PI=3.50] | 24.486     | 6.1277                       | 12.476 | 36.496          | 15.967 | 1    | .000   | 43055519399.818                         | 261867.876    | 7079057489644876.000     |
|           | [PI=3.75] | 29.825     | 6.2050                       | 17.664 | 41.987          | 23.104 | 1    | .000   | 8972522580619.290                       | 46903122.070  | 1716435024073294340.000  |
|           | [PI=4.00] | 32.048     | 6.2305                       | 19.837 | 44.260          | 26.459 | 1    | .000   | 82877918038313.030                      | 412161038.577 | 16665207662731630000.000 |
| AT        |           | -1.676     | .8750                        | -3.391 | .039            | 3.669  | 1    | .055   | .187                                    | .034          | 1.040                    |
| PBC       |           | 3.242      | 1.0782                       | 1.129  | 5.355           | 9.043  | 1    | .003   | 25.590                                  | 3.093         | 211.751                  |
| EM        |           | .401       | .4947                        | -.569  | 1.371           | .657   | 1    | .418   | 1.493                                   | .566          | 3.938                    |
| EK        |           | -.055      | .4918                        | -1.019 | .909            | .013   | 1    | .911   | .946                                    | .361          | 2.481                    |
| SN        |           | .257       | .4404                        | -.606  | 1.120           | .340   | 1    | .560   | 1.293                                   | .545          | 3.065                    |



|         |                |       |        |       |       |   |      |        |       |        |
|---------|----------------|-------|--------|-------|-------|---|------|--------|-------|--------|
| PA      | 2.654          | .9455 | .801   | 4.507 | 7.882 | 1 | .005 | 14.216 | 2.228 | 90.693 |
| PR      | 1.274          | .6792 | -.058  | 2.605 | 3.516 | 1 | .061 | 3.573  | .944  | 13.527 |
| PL      | -.855          | .5525 | -1.938 | .228  | 2.394 | 1 | .122 | .425   | .144  | 1.256  |
| GA      | 1.550          | .8914 | -.197  | 3.297 | 3.023 | 1 | .082 | 4.710  | .821  | 27.029 |
| (Scale) | 1 <sup>a</sup> |       |        |       |       |   |      |        |       |        |

Dependent Variable: PI

Model: (Threshold), AT, PBC, EM, EK, SN, PA, PR, PL, GA

a. Fixed at the displayed value.

## **CHAPTER 5**

### **CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

The attitude, perceived behavioral control, emotion, environmental knowledge, subjective norms, product attributes, price, place, and green advertising are decided to be the research elements in influencing purchase intention of green clothing products from the perspective of Gen-Y consumer, since they are found to be the few factors that supported by the most researchers and scholars for these related topics. In summary, this research is concerning an empirical evaluation of the various factor that influencing Gen-Y consumer's purchase intention toward green clothing products in Selangor through the application of research model which expanded from Theory Planned Behavior (TPB). The research model consists of nine independent constructs such as attitude, perceived behavioral control, emotion, environmental knowledge, subjective norms, product attributes, price, place and green advertising with purchase intention as dependent construct. All the nine independent constructs might affect the Gen-Y consumer's purchase intention toward green clothing products in Selangor, Malaysia.

#### **5.2 Summary**

A perceived lack of purchase intention to buy green clothing products observed among the Malaysian Generation Y consumers has sparked the interest to carry out this study. With the aid of structured questionnaires, data will be collected from a total of 396 respondents, aged between 26 and 43 years of age for this research study. Gen-Y consumer has been identified as target for this study. According to Pew Research Center report in 2019, Gen-Y are those who born in between 1981 and 1996. According to (Kavitha,

Prabhu, & Souji, 2011), Gen-Y are those who born between 1977 and 1994, currently aged between 26 and 43 years old, and they made about 26.9% of Malaysia's total population, according to the country's Economic Planning Unit (2010); and they have greater purchasing power as professionals and entrepreneurs, some succeeding their captain-of-industry parents or/and relatives who are retired or in the process of doing – a succession-narrative in aging but still strong business companies.

### **5.2.1 Statistical Analysis – Summary of Scale Measurement**

Reliability and validity tests as means to access the goodness of measure of study constructs. From the reliability test by using Cronbach's Alpha, the independent variable of "Subjective Norm" has the highest alpha value of 0.823 with 4 items. The second highest alpha value is 0.792 from independent variable "Environmental Knowledge" measured by 6 items. The third highest alpha value is 0.736 from independent variable "Emotion" measured by 3 items. The fourth highest alpha value is 0.545 from independent variable "Perceived Behavioral Control" measured by 6 items. The fifth highest alpha value is 0.541 from independent variable "Place" measured by 4 items. The sixth highest alpha value is 0.488 from independent variable "Green Advertising" measured by 5 items. The seventh highest alpha value is 0.481 from independent variable "Attitude" measured by 6 items. The eight highest alpha value is 0.450 from independent variable "Product Attributes" measured by 4 items. The nine-highest alpha value is 0.261 from independent variable "Price" measured by 3 items. Lastly it is followed by dependent variable of "Purchase Intention" which measured by 4 items and value of 0.165. The result shows that only five of the measures have acceptable level of reliability.

From the skewness and kurtosis value for each variable, Green Advertising (GA) has the greatest skewness value of +1.179 and Product Attributes (PA) has the lowest skewness value of -2.202. On the other hands, Perceived Behavioural Control (PBC) achieved the greatest kurtosis value of 11.869 whereas Environmental Knowledge (EK) has the lowest value of kurtosis of 1.924. All the kurtosis value is greater than +1, it shown the distribution is too peaked. The results show the P-value is small, therefore it concluded that the two groups were sampled from populations with different distributions.

### **5.3 Descriptive Analysis**

Based on the survey conducted, the respondent demographic profile examined comprises gender, age, marital status, ethnic group, educational level, personal income level, location/areas, and experience in purchasing green products before. A total 396 respondents had participated this survey from various races by location and areas in Selangor state. The majority of the respondents are females (52.5%) while the remaining 47.5% are males. Most of the respondents are between the ages of 36 to 40 years old (30.1%) and 31 to 35 years old (28.3%), suggesting that they fall within the Gen-Y group. A large percentage of the respondents (81.6%) are married. From the survey result, 255 respondents are Chinese who constituted 64.4%, followed by 122 Malays totaling 30.8% of the 396 respondents. This is only a state-wide survey in Selangor and the predominance of Chinese Gen-Y cannot be interpreted as being more green-conscious and green-purchase intention than the Malays; it is purely coincidental that there were more Chinese respondents and any ethnic inclination to green purchase of clothing is not conclusive along racial lines.

On the income perspective, the majority of respondents (250 respondents accounting for 63.1%) earn a personal monthly income of between RM 2001 to RM 3000. And 78.3% of the respondents have completed their education level at UPSR, PT3/ PMR, SPM or O-level, representing a total of 310 respondents. This suggests that they are likely to have some or more knowledge of the issues researched in this survey although they may be more articulate but not really action-oriented towards green issues, environmentalism and consumerism. In short, the level of education does not necessarily mean that they are highly conversant on the relationship between environmental degradation due to climate change and the need for go-green to save human communities and non-green polluting industries. Nevertheless, 58.3% of the 396 respondents are self-employed and the majority are from Petaling Jaya District. A breakdown by residence shows 131 of the respondents are from Damansara, Sungai Buloh, Kelana Jaya, city centre, and Sungai Way, making up 33.1% of the total sample size. This confirms that the respondents do have or have had experiences in purchasing some forms of green products. In fact, the survey results attest that 221 respondents (55.8%) have purchased one or more green product such as clothing (underwear, undergarment, t-shirt, shorts, dress, sock, office wear) before they participated in this survey.

Based on the summary of central tendency analysis for all variables, the following phenomena emerges. Firstly, the 3.04 to 4.00 mean range for “attitudes” on the item that ranked first place suggests that a need does exist among the respondents to start purchasing green clothing products with a mean value of 4.00. In other words, the potential to go green is ever-present to be exploited. However, the item that ranked the last place, with a mean of 3.04, is “Green clothing product purchase will give more benefits compared to

non-green clothing product purchase” reinforces the go-green potential when exploited would be beneficial.

Secondly, the 3.81 to 4.04 mean range for “perceived behavioral control” for the item that ranked in the first place, with a mean of 4.04, is “I feel that making purchases of green clothing products is totally within my control”. This suggests that the respondents do have an inclination to purchase green clothing products because it is within their ability to do so. This purchase intention inclination is further reinforced by the item that ranked the last place, with a mean of 3.81, attesting “If it is my own choice, I am confident that I will select green clothing products when making purchase compared to a non-green clothing product”. Indeed, a positive testimonial to a self-decision to go-green clothing purchase as necessary.

Thirdly, the mean range of 3.85 to 3.93 for “emotions” on the item that ranked in the first place is “I feel joyful whenever I am making purchases of green clothing products” with the mean value of 3.93. This suggests that any intent to purchase green products tend to give joy to the respondents with similar emotion at work. Moreover, the item that ranked the last place is “I am excited whenever I make a purchase of green clothing products” with mean of 3.85 also reinforces the joy or glee factor of looking forward to purchase green products such as green clothing.

Fourthly, the mean range of 4.06 to 4.83 for “environmental knowledge” on the item that ranked in the first place is “I know plastic materials in various forms such as bottles and grocery bags take years to decompose, hence causing pollution to the environment” with the mean value of 4.83. This suggest that the respondents are

environment-friendly conscious if not well aware that non-green consumption hurts the environment. And the testimonial of the 4.06 mean for the item that ranked the last place on “I know the importance of conserving the environment without damaging it” tend to reinforce some environmental knowledge among the respondents.

Fifthly, the mean range of 3.78 to 4.00 for “subjective norms” on the item that ranked in the first place is “Most people who are important to me think that I should continue to make purchases of green clothing products” with a mean value of 4.00. This suggests that the respondents are likely to listen to and be influenced by those close to them on making purchases of green clothing products. This kind of enthusiasm is fanned by the mean score of 3.78 for the item in the last place as “My friends share positive opinions about the importance of making purchases of green clothing products”. Indeed, the confidence of the respondents rises to go-green is further subject to peer or friend persuasion-influences.

Thus, based on the results of central tendency, all five variables (attitudes, perceived behavior control, emotion, environmental knowledge and subjective norms) described above show that the respondents, that is, the Gen-Y survey sample, are positively and potentially inclined to developing and applying knowledge confidently in purchasing green clothing products as and when needed.

For the marketing-related variables, the mean range of 3.94 to 4.02 for “product attributes” on the item that ranked in the first place is “I will look for certified eco-labelling when considering purchase of green clothing products”, with the mean value of 4.02. This suggests that the respondents are willing to go along with the eco-label certified green

clothing products. This is further reinforced by the 3.94 mean for the last-ranked item on “Green clothing products are not harmful to user compared to non-green clothing products” that suggests a prevailing presence of an environment-friendly disposition among the respondents.

Secondly, for the mean range of 3.30 to 4.01 for “price” on the item that ranked in the first place is “If the price of a green clothing product is less expensive, I'm willing to purchase it every time in order to change my lifestyle” with the mean value of 4.01. This suggest a concern for how pricing can affect the respondents purchase intention and his decision to purchase green product clothing. Nevertheless, the 3.30 mean for the last-ranked item on “I am willing to pay slightly more for a purchase of green clothing products” is enough to reinforce their conviction that even though price is a factor of consideration but quality of green clothing products with a higher price is acceptable.

Thirdly, for the mean range of 3.89 to 4.37 for “place” on the ranked first-placed item is “I would purchase green clothing products from fashion retails stores which specializes in selling green clothing products only”. Again, indirectly related to pricing concern, is place-of-purchase location, with a mean value of 4.37. This insightful inclination of purchase intention among respondents is reinforced by the mean value of 3.89 for the last-ranked item on “I would make purchases of green clothing products if the products are displayed visibly on shelf in the fashion retail outlet”. This suggests that visible displays of green clothing products tend to convince the respondents to react positively because they can see the products themselves.in public display venues.



Fourthly, the item that ranked in the first place is “Advertising presents a true picture of the nature of the product that enables me to decide to purchase the green clothing products”, with a mean value of 4.11, affirms respondent-confidence egged by advertising authentication of green clothing products. And the last-ranked item with a mean value of 4.03 for the item on “I plan to switch to advertised green clothing products more so than non-advertised ones when making purchases of green clothing products” is no less encouraging and reinforcing too because visibility and blasts of advertising campaigns do impact on the mind (purchase intention) and the body (decision to buy) the advertised products.

Lastly, the mean range of 3.06 to 4.01 for “purchase intention” on the first-ranked item is “I expect to purchase green clothing products in future because they contribute to conserving the environment” with the mean value of 4.01. This is reinforcing the respondent penchant to protect the environment as needed through green clothing product purchases. And the last-ranked item with a mean value of 3.06 on “I plan to purchase green clothing products rather than non-green clothing products” further confirms the purchase-decision driving purchase intention to support and buy green clothing products.

Based on the five marketing variables of eco-labelling, price, place, advertising and purchase intention, the respondents are all fired up to take on the challenges of purchasing green clothing products on locational displays and advertised campaigns, among others, even if the price is a little more expansive. This is an encouraging sign for environmentalists and green campaigners, among whom are also the Gen-Y groups of

future human communities that must try to conserve earth and reform consumption-destruction behaviors and habits of destructive lifestyles.

#### 5.4 Discussion of Major Findings – Hypotheses Interpretation

Based on the analysis results of in Chapter 4, the results of the hypotheses testing are summarized as Table 5.36 below. Only the supported hypotheses are interpreted in alignment with fulfilling the objectives of the study and answering the research questions.

**Table 5.1: Results of Hypotheses Testing**

| Hypotheses                                                                                                                                     | Valued Scored                     | Decision      |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|---------------|
| H1: There is positive relationship between attitudes on Gen-Y consumer's purchase intention towards green clothing products.                   | $r_s = -.022$ ,<br>( $p > 0.05$ ) | Not Supported |
| H2: There is positive relationship between perceived behavioral control on Gen-Y consumer's purchase intention towards green clothing products | $r_s = .189$ ,<br>( $p < 0.05$ )  | Supported     |
| H3: There is positive relationship between emotions on Gen-Y consumer's purchase intention to towards green clothing products                  | $r_s = .115$ ,<br>( $p < 0.05$ )  | Supported     |
| H4: There is positive relationship between environmental knowledge on Gen-Y consumer's purchase intention towards green clothing products.     | $r_s = .066$ ,<br>( $p > 0.05$ )  | Not Supported |
| H5: There is positive relationship between subjective norms on Gen-Y consumer's purchase intention towards green clothing products.            | $r_s = .147$ ,<br>( $p < 0.05$ )  | Supported     |
| H6: There is positive relationship between product attributes on Gen-Y consumer's purchase intention towards green clothing products.          | $r_s = .167$ ,<br>( $p < 0.05$ ). | Supported     |
| H7: There is positive relationship between prices on Gen-Y consumer's purchase intention towards green clothing products.                      | $r_s = .147$ ,<br>( $p < 0.05$ )  | Supported     |
| H8: There is positive relationship between place on Gen-Y consumer's purchase intention towards green clothing products.                       | $r_s = -.094$ ,<br>( $p > 0.05$ ) | Not supported |

|                                                                                                                                      |                                  |               |
|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------|
| H9: There is positive relationship between green advertising on Gen-Y consumer's purchase intention towards green clothing products. | $r_s = .018$ ,<br>( $p > 0.05$ ) | Not supported |
|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------|

#### 5.4.1.1 Attitudes (AT)

**Ha1: There is positive relationship between attitudes and Gen-Y consumer purchase intention toward green clothing products.**

The outcome of shows that there is a positive relationship between attitudes on Gen-Y consumer purchase intention toward green clothing products. This suggests that Gen-Y consumer attitudes may lead to certain purchase intentions in performing kind and thoughtful behaviors, such as purchasing environmentally products. Nevertheless, the hypotheses for this variable were not supported. This may be due to attitudes – behavior inconsistencies in the context of green purchasing such as various prevalent motives, facilitators and barriers affecting purchase decision making towards green products. Also, consumer attitudes on the government's role and their personal norm towards the environmental may have contributed significantly to their attitudes on green product and purchases. Furthermore, personal norm as the key contributor to the attitude towards green product may not translate into green purchase because, among other reasons, the existing of green attitudes and practices in developing countries especially in Malaysia is still lacking in the daily life. Thus, the hypotheses Ha1 is not supported.

#### 5.4.1.2 Perceived Behavioral Control (PBC)

**Ha2: There is positive relationship between perceived behavioral control and Gen-Y consumer purchase intention toward green clothing products.**

The outcome of shows that perceived behavioral control has a positive relationship with Gen-Y consumer purchase intention toward green clothing products among Gen-Y consumer in Selangor. Perceived behavioral control had a positive effect on behavioral purchase intention. It is the most influential factor when predicting the likelihood of green clothing product adoption. The Gen-Y consumer feel that making purchases of green clothing products is totally within their control. They will have sufficient time to decide when making a purchases of green clothing products and will be able to take available opportunities to make purchases of green clothing products. They also trust themselves in making the right decision to purchase green clothing products and believe that the have capable of selecting green clothing products when making purchases. In addition, if it is a choice, they are confident able to select green clothing products when making purchase compared to a non-green clothing product. Thus, the hypotheses Ha2 is supported.

#### **5.4.1.3 Emotion (EM)**

**Ha3: There is positive relationship between emotions and Gen-Y consumer purchase intention to toward green clothing products.**

The outcome of shows that emotion positive significant relationship on Gen-Y consumer purchase intention toward green clothing products. Emotion refers to various affective states or feelings associated with consumption. It is affective response towards emotion-eliciting objects or events and are involved in every purchase decision. The emotion a person can be either positive or negative which are such as frustrated, guilty, proud, and content. Study also shows that emotion has a positive influence on loyalty intentions. The respondents agreed they feel joyful whenever making purchases of green clothing

products. They enjoy a sense of peace and excited whenever make a purchase of green clothing products. This result is shown that emotion has a positive relationship with consumers' green clothing product usage and purchase intention as it involves the cognitive, rational, affective, and emotional elements when encountering with environmental issues. This result showed a positive correlation between emotion and green clothing product usage and purchases. Thus, the hypotheses Ha3 is supported.

#### **5.4.1.4 Environmental Knowledge (EK)**

**Ha4: There is positive relationship between environmental knowledge and Gen-Y consumer purchase intention toward green clothing products.**

The outcome of shows environmental knowledge has relationship with Gen-Y consumer purchase intention towards green clothing products among Gen-Y consumer in Selangor. This indicated that Gen-Y consumer environmental knowledge may lead to certain purchase intentions in green purchases. Nevertheless, the hypotheses for this variable were not supported due to its significant results. This may be due to the environmental knowledge of Gen-Y consumer is still lacking when making a green product purchase including green clothing products. The understanding and explaining in more depth about environment issue that occurred is lacking and need to strengthen to create impact on purchase intention. As a results, the environmental protection did not contribute significantly to consumer's attitudes on green clothing products. Consumers still need to be educated those environmental problems can be minimized by changing consumption patten from conventional products to green clothing product. Attitude towards green clothing product provides a role in the relationship of environmental knowledge and

purchase intention. A positive attitude is needed to bridge the increase in consumer purchase intention towards green clothing products. Thus, the hypotheses Ha4 is not supported.

#### **5.4.1.5 Subjective Norms (SN)**

**H5: There is positive relationship between subjective norms and Gen-Y consumer purchase intention toward green clothing products.**

The outcome of shows that subjective norms have a relationship with Gen-Y consumer purchase intention toward green clothing products among Gen-Y consumer in Selangor. Subjective norm is a social factor which refers to perceived social pressure to perform or not to perform the action to gain approval from their circle of influence. The desire to act is highly influenced by the reference groups such as close friends, relatives, and colleagues who are important to the actor. In another words subjective norm refers to a person's total belief that as an individual or group they should perform the behavior under investigation. The study proves that subjective norms have positive relationship on Gen-Y consumer's purchase intention towards green clothing products. The result of research study shows that most people who are important to them think that they should continue to make purchases of green clothing products and want them to make purchases of green clothing products. People whose opinions that they value would prefer that I make purchases of green clothing products. And they do agree that friends share positive opinions about the importance of making purchases of green clothing products. Thus, the hypotheses Ha5 is supported.

#### **5.4.1.6 Product Attributes (PA)**

**Ha6: There is positive relationship between product attributes and Gen-Y consumer purchase intention toward green clothing products.**

As predicted, the outcome of shows that product attributes have a relationship with Gen-Y consumer purchase intention toward green clothing products among Gen-Y consumer in Selangor. Gen-Y consumers tend to make purchase towards green clothing products because they are willing to look for certified eco-labelling when considering purchase of green clothing products. Besides that, the respondents also indicated that thy usually purchase green clothing products which the packaging includes eco-friendly elements (e.g., recycled materials or recyclable packaging). It is also included making a purchase green clothing products that have the ‘eco’ label” which is not are harmful to user compared to non-green clothing products. Consumers will consider the environmental compatibility of the products when making their purchases. Consumers identify products information based on what they read on the product labelling and the information will let them on purchasing decision. Eco-label strongly influenced consumer intention to purchase green product has also become a concern to consumers in making their purchasing decisions. Thus, the hypotheses Ha6 is supported.

#### **5.4.1.7 Price (PR)**

**Ha7: There is positive relationship between prices and Gen-Y consumer purchase intention toward green clothing products.**

The outcome of shows that price have a relationship with Gen-Y consumer purchase intention toward green clothing products among Gen-Y consumer in Selangor. Price can be defined as the amount of money expected, required, or given in payment for something. As the consideration given in exchange for transfer of ownership, price forms the essential basis of commercial transactions. Price was tested to have positive significant relationship on Gen-Y consumer's purchase intention towards green clothing products. The result shows if the price of a green clothing product is less expensive, the respondents willing to purchase it every time to change their lifestyle. They would choose green clothing products over non-green products if the price is similar, and they are willing to pay slightly more for a purchase of green clothing products. Consumers will consider price as the essential determinant of green clothing product. Consumers, who are price- sensitive deem that the price of products is the most salient factor affecting their buying decision. However, price premium may not be a major purchase barrier as people increasingly seemed to be prepared to incur higher cost in consuming green clothing products. People seemed to be more interested in other factors, probably the benefits attached to the surcharges and thus they were willing to pay a higher price when comes to green purchases. Thus, the hypotheses Ha7 is supported.

#### **5.4.1.8 Place (PL)**

**Ha8: There is positive relationship between place and Gen-Y consumer purchase intention toward green clothing products.**



The outcome of shows that place have a relationship with Gen-Y consumer purchase intention toward green clothing products among Gen-Y consumer in Selangor. Nevertheless, the hypotheses for this variable were not supported due to its significant results. This may be due to the place is not generator factor, it has numerous features that can creates revenue and certain outcome. Place represents the physical location or outlet where the product can be purchased. Customer might not focus on this marketing mix when considering the purchases of green product. The commitment from the retailer to display or selling green product in their outlet is still lacking. The point of sales material and the available of specialty store in selling green clothing product is still limited. Thus, the hypotheses Ha8 is not supported.

#### **5.4.1.9 Green Advertising (GA)**

**Ha9: There is positive relationship between green advertising on Gen-Y consumer purchase intention toward green clothing products**

The outcome of shows that green advertising has a relationship with Gen-Y consumer purchase intention toward green clothing products among Gen-Y consumer in Selangor. Nevertheless, the hypotheses for this variable were not supported due to its significant results. This may be due to attributes of the green advertising, which is attractiveness, reliability and information is not clearly communicated especially in marketing of green clothing products. Compared to green or non-green ads, consumer do not feel empowered by green appeal, which is often used in advertising practice, and perceptions of customer orientation are not enhanced. This could also be due to advertisement for green product only emphasis its benefits for the environment, consumers might consider the company's

effort on environmental protection to compete with those on fulfilling their needs and they do not have the power to change company's decision. The green message and appeal do not contribute to increase consumers' felt power that they can specifically exercise on companies and the perceptions of corporate environmental responsibility, which is however a significant driver of customer orientation. Thus the hypotheses Ha9 is not supported.

In essence, the five supported hypotheses bearing the variables of behavioral control, emotion, subjective norms, product attributes and prices are all inter-related to assessing the positive or negative inclinations of Gen-Y toward purchase-intention decisions to buy green clothing products that conserve and heal the environment. The interlinking 5-variables suggest that Gen-Y are educated consumers, probably still wet in the ears, insofar as in-depth knowledge-learning experiences on policy-compliance applications of the complexities of environmental management agendas present today. This suggests that their learning curve to purchase and use green products including clothing products made of natural and recycled materials is still progressing and maturing, differing from one Gen-Y to another depending on their maturity, social status and professional standing in societies. Nevertheless, with education and age, their behavioral control is tamed to a certain extent barring any outburst of emotional expressions that characterize their idiosyncratic individuality based on their subjective norms (translated from culture-biased attitudinal perceptions of reality and milieu around them) that will eventually influence their intent-decision to purchase premised on product attributes and prices of green clothing products, even for reasons beyond environment-friendly conservation and health-quality concern for human communities and the world at large.

### **5.4.2 Implications of the Study**

This research study aims to examine the factors and the relationship between the nine independent variables (attitude, perceived behavioral control, emotion, environmental knowledge, subjective norms, product attributes, price, place, and green advertising) and Gen-Y's purchase intention toward green clothing products in the State of Selangor. The implication of this study is divided into two parts - theoretical implications and managerial implications. Theoretical implications relate to the development of research results for future research on purchase intention of green clothing products. Managerial implications covers managerial contribution to marketing companies whose strategic business concern is to attract more consumers to purchase and use green clothing products.

#### **5.4.2.1 Theoretical Implications**

Theoretically, there is limited existing research focus on exploring the factors influencing purchase intention toward green clothing products among Gen-Y consumers in Selangor, Malaysia. Hence, this research study takes a forward step to examine the factors influencing purchase intention toward green clothing products in the context of Gen-Y consumers who are perceived to have greater purchasing power in making purchase of clothing product currently and in future too.

Next, this study has confirmed that the expansion on TPB model is an appropriate approach to predicting the purchase intention for green clothing products among Gen-Y consumers in Selangor. In addition, there are five independent variables (perceived behavioral control, emotions, subjective norms, product attributes and price) that show a significant relationship with purchase intention, again supported by the TPB model. Therefore, the findings of this research study provide a new insight for other researchers

and academicians to delve further into some other important factors (emotional constructs, and situational factors constructs and marketing mix constructs) omitted here.

Today, as the environmental protection issues and green consumption and usage grow and expand, this study can be an important source of reference for future study in the same area of research. In this regard, future researchers can also apply the theoretical or/and conceptual framework developed in this study with improvements as necessary to achieve their own target objectives.

#### **5.4.2.2 Management Implications**

Marketing Managers and manufacturers of clothing products are able to benefit from this research if they choose to understand and adopt the findings-results in their professional and industry undertakings respectively. Specifically, they can use the findings on Gen-Y consumer attitude-intention and behavior-decision purchases to design more effective strategies in promoting green clothing products. As shown by many researches, there is a growing demand for green products such as green clothing products in years to come, so companies need to quickly divert and redesign their businesses to go-green in order to increase their market share, sales, profitability, and long-term sustainability, as well as to fulfill customer satisfaction and responsibility to protect the environment. In short, business and management can start re-engineering their respective organizations to drive more green products commitment in the common public interest of humans and their remaining natural environment, fauna and forestry including animals.

### **5.5 Recommendations**

Several recommendations are proposed to address the scope and limitation of the research study as follows:

1. Future researchers could consider other age groups such as millennium consumer because these consumers are also future consumers of green clothing products, and they do have purchasing power in making purchase on green clothing products. Different age groups might have different perceptions of green clothing products and purchase intentions. By including a wider age-group of respondents in future research, it may improve the generalizability and validity of the research results.
2. Future studies can expand the research areas throughout Malaysia, covering both West and East Malaysia where the population is large and cosmopolitan. The research findings would be able to increase the generalizability of results application. A more comprehensive questionnaire should be developed to include a feedback session in the survey questionnaire. This will allow the respondents to express their viewpoint on the variable items instead of choosing from a preset or limited items. By doing this, the researcher could improve the analysis of research findings from the diverse set of answers and improve the weaknesses of the questionnaire. Also, the quantitative method could be complemented with a qualitative method to expand the results finding via semi-structured interviews with triangulated results interpretation.
3. Future researcher can develop a similar study by focusing on a particular type or category of green clothing product, as different types of products or categories of green products may lead to different purchase intentions and purchasing behaviors. Researchers would then be able to test purchase-intention behaviors for both high involvement products such as branded appeal items and low involvement products purchased on a regular basis such as undergarments or T-shirts or sportswear.

4. Future researchers may conduct similar studies in different countries. The researchers may focus on the selecting countries where environmental awareness and purchasing of green clothing products are slow because it provides a comparison between green consumer behaviors of self-proclaimed green and non-green consumers. This may help the future researchers understand the reasons why non-green consumers are not buying green clothing products. Others potential factors should be explored in future studies such as environmental laws by government, and international regulations of green environment can also be examined. The researchers may also include cultural differences among various countries from perspectives of preferences, habits and situational factors can be further investigated and tested.
5. Lastly, variables that have been tested before can be tested as moderators to examine their influence as a mediator for either purchase intention or purchase behavior or both for green clothing products. With this, it will enable researchers to explore more exploratory and develop more meaningful framework for applied research in green products and especially green clothing products.

## **5.6 Conclusion**

Green products, in this study, are confined to green clothing products defined as sustainable fabric clothing produced from eco-friendly resources such as grown fiber crops or recycled materials including organic textiles and sustainable materials (for example) hemp, non-textiles (for example, bamboo or recycled plastic bottles) and recycled products (for example, clothes made from recycled clothing including vintage, textile and other materials and can also be termed re-used). Directly or indirectly, green

clothing products are related to the multi-billion fashion industry as well; but uncontrolled and wasteful fashion related to rapid changing lifestyles and over-consumption can damage the environment and the industry itself.

Fast fashion (cheap trendy collections) bases its business model on high volume collections and speedy production. And because production is so fast and the clothing is right on trend, consumers cannot help to be constantly bombarded with the latest items they must have. The reality is we really do not need this much clothing in our lives. The documentary reiterates that, worldwide, we consume 80 billion pieces of clothing a month, which is a 400% increase from two decades ago. Sustainability is incredibly important in textile and fashion industry and so too brands; hence, this research study can contribute in some ways to raise awareness and heighten green-conscious actions that could help shift societies and consumption preference and habits toward high quality and sustainable practices so important to overcoming increasing environmental and waste issues.

Companies such as H&M, Nike, Adidas and Zara who are known for creating fast fashion collections around the world are even working to develop a sustainable shift. Although we have a long way to go, the industry is at least on the right path towards a common understanding and an honest reflection towards what needs to change. And the power is in consumers now to start aware and make purchase of green clothing product available in the market. H&M, Levi and Uniqlo had promoting their sustainable green clothing worldwide including Malaysia. There are also a lot of consumers who are under the impression that only the upper class can afford eco-friendly fashion and green clothing products. The truth remains that exclusivity may focus on the rich and nouveau riche with niche green products that literally are beyond the affordability of the commons and the

poor, but the side of the coin favors the non-rich and the average with similar product imitations or copycats at affordable or even cheap prices. Yet the critical point common to both is that their demands are increasingly being met by supply chain and logistic chain people who, like them, in progressive-processes challenges the resilience of environment-friendly standoff against the continuing rape of the environment and its diminishing natural heritage.

In essence, unless green-awareness and green-conscious practices are less articulated and more action-driven, green clothing products or none can continue to stand in isolation in shopping complexes without governments dedicated intervention to arrest the rot and encourage discriminating preservation-conservation strategic management of diminishing natural resources for productive enterprises that comply with regulated go- green policies and practices at all levels of governance domestically, nationally, regionally and internationally.



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## APPENDICES

### Appendix A

#### Krejcie & Morgan Table

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

## Appendix B

### Proposed Research Questionnaire



Centre of Graduate Studies Faculty of  
Business and Management

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Dear Sir / Madam,

You are invited to participate in an academic research study on “Factors Influencing Purchase Intention Towards Green Clothing Products: A study among Gen-Y Consumer in Selangor, Malaysia”. The purpose of this study is to identify those factors which influencing of their purchase intention towards green clothing products in Selangor, Malaysia.

The results of this study will provide some insights information on the effective marketing channel for green clothing products in Malaysia. The questionnaires will take approximately 25 minutes to complete. Your assistant and support will be highly appreciated.

Kindly note that all information collected from this survey is solely for those research project only. All information collect shall be kept confidential and no publications will contain information from which you may be identified.

Should you have any queries pertaining to this survey, please do not hesitate to contact the undersigned for clarification. My contact details are as follows:

Contact Number: 016223 6202

Email: jasonhng128@gmail.com

Thank you.

Yours faithfully,

-----  
(Jason Hong Kok Siong)

Postgraduate Student

Centre of Graduate Studies

Faculty of Business and Management

Asia e University

-----  
(Prof. Dr. Oo Yu Hock)

Research Project Advisor



**Factors Influencing Purchase Intention Towards Green Clothing Products: A study  
among Gen-Y Consumer in Selangor, Malaysia.**

**Survey Questionnaires**

---

Dear Respondent,

I am the final year post-graduate student (DBA), Asia e University (AeU). The purpose of this survey is to conduct a research to investigate the factors Influencing Gen-Y consumers' purchase intention towards green clothing products in Selangor, Malaysia.

*Green products, in this study, is confined to green clothing products defined as sustainable fabric clothing produced from eco-friendly resources such as grown fiber crops or recycled materials including organic textiles and sustainable materials (for example) hemp, non-textiles (for example, bamboo or recycled plastic bottles) and recycled products (for example, clothes made from recycled clothing including vintage, textile and other materials and can also be termed re-used).*

Please answer all questions to the best of your knowledge. There are no wrong responses to any of these statements. All responses are collected for academic research purpose and will be kept strictly confidential.

Thank you for your participation.





## Green Clothing Products



**Instructions:**

1. There are THREE (3) sections in this questionnaire. Please answer ALL questions in ALL sections.
2. Completion of this form will about 25 minutes.
3. The contents of this questionnaire will be kept strictly confidential.

**Voluntary Nature of the Study**

Participation in this research is entirely voluntary. Even if you decide to participate now, you may change your mind and stop at any time. There is no foreseeable risk of harm or discomfort in answering this questionnaire. This is an anonymous questionnaire; as such, it is not able to trace response back to any individual participant. All information collected is treated as strictly confidential and will be used for the purpose of this study only.

I have been informed about the purpose of the study and I give my consent to participate in this survey.

YES ( )      NO ( )

Note: If yes, you may proceed to next page or if no, you may return the questionnaire to researchers and thanks for your time and cooperation.

## **Section A: Demographic Profile**

In this section, we would like you to fill in some of your personal details. Please tick (✓) according to the answers in the boxes that best represents you.

1. Which state do you currently live in?

- ☐ Johor [Terminate]
- ☐ Kedah [Terminate]
- ☐ Kelantan [Terminate]
- ☐ Melaka [Terminate]
- ☐ Negeri Sembilan [Terminate]
- ☐ Pahang [Terminate]
- ☐ Penang [Terminate]
- ☐ Perak [Terminate]
- ☐ Perlis [Terminate]
- ☐ Sabah [Terminate]
- ☐ Sarawak [Terminate]
- ☐ Selangor
- ☐ Terengganu [Terminate]
- ☐ W.P. Kuala Lumpur [Terminate]
- ☐ W.P. Labuan [Terminate]
- ☐ W.P. Putrajaya [Terminate]

2. Which district do you currently live in?

- ☐ Gombak (Rawang, Selayang, Batu Caves, Gombak, Batu Arang, Kundang, Kuang, Kepong)
- ☐ Hulu Langat (Bandar Baru Bangi, Kajang, Bangi, Sementih, Batu 14 Hulu Langat, Cheras)
- ☐ Hulu Selangor (Kuala Kubu Baharu, Batang Kali, Serendah, Bukit Beruntung, Hulu Bernam)
- ☐ Klang (Klang, Port Klang, Kapar)
- ☐ Kuala Langat (Teluk Panglima Garang, Jenjarom, Banting, Jugra, Morib, Bandar Saujana Putra)
- ☐ Kuala Selangor (Kuala Selangor, Tanjung Karang, Bestari Jaya, Ijok, Jeram, Puncak Alam)
- ☐ Petaling Jaya (Damansara, Sungai Buloh, Kelana Jaya, city centre, Sungai Way)
- ☐ Sabak Bernam (Sekinchan, Sabak, Sungai Besar, Sungai Ayer Tawar)
- ☐ Others [TERMINATE]

QA 1: Gender:

☐ Female

☐ Male

QA 2: Age:

☐ 25 years old and below

☐ 26 - 30 years

☐ 31 - 35 years

☐ 36 - 40 years

☐ 41 - 45 years

QA 3: Marital status:

☐ Single

☐ Married

☐ Divorced

☐ Widowed

QA 4: Ethnic group

☐ Malay

☐ Chinese

☐ Indian

☐ Others, please specify \_\_\_\_\_

QA 5: Income level:

- ☐ Below RM1000
- ☐ RM1001 – RM2000
- ☐ RM2001 – RM3000
- ☐ RM3001 – RM4000
- ☐ RM4001 – RM5000
- ☐ RM5001 – RM6000
- ☐ RM6001 and above

QA 6: Education Level:

- ☐ UPSR / PT3 / PMR / SPM / O-Level
- ☐ STPM / A-Level / Diploma
- ☐ Bachelor Degree / Professional Certificate
- ☐ Postgraduate (Master / PhD)

QA 7: Please specify your employment position

- ☐ Unemployed
- ☐ Part-time
- ☐ Full-time
- ☐ Self-employed
- ☐ Others, please specify \_\_\_\_\_

QA8 : Have you purchased any green products for the following categories of items?

\*A sustainable product is designed to minimize its environmental impacts during its whole life-cycle and even after it's of no use. Please select all that apply.

- Clothing
- Electrical appliances
- Furniture
- Kitchen utensils
- Others
- I haven't purchased any green products before [TERMINATE]

## **Section B: Independent Variables Related Questions**

Please circle the most appropriate answer that represents your best interest from the statement.

The selection band is ranged from 1 to 5, which 1 is strongly disagree while 5 is strongly agree.

[1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree]

| No        | Questions                                                                                                | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|-----------|----------------------------------------------------------------------------------------------------------|-------------------|----------|---------|-------|----------------|
| <b>B1</b> | <b>Attitudes (AT)</b>                                                                                    |                   |          |         |       |                |
| AT1       | Green clothing product purchase will give more benefits compared to non-green clothing product purchase. | 1                 | 2        | 3       | 4     | 5              |
| AT2       | Green clothing product is a good idea.                                                                   | 1                 | 2        | 3       | 4     | 5              |
| AT3       | I am interested in purchasing green clothing products.                                                   | 1                 | 2        | 3       | 4     | 5              |
| AT4       | Green clothing products will improve the quality of my life.                                             | 1                 | 2        | 3       | 4     | 5              |
| AT5.      | I will consider how it will affect the environment when purchasing a green clothing product.             | 1                 | 2        | 3       | 4     | 5              |
| AT6       | There is a need for me to start purchasing green clothing products.                                      | 1                 | 2        | 3       | 4     | 5              |
| <b>B2</b> | <b>Perceived Behavioral Control (PBC)</b>                                                                |                   |          |         |       |                |
| PBC1      | I believe that I am capable of selecting green clothing products when making purchases.                  | 1                 | 2        | 3       | 4     | 5              |

|      |                                                                                        |   |   |   |   |   |
|------|----------------------------------------------------------------------------------------|---|---|---|---|---|
| PBC2 | If it is my own choice, I am confident that I will select green clothing products when | 1 | 2 | 3 | 4 | 5 |
|------|----------------------------------------------------------------------------------------|---|---|---|---|---|



|           |                                                                                                                                                 |   |   |   |   |   |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|
|           | making purchase compared to a non-green clothing product.                                                                                       |   |   |   |   |   |
| PBC3      | I trust myself in making the right decision to purchase green clothing products.                                                                | 1 | 2 | 3 | 4 | 5 |
| PBC4      | I have the time to decide my resources to make purchases of the green clothing products.                                                        | 1 | 2 | 3 | 4 | 5 |
| PBC5      | I take available opportunities to make purchases of green clothing products.                                                                    | 1 | 2 | 3 | 4 | 5 |
| PBC6      | I feel that making purchases of green clothing products is totally within my control.                                                           | 1 | 2 | 3 | 4 | 5 |
| <b>B3</b> | <b>Emotion (EM)</b>                                                                                                                             |   |   |   |   |   |
| EM1       | I feel joyful whenever I am making purchases of green clothing products.                                                                        | 1 | 2 | 3 | 4 | 5 |
| EM2       | I am excited whenever I make a purchase of green clothing products.                                                                             | 1 | 2 | 3 | 4 | 5 |
| EM3       | I enjoy a sense of peace whenever I make a purchase of green clothing products.                                                                 | 1 | 2 | 3 | 4 | 5 |
| <b>B4</b> | <b>Environmental Knowledge (EK)</b>                                                                                                             |   |   |   |   |   |
| EK1       | I know the importance of conserving the environment without damaging it.                                                                        | 1 | 2 | 3 | 4 | 5 |
| EK2       | I know plastic materials in various forms such as bottles and grocery bags take years to decompose, hence causing pollution to the environment. | 1 | 2 | 3 | 4 | 5 |
| EK3       | I know the causes and effects of global warming and green issues.                                                                               | 1 | 2 | 3 | 4 | 5 |
| EK4       | I know the importance of recycling used materials to protect damaging the environment.                                                          | 1 | 2 | 3 | 4 | 5 |

|           |                                                                                                                                                        |   |   |   |   |   |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| EK5       | I know how to choose green clothing products that are environmentally friendly.                                                                        | 1 | 2 | 3 | 4 | 5 |
| EK6       | I appreciate and understand the use of environmental symbols and phrases on the product packaging to educate the consumer on greening the environment. | 1 | 2 | 3 | 4 | 5 |
| <b>B5</b> | <b>Subjective Norm (SN)</b>                                                                                                                            |   |   |   |   |   |
| SN1       | Most people who are important to me think that I should continue to make purchases of green clothing products.                                         | 1 | 2 | 3 | 4 | 5 |
| SN2       | Most people who are important to me would want me to make purchases of green clothing products.                                                        | 1 | 2 | 3 | 4 | 5 |
| SN3       | People whose opinions I value would prefer that I make purchases of green clothing products.                                                           | 1 | 2 | 3 | 4 | 5 |
| SN4       | My friends share positive opinions about the importance of making purchases of green clothing products.                                                | 1 | 2 | 3 | 4 | 5 |
| <b>B6</b> | <b>Product Attributes (PA)</b>                                                                                                                         |   |   |   |   |   |
| PA1       | I usually purchase green clothing products that have the 'eco' label.                                                                                  | 1 | 2 | 3 | 4 | 5 |
| PA2       | I will look for certified eco-labelling when considering purchase of green clothing products.                                                          | 1 | 2 | 3 | 4 | 5 |
| PA3       | Green clothing products are not harmful to user compared to non-green clothing products.                                                               | 1 | 2 | 3 | 4 | 5 |
| PA4       | I usually purchase green clothing products which the packaging includes eco-friendly elements (e.g. recycled materials or recyclable packaging).       | 1 | 2 | 3 | 4 | 5 |

| B7 Price (PR)             |                                                                                                                                    |   |   |   |   |   |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| PR1                       | I would choose green clothing products over non-green products if the price is similar.                                            | 1 | 2 | 3 | 4 | 5 |
| PR2                       | I am willing to pay slightly more for a purchase of green clothing products.                                                       | 1 | 2 | 3 | 4 | 5 |
| PR3                       | If the price of a green clothing product is less expensive, I'm willing to purchase it every time in order to change my lifestyle. | 1 | 2 | 3 | 4 | 5 |
| B8 Place (PL)             |                                                                                                                                    |   |   |   |   |   |
| PL1                       | I would make purchases of green clothing products if they are available in fashion retail stores.                                  | 1 | 2 | 3 | 4 | 5 |
| PL2                       | I would make purchases of green clothing products if the fashion retail outlet is accessible to me easily.                         | 1 | 2 | 3 | 4 | 5 |
| PL3                       | I would make purchases of green clothing products if the products are displayed visibly on shelf in the fashion retail outlet.     | 1 | 2 | 3 | 4 | 5 |
| PL4                       | I would purchase green clothing products from fashion retail stores which specialize in selling green clothing products only.      | 1 | 2 | 3 | 4 | 5 |
| B9 Green Advertising (GA) |                                                                                                                                    |   |   |   |   |   |
| GA1                       | Advertising leads me to be more socially responsible in making purchases of green clothing products.                               | 1 | 2 | 3 | 4 | 5 |
| GA2                       | Advertising is a good source of information for me in making purchases of green clothing products.                                 | 1 | 2 | 3 | 4 | 5 |

|     |                                                                                                                                          |   |   |   |   |   |
|-----|------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| GA3 | I plan to switch to advertised green clothing products more so than non-advertised oneswhen making purchases of green clothing products. | 1 | 2 | 3 | 4 | 5 |
|-----|------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|

|     |                                                                                                                                     |   |   |   |   |   |
|-----|-------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| GA4 | I believe that the claims made on advertising are truthful to influence my decision to purchase green clothing products.            | 1 | 2 | 3 | 4 | 5 |
| GA5 | Advertising presents a true picture of the nature of the product that enables me to decide to purchase the green clothing products. | 1 | 2 | 3 | 4 | 5 |

### **Section C: Dependent Variable Related Questions**

Please circle the most appropriate answer that represents your best interest from the statement.

The selection band is ranged from 1 to 5, which 1 is strongly disagree while 5 is strongly agree.

*[1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree]*

| No        | Questions                                                                                                     | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|-----------|---------------------------------------------------------------------------------------------------------------|-------------------|----------|---------|-------|----------------|
| <b>C1</b> | <b>Purchase Intention (PI)</b>                                                                                |                   |          |         |       |                |
| PI1       | I choose to purchase green clothing products because they are less environmentally harmful.                   | 1                 | 2        | 3       | 4     | 5              |
| PI2       | I pay more attention to green clothing products when shopping for clothing.                                   | 1                 | 2        | 3       | 4     | 5              |
| PI3       | I expect to purchase green clothing products in future because they contribute to conserving the environment. | 1                 | 2        | 3       | 4     | 5              |
| PI4       | I plan to purchase green clothing products rather than non- green clothing products.                          | 1                 | 2        | 3       | 4     | 5              |

Thank you for your participation on this survey!

## Appendix C

### Gantt Chart for Research Study

|      |                                                        | 2018 |     |     |     |     |     |     |     |     |     |     |     | 2019 |     |     |     |     |     |     |     |     |     |     |     | 2020 |     |     |     |     |     |     |     |     |     |     |     |
|------|--------------------------------------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| No   | Topic                                                  | Jan  | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan  | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan  | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| 1.0  | Topic Finding                                          |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 1.1  | Read about the strategies for finding a research topic |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 1.2  | Research possible topics                               |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 1.3  | Check out the topic areas                              |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 1.4  | Brainstorm research questions                          |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 1.5  | Meet with supervisor to discuss research question      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 1.6  | Plan resources                                         |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 1.7  | Finalize research objective and questions              |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 2.0  | Dissertation Proposal                                  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 2.1  | Agree the research questions and scope                 |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 2.2  | Proposal for literature review                         |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 2.3  | Address ethical issue and prepare ethical statement    |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 2.4  | Enter references and bibliography                      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 2.5  | Finalize the proposal                                  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 2.6  | Agree proposal with supervisor                         |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 3.0  | Literature Review                                      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 3.1  | Prepare phase read text books                          |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 3.2  | Define research theory                                 |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 3.3  | Select material for the final literature review        |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 3.4  | Evaluate all sources in the review                     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 3.5  | Create syntheses theory                                |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 3.6  | Update the bibliography                                |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 3.7  | Finalize the literature review                         |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 3.8  | Propose research framework                             |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 3.9  | Hypotheses development                                 |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 4.10 | Agree proposal with supervisor                         |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 4.0  | Methodology                                            |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 4.1  | Prepare phase read text books                          |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 4.2  | Select the right methodology                           |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 4.3  | Research design & sampling design                      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 4.4  | Data collection method                                 |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 4.5  | Research instrument                                    |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 4.6  | Constructs measurement                                 |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 4.7  | Data Processing                                        |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 4.8  | Data Analysis                                          |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 4.9  | Questionnaires Design                                  |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 4.10 | Arrange for supervisor to approve on methodology       |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 5.0  | Collectin of data                                      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 5.1  | Decide on data collection methods                      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |

