NURUL AMANINA

CONSUMER GREEN PURCHASE BEHAVIOUR AMONG MILLENNIAL GENERATION

MSc. (Mgt.)

2018

CONSUMER GREEN PURCHASE BEHAVIOUR AMONG MILLENNIAL GENERATION

NURUL AMANINA BINTI ABDUL BASIR

MASTER OF SCIENCE (MANAGEMENT)

UNIVERSITI UTARA MALAYSIA

MAY 2018

CONSUMER GREEN PURCHASE BEHAVIOUR AMONG MILLENNIAL GENERATION

BY

NURUL AMANINA BINTI ABDUL BASIR

Thesis Submitted to
School of Business Management,
Universiti Utara Malaysia,
In Partial Fulfilment of the Requirement for the Master of Sciences (Management)

Pusat Pengajian Pengurusan Perniagaan
SCHOOL OF BUSINESS MANAGEMENT
Universiti Utara Malaysia

PERAKUAN KERJA KERTAS PENYELIDIKAN
(Certification of Research Paper)

Saya, mengaku bertandatangan, memperakukan bahawa
(I, the undersigned, certified that)
NURUL AMANINA BINTI ABDUL BASIR (822567)

Calon untuk Ijazah Sarjana
(Candidate for the degree of)
MASTER OF SCIENCE (MANAGEMENT)

telah mengemukakan kertas penyelidikan yang bertajuk
(has presented his/her research paper of the following title)

CONSUMER GREEN PURCHASE BEHAVIOUR AMONG MILLENNIAL GENERATION

Seperti yang tercatat di muka surat tajuk dan kulit kertas penyelidikan
(as it appears on the title page and front cover of the research paper)

Bahawa kertas penyelidikan tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang ilmu dengan memuaskan.
(that the research paper acceptable in the form and content and that a satisfactory knowledge of the field is covered by the research paper).

Nama Penyelia : **PROF. MADYA DR. HASNIZAM BIN SHAARI**
(Name of Supervisor)

Tandatangan :
(Signature)

Tarikh : **3 MEI 2018**
(Date)

PERMISSION TO USE

In presenting this dissertation paper in partial fulfillment of the requirements for a Post Graduate degree from Universiti Utara Malaysia (UUM), I agree that the University Library may make it freely available for inspection. I further agree that permission for copying of this dissertation paper in any manner, in whole or in part, for scholarly purpose may be granted by my supervisor or in their absence, by the Dean of School of Business Management. It is understood that copying or publication or use of this research paper or parts of it for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the UUM in any scholarly use which may be made of any material in my dissertation paper.

Requests for permission to copy or make other use of materials in this dissertation paper in whole or in part should be addressed to:

Dean of School of Business Management
Universiti Utara Malaysia
06010 UUM Sintok
Kedah Darul Aman

ABSTRACT

The rapid growth of development in the economy for the last few decades has greatly increase consumers' worldwide consumption and became the main cause that contribute to environmental degradation. Consequently, more people becoming increasingly aware and concerned about environmental issues especially among millennial generation. They are now demand for more environmental friendly products, hence many green marketers and manufacturers have shift the attention towards the importance of understanding the green purchase behaviour among this market segment. The purpose of this paper is to determine factors that have significant relationship toward millennial consumer's green purchase behaviour in Malaysia by integrating the Theory of Planned Behaviour as research framework. The research model was adapted and modified from The Theory of Planned Behaviour (TPB) added with another potential variable namely, environmental involvement and media exposure to environmental message to identify the key factors that stimulate millennial consumer's green purchase behaviour. A total of 375 questionnaires were distributed among UUM students by using proportionate sampling, to perform the statistical analysis for data analysis. Results showed attitude towards green products, subjective norm, perceived behavioural control, environmental involvement and media exposure to environmental message have significant effect toward millennial consumer's green purchase behaviour. In addition, subjective norm was found to be the most influential factor that contribute to millennial consumer's green purchase behaviour.

Keywords: Green marketing, environmental involvement, millennial consumer's green purchase behaviour.

ABSTRAK

Pertumbuhan pesat dalam pembangunan ekonomi sejak beberapa dekad yang lalu telah banyak meningkatkan penggunaan pengguna di seluruh dunia dan ia menjadi punca utama yang menyumbang kepada kemerosotan alam sekitar. Akibatnya, lebih ramai orang yang semakin sedar dan prihatin terhadap isu-isu alam sekitar terutama di kalangan generasi milenium. Memandangkan mereka kini menginginkan produk yang lebih mesra alam, ramai pemasar dan pengeluar hijau telah beralih perhatian terhadap kepentingan untuk memahami perilaku pembelian hijau di kalangan segmen pasaran ini. Tujuan kertas ini adalah untuk menentukan faktor yang mempunyai hubungan penting terhadap tingkahlaku pembelian hijau di kalangan pengguna milenium di Malaysia dengan menggunakan Teori Perilaku yang Terangcang (TPB) sebagai rangka penyelidikan. Model penyelidikan ini telah diadaptasi dan diubahsuai dari Teori Perilaku yang Terangcang (TPB) yang ditambah dengan pemboleh ubah berpotensi yang lain iaitu, penglibatan alam sekitar dan pendedahan media mengenai mesej alam sekitar. Seramai 375 soal selidik telah diedarkan di kalangan pelajar UUM dengan mengunakan pensampelan berkadar, untuk melakukan analisis statistik. Hasil menunjukkan bahawa sikap terhadap produk hijau, norma subjektif, kawalan tingkah laku yang dilihat, penglibatan alam sekitar, pendedahan media mengenai mesej alam sekitar mempunyai kesan terhadap tingkahlaku pembelian hijau di kalangan pengguna milenium. Sebagai tambahan, norma subjektif didapati sebagai faktor yang paling berpengaruh yang menyumbang kepada tingkah laku pembelian hijau di kalangan pengguna milenium.

Kata kunci: Pemasaran hijau, penglibatan alam sekitar, tingkah laku pembelian hijau dikalangan pengguna milenium.

ACKNOWLEDGEMENT

In the Name of Allah, the Most Forgiving and the Most Merciful

Alhamdulillah, I am grateful to Allah SWT for giving me an excellent health, energy and capability to complete this thesis within the time period given. I would like to give my deepest appreciation to all those involved who had helped me in completing this academic work.

First of all, I would like to sincerely express my deepest gratitude to my supervisor, Associate Professor Dr. Hasnizam bin Shaari for his valuable and untiring supervisory role in the course of writing this thesis. Your wealth of experience in guiding the writing of this thesis brought it to this successful end. Words are not enough to express how I appreciate your support and encouragement throughout the preparation and completion in this study. Thank you.

Most importantly, I would like to thanks my parents Abdul Basir bin Hassan and Rosmah binti Jupri for their continuous love, endless moral support and prayers for my success over the years. In addition, I would like to sincerely express my appreciation for my partner, Saymioud Tinggom who has been with me through ups and downs during my master life and always believing in me from day one. Thank you and I love you all.

Special thanks to Students Accommodation Center (SAC) for providing me data regarding the total numbers of students who stayed in each student residential area in University Utara Malaysia (UUM). Without the data, the questionnaire may not be able to be distributed to selected respondents. Finally, thank you for all the respondents for their valuable time, kindness and support in participating in this study.

Thank you.

TABLE OF CONTENTS

CHAPTER 2: LITERATURE REVIEW

CHAPTER 3: RESEARCH METHODOLOGY

CHAPTER 4: FINDINGS

CHAPTER 5: DISCUSSION AND CONCLUSION

LIST OF TABLES

Tables **Pages**

LIST OF FIGURES

Figures **Pages**

LIST OF APPENDICES

Appendices **Pages**

LIST OF ABBREVIATIONS

ASEAN	Association of Southeast Asian Nations
BSN	Bank Simpanan Nasional
H1	Hypothesis 1
H2	Hypothesis 2
H3	Hypothesis 3
H4	Hypothesis 4
H5	Hypothesis 5
INASIS	Inapan Siswa
MAS	Malaysia Airlines
MISC	Malaysia International Shipping Corporation
SAC	Student's Accommodation Center
SME Bank	Small Medium Enterprise Development Bank Malaysia Berhad
SPSS	Statistical Package for Social Science
TM	Telekom Malaysia
TNB	Tenaga Nasional Berhad
TPB	Theory of Planned Behaviour
UK	United Kingdom
US	United States
UUM	University Utara Malaysia
WHO	World Health Organization
YAB	Yayasan Al-Bukhary

CHAPTER 1

INTRODUCTION

1.0 Introduction

This chapter explains the fundamental information of the study. It includes the background of the study, problem statement, research question, research objective, significant of study, the scope of the study, definitions of key terms and lastly the organization of the study.

1.1 Background of the Study

Rapid economic expansion has led to serious environmental deterioration and a significant change around the globe. Due to some factors such as air pollution, waste generations and natural disasters which not only affect living organisms but also the economic conditions and social status of people (Maichum, Parichatnon, & Peng, 2016). In fact, the misuse of resources and deprivation of environment has been increased at an alarming rate.

Malaysia is one of the fastest growing economies among ASEAN countries. This rapid growth rate is credited mainly in its ability to exploit every environmental resource available for the country (Noranida & Khairulmaini, 2014). Whereas, this rapid development resulted in adverse environmental deterioration due to consumers' over-consumption and exceeding utilization of natural resources. Based on the report published by World Health Organization (WHO) in 2012, around 6,251 deaths have been reported in Malaysia due to air pollution. The causes of deaths were diverse where 3,630 died by heart diseases, 1773 died by strokes, 670 died due to lung cancer,

148 people died by pulmonary disease and 29 deaths were reported due to lower respiratory disease. Furthermore, Khor (2016) mentioned 160,693 of life losses in the year 2012 due to premature deaths in Malaysia where such diseases are mostly interrelated with air pollution and water pollution which highly and continuously exposed to Malaysian people.

In response to such kind of problems, governments all over the world have undertaken serious counter measure to address these problems by establishing several green awareness campaigns as well as regulating the impacts of human activity (Bronfman, Cisternas, Vázquez, Maza, & Oyanedel, 2015). In Malaysia, the government has intentions for investment in environmental protection because of its significant importance. The government is keenly focused to address such environmental problems and many rules and regulations have been implemented to ensure environmental protection (Chen & Chai, 2010). For such purpose, the Ministry of Energy and Green Technology and Water has been formed in order to meet the increasing demand of green technology towards sustainable advancement (Nizam, Rajiani, Mansur & Yahaya, 2014). As a result, public awareness towards sustainable environment had increased and resulted in increasing demand for more environmentally friendly packages (Kanchanapibul, Lacka, Wang, & Chan, 2014). Hence, organizations have focused on 'sustainability' as a business orientation by focusing on green marketing strategies to promote the purchase of eco-friendly products among consumers (Naman, Shankar, & Pradip, 2018) which also helps for having a competitive advantage.

The severity of environmental sustainability issues has encouraged the society to change their conventional consumption patterns toward the pursuit of environmental sustainability (Deepak & Rishi, 2018). Companies have answered to these changes by introducing numerous green initiatives which include green products and designs (Danjelico & Pujari, 2010), green innovation practices (Tseng, Wang, Chiu, Geng, & Lin, 2013) and green supply chain management (Wang & Chan, 2013). According to the UN Global Compact Report (2010), 93% businesses of the world feel the need of implementing sustainability in their business for future success. As a result, a rapid increase has been observed in consumers who intentionally buy a green product (Lee, 2010; Singh & Bansal, 2012). Moreover, the concept of green consumption has received the attention of academicians and implementors in many countries particularly Asia (Punyatoya, 2014).

1.2 Problem Statement

The country of Malaysia is facing a massive challenge to balance between development and environmental sustainability. Pollution, climate change, global warming, household waste and hazardous waste are some of the serious environmental problems faced by the country. People of this era having more awareness about the importance of preserving the environment and trying to find other alternatives for environmental sustainability after realizing how serious ecological problems are (Han, Hsu & Lee, 2009). Consumers have understood that their purchasing behaviour can actually cause impact to the environment and realized their role as citizens to protect the sustainability of the country. The increased awareness towards green purchase behaviour and the emergence of environmental problems have got the attention of many stakeholders around the globe such as the government bodies, researchers,

businesses and consumers (Goh & Nabsiah, 2015). It has encouraged stakeholders to invest substantial efforts to enhance environmental behaviour (Ta Fang, Ng, Wang, & Hsu, 2017) and trying to minimize any potential activities that could harm the environment. Moreover, to enhance the availability of more environment-friendly product in the market and to encourage customers to purchase and consume green products.

The study of consumer green purchase behaviour has become one of the major current research topics as environmentalism has appeared as the crucial issue and becoming a global concern. However, previous studies have made significant contributions to the sustainability literature are mostly investigated in western countries such as United States (US) and United Kingdom (UK). According to Joshi and Rahman (2016), such green purchasing research domain has been significantly researched in developed countries, whereas less attention has been paid in Asian countries.

Review of past literature indicates several studies which focused on the green purchase behaviour were accomplished in countries like US, UK, Egypt, China and India. However, there is limited evidence and understanding on what influence consumer green purchase behaviour among millennial generation in Malaysia. As this research area has started to gain attention of scholars and academicians in other Asian countries and Malaysia also started to focus on environmentalism practices, the study on millennial generation purchasing behaviour toward green products remain noticeably low. Despite, the growing practice and research on green marketing

(McKay, 2010), less academic research have devoted attention to understanding the millennial generation's consumption of green products (Smith & Brower, 2012).

On the other hand, only few researchers had conducted studies on millennial generation green purchasing behaviour as the majority of the Malaysian researcher are focusing on all ages of respondents. Studies by Wong (2010), Sinnapan and Rahman (2011), Ooi, Kwek and Keoy (2012) and Ooi, Kwek and Tan (2012) are some of the available researchers directed on green purchasing behaviour that focusing on all level of age group. Besides that, there are also many accessible researchers studied based on examining the green purchase behaviour of respondents from all age group while focusing more on demographic characteristic of respondents such as studies from D'souza, Taghian and Khosla (2007), Diamantopoulosa, Schlegelmilchb, Sinkovicsd and Bohlen (2003) and Sinnapan and Rahman (2011). These past researches show the study on green purchase especially among millennial is a bit scant in the Malaysian context. As mentioned by Wong (2010), the green marketing issues explored among millennial generation in Malaysia's context propose that, the country is important to explore in predicting this generation purchasing behaviour toward green products. Although the millennial generation is known for their large group of supporters for the consumption of sustainable products and services, the green purchase behaviour of this market segment has rarely been examined (Kanchanapibul et al., 2014). Therefore, this study aims to investigate the factors that affect millennial generation green purchasing behaviour towards green products as an attempt to fill the gap in Malaysia as well as ensuring that green awareness could be pass on to this population.

The selection of this generation as a target group in this study is mainly because of its population which comprise of the major demographic segment with high spending power and significantly important to the market segment as future environmentalism (Markert, 2004; Eastman & Liu, 2012). Studying the millennial generation green behaviour is significant because they represent future consumers, workers and innovators who will represent the future of our society (Smola & Sutton, 2002; Heaney, 2006; Hume, 2010). Moreover, this group of consumers also more inclined to new experiences especially in things related to environment and nature (Wiernik, Deniz, & Dilchert, 2013) and they have longer lifespan which may ensure that the change introduced by them will stay for a longer period of time, also it can be beneficial for future generations (Joshi & Rahman, 2016).

This study employed the Theory of Planned Behaviour (TPB) as proposed by Ajzen (1985). TPB has been confirmed to be superior to other psychological models and one of the most significant social psychological theories to predict human behaviour (Dean, Raats, & Shepherd, 2012). This model was also relatively renowned among academicians in order understand the individual behaviour. Earlier, TPB has been extensively applied and useful in predicting consumer intention as well as behaviour in various green areas, such as energy efficient products (Ha & Janda, 2012), green hotels and restaurants (Chen & Tung, 2014; Kim, Njite, & Hancer, 2013), green products (Kalafatis, Pollard, East, & Tsogas 1999; Chan & Lau, 2002), organic products (Kim & Chung, 2011; Zagata, 2012; Tseng & Chang, 2015) and proven its applicability and robustness.

TPB assumes that behavioural intention is determined by three factors, namely; attitude, subjective norm and perceived behavioural control. However, previous researches have stated that there can be other specific factors which can be included in the model (Donald, Cooper, & Conchie, 2014). Nevertheless, there is a discrepancy between consumers' attitude and behaviour where consumers' positive attitude toward green purchasing does not always resultant into actions (Joshi & Rahman, 2015). It is also mentioned that there are inconsistent results of subjective norm and perceived behavioural control in determining consumers' green purchase behaviour. Several studies have indicated that subjective norm and reference groups have a significant relationship with purchase intention and actual green products purchases (Welsch & Kuhling, 2009; Eze & Ndubisi, 2013) Whereas, other studies reported that subjective norm have a negative relationship with purchase intention and actual purchase behaviour (Connell, 2010). Although there is some evidence that showed perceived behavioural control positively influences green purchase behaviour, the further empirical investigation is needed due to the limited research in this area (Joshi & Rahman, 2015). In order to address these gaps, it is essential to study these variables along with other factors that influence consumers to make a green purchase. Therefore, this study has incorporated the TPB as a standard framework with an integration of two additional constructs namely environmental involvement and media exposure to the environmental message as an antecedent in influencing consumer's green purchasing behaviour intention.

The millennial generation has been identified as the population that cares the most about the environment (Vermillion & Peart, 2010). They are extremely diverse, highly educated, and technologically savvy (Hood, 2012). According to a study regarding the media usage, this millennial generation considers media as important sources of information. It shows the importance of the role of media towards this generation (Valentine & Powers, 2013). Despite the increasing influence of the media, there is a lack of literature that investigated the importance of media and impact on consumer purchase behaviour regarding sustainable or environmentally friendly products, brands and services (Abdelaziz, Saeed, & Benleulmi, 2015). In addition, various studies have proposed that media exposure to environmental message positively affects young consumer's environmental concern (Good, 2006; Holbert, Kwak, & Shah, 2003). Mee and Clewes (2004) stated that communication campaigns through various media sources found to be positively influenced consumers' recycling behaviour. Lee (2014) also found that environmental messages which publicized through the media influenced consumers' purchase behaviour towards sustainable products. Hence, this study attempt to address the gap by examining the effects of media exposure to environmental message towards millennial generation purchasing behaviour as a new predictor of green purchasing in Theory of Planned Behaviour.

Besides, environmental involvement is integrated into the TPB to further measure the determinant of millennial generation green purchasing behaviour intention. Azjen and Fishbein (2005) indicated that additional factors can be embedded to the theory to present as powerful predictors of the study. Existing studies showed that environmental involvement was found to be very relevant and significant in

explaining green purchase behaviour of the young consumers and it was the most important driver of green purchase behaviour (Uddin & Khan, 2016).

Based on the gaps from previous studies in relation to consumer green purchasing behaviour, hence this study aims to investigate the relationship between attitude toward green behaviour, subjective norm, perceived behavioural control, environmental involvement, media exposure to environmental message and consumer green purchasing behaviour among millennial generation in Malaysia.

1.3 Research Questions

Based on the problem statements, below are the research questions:

i. Does attitude towards green products has a significant relationship to millennial consumers green purchase behaviour?
ii. Does subjective norm has a significant relationship to millennial consumers green purchase behaviour?
iii. Does perceived behavioural control has a significant relationship to millennial consumers green purchase behaviour?
iv. Does environmental involvement has a significant relationship to millennial consumers green purchase behaviour?
v. Does media exposure to environmental message has a significant relationship to millennial consumers green purchase behaviour?

1.4 Research Objectives

The objectives of the study are as follows:

i. To examine the relationship between attitude towards green products and millennial generation green purchase behaviour.
ii. To determine the relationship between subjective norm and millennial generation green purchase behaviour.
iii. To investigate the relationship between perceived behavioural control and millennial generation green purchase behaviour.
iv. To identify the relationship between environmental involvement and millennial generation green purchase behaviour.
v. To examine the relationship between media exposure to environmental message and millennial generation green purchase behaviour.

1.5 Significant of Study

The study contributes to both theoretical and practical perspectives:

1.5.1 Theoretical Contributions

From perspective theoretical, this research adds to the body of knowledge and literature with respect to the underpinning theory of Planned Behaviour (TPB). There are several pro-environmental theories that can be used to measure environmental behaviour among individual for example Responsible Environmental Behaviour by Hines, Hungerford, and Tomera (1987). According to Kollmuss and Agyeman (2002), even though the framework proposed by Hines et al., (1987) is more refined from the model which proposed by Ajzen and Fishbein (1980), the identified factors were not

sufficient in explaining environmental behaviour. The next proposed theory is Environmental Significantly Behaviour by Stern (2000). However, a meta-analysis of these theories by Osbaldiston and Schott (2011) revealed by its finding that previously proposed theories were not enough sufficient to predict and explain environmental behaviour.

Whereas, Theory of Planned Behaviour has been proven to be most influential attitude-behaviour model in social psychology (Kollmuss & Agyeman, 2002) Moreover, it is widely used due to its clarity and simplicity (Regis, 1990). However, the model certainly has limitations. TPB has been failed to incorporate the role of individual environmental involvement and media exposure to environmental message. Past studies have been suggested the contributing factors of attitude, subjective norm and perceived behavioural control, which were not fully attributed in the intention and behaviour relationship (Amireault, Godin, Vohl, & Pérusse, 2008; Sheeran, 2002).

Furthermore, most studies were found to be insufficient to explain the green purchase behaviour using TPB approach. Therefore, the model found to be having a weak relationship for an explanation of consumer possessed a positive attitude towards green purchasing and their actual purchase decision (Tan, 2011; and Joshi & Rahman, 2015). Further study should include other factors to predict green purchase behaviour either using modified TPB or applying some other approaches in the view of different cultural and local settings (Chan, 2001; Chan & Lau, 2002; Joshi & Rahman, 2015).

In addition, this study incorporated two new variables to the basic framework of TPB namely environmental involvement and media exposure to environmental message. By integrating additional constructs to the existing model of the theory of planned behaviour, the present study can contribute to greater insights toward an understanding of consumer green purchase behaviour, particularly among the millennial generation.

1.5.2 Practical Contributions

From the practical point of view, this study is important because it provides new insights into the consumers' pro-environmental behaviour. The outcomes of this study are helpful for green marketers and manufacturers in understanding the factors that contribute to consumer's green purchase behaviour, particularly among the millennial generation.

As the awareness toward environmental issue is growing, young consumer nowadays demanding for more green products. Dagher, Itani, and Kassar (2015) argued that consumers nowadays are increasingly involving in environmentally friendly behaviour and interested in supporting businesses who apply green marketing strategies. Hence, this study would benefit green marketers and manufacturers who wish to target this market segment by delivering products, services or designs more related to environmentally friendly. By successfully understanding the demand of this market segment, it helps both marketers and manufacturers to build a good public image and goodwill in the marketplace as well as gaining consumer preferences.

Furthermore, this study also beneficial for the government to gauge Malaysian's behaviour toward green marketing. In promoting sustainable consumption practices among Malaysian, the results of this study will enable the government to tailor their strategies toward becoming green that are better meeting the millennial's demand. The government can encourage more marketers and manufacturers to engage in sustainable production, promotion and marketing of green products, thus increase green consumption among the millennial generation. It will enable consumers to find that green products are the best products to choose for fulfilling their needs and wants in the coming future.

1.6 Scope of Study

The scope of this research is to examine the factors that influence millennial generation green purchase behaviour in the Malaysian context. The respondent of this study is individual, the age of above eighteen years old. The majority of individuals of this ages are considered well known for purchasing and having rational decision making for purchases. Moreover, university students are an important segment of shoppers among the Malaysian consumer segments (Muniady, Al-Mamun, Permarupan, & Noor Raihani, 2014). According to Wong and Smith (2010), university students are one of the most crucial markets for many businesses due to its size and characteristics of the market. Hence, a student at University Utara Malaysia (UUM) considered being a right location to collect a sample. Besides that, the term of millennial also is appropriate for UUM students as the population of this group can represent young consumers who fall within millennial generation cohort's age namely between age 18 to 34. This is supported by Lu, Bock, and Joseph (2013) which indicate that millennial generation is consisting of individuals who aged between 18 and 34 years old.

1.7 Definitions of Key Terms

The followings are definition of key terms as used and operationalized in the study:

Attitude towards Green Products

According to Kotler and Armstrong (2009), attitude is a person's consistently favourable or unfavourable evaluations, feelings, and tendencies toward an object or idea. In this context, attitude towards green products refers to a state in which human moves to act or do with certain feelings in response to the object or situation surrounding environmental conditions (Shaik Ismail, 2014).

Subjective Norms

According to Abdullah, Sheikh Mohammed, Muhammad Haroon, and Mohd Noor (2014), subjective norm refers to the perceived social influences or pressures to indulge or not to indulge in a given behaviour and reveal the beliefs of individuals about how they would be viewed by their reference groups if they perform a certain behaviour.

Perceived Behavioural Control

According to Azjen (1991), perceived behavioural control refers to an individual's perceived ease or difficulty in performing a particular behaviour.

Environmental Involvement

According to Schultz, Shriver, Tobanico, and Khazian (2004), environmental involvement refers to the emotions associated with beliefs about environmental protection.

Media Exposure to Environmental Message

According to Lee (2010), media exposure to environmental message refers to messages that related to environmental protection from each of the following sources which are TV programs, radio, internet, and advertisements.

Green Purchase Behaviour

According to Mostafa (2007), green purchase behaviour refers to the purchase of environmentally friendly products or sustainable products those are recyclable and beneficial to the environment and avoiding such products which harm the environment and society.

1.8 Organization of the Study

Organization of the thesis provides an idea of the whole chapters of this study. This study consist of five chapters. It includes research overview, literature review, research methodology, findings and finally discussion and conclusion.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

This chapter presents the data from secondary sources which are reviews from various scholars and explanation that related to the main variables and theory used in the study. It includes the discussion of literature regarding the concept of green purchasing and some of the key factors that were selected namely attitude toward green products, subjective norm, perceived behavioural control, environmental involvement and media exposure to environmental message to describe how it affects the millennial consumer's green purchase behaviour. The underpinning theory of the study, theoretical framework and research hypothesis being discussed at the end part of this chapter.

2.1 Green Consumerism

The rapid growth of development in the economy for the last few decades has greatly increased worldwide consumption of consumers and it is the main reason that contributes to environmental degradation. As the environment continues to get worse, it has become a public concern in the developed countries and a crucial issue in developing countries toward the green movement to protect the environment (Chen & Chai, 2010). In western countries, the green movement has become one of the important subjects in the community for over a decade. The key stakeholders such as businesses, governments and consumers are becoming aware and concerned about environmental issues. This realization and considerations towards the environment and society have led to the emergence of 'sustainable development' which emphasizes the

need to promote sustainability as a way of living in order to minimize the negative impact on the environment and society (Joshi & Rahman, 2015) which thus further encourage green consumption among consumers.

Development of concern for the environment can be seen in the major shift in people's attitudes and behaviours towards the environment. Increasing number of consumers have started to look for environmentally friendly products on the pursuit to purchase for the betterment of current and future generations (Laroche, Bergeron, & Forleo, 2001) and at times they even willing to pay more for such products (Kahn, 2007; Laroche et al., 2001; Lee, Hsu, Han, & Kim, 2010). In fact, consumers have also started to express their demand for green products from companies (Bockman, Razzouk, & Sirotnik, 2009; Schmeltz, 2012). Thus, a change in consumer buying patterns has occurred with increasing number of consumers change old their purchases to products that are more sustainable or environmentally friendly and avoid products that can cause harm to the environment. This new trend has been known as green consumerism.

2.1.1 Green Purchase Behaviour

The review of the literature has found a big number of studies that focus on green purchase behaviour. As a result, the various definition of green purchase behaviour has been formed among researchers. For instance, Mostafa (2007) defined green purchase behaviour as environmentally friendly buying behaviour or the consumption of products that benefits the environment, conservable, recyclable, responsive and sensitive to the concern of ecological matters. Chan (2001) also defined green purchase

behaviour as environmentally friendly behaviour expressed by consumers in showing their interest towards the environment.

The study of green purchase behaviour is commonly investigated in prior studies and proposed many other factors that could influence green purchase behaviour. For example, Lee (2009) has studied on Hong Kong consumer's green purchase behaviour and had used seven variables namely environmental attitude, environmental concern, perceived environmental responsibility, perceived effectiveness of environmental behaviour, concern for self-image in environmental protection and social influence. Based on the results, social influence found to be the main predictor of consumer's purchase behaviour. Findings revealed that subjective norm seems to have an indirect influence on consumer green purchase behaviour as it influenced green attitudes that further affected green purchase behaviour (Gadenne, Sharma, Kerr, & Smith, 2013; Smith & Poladino, 2010; Tarkiainen & Sundqvist, 2005; Welsch & Kuhling, 2009; Salazar, Oerlemans, & Stroe-Biezen, 2013).

From the empirical evidence of studies done in developed and developing countries worldwide, it is found that green purchase behaviour is influenced by number of factors like culture, value orientation, environmental concern, knowledge, attitude and demographic factors such as age, gender, income level, marital status (Goh & Nabsiah, 2015). In Malaysia, certain demographics profile has also been found to play an important role in green purchase behaviour. For example, in a study by Sinnappan and Abdul Rahman (2011), they found that the age group of 20 years and below (adolescence) are more receptive toward green purchase behaviour compared to other age groups.

Based on the previous studies of the various scholar had proven that there are various factors that could influence green purchase behaviour. In the present study, the researcher has focused on five factors that influenced the green purchase behaviour which including attitude toward green products, subjective norm, perceived behavioural control, environmental involvement and media exposure to environmental message.

2.2 Millennial Generation as Green Consumer

There is a general consensus that the millennial generation is composed of individuals who born throughout the 1980s and early 2000s. According to Lu et al., (2013), the millennial generation is consisting of an individual who ages between 18 and 34 years old. This group of consumers have represented individuals with high discretionary income, concern with quality, technologically advanced, socially conscious, and willing to pay more for brands and are brand loyal (Sullivan & Heitmeyer, 2008; Lee, 2009). In addition, they also have higher education than earlier generations, highly competent users of information and communication technologies (ICTs), and more susceptible to the world of social media (Deal, Altman, & Rogelberg, 2010; Hershatter & Epstein, 2010; Kowske, Rasch, & Wiley, 2010).

Several studies have found this group of consumers is the most environmentally conscious (Vermillion & Peart, 2010) and considered to be "born green" because they grew up in a society where environmental consciousness has become a norm (Rogers, 2013). Moreover, as this generation is known to be the most educated, making them extremely aware of social and environmental issues affecting

them and the world they live in (Dolan, McKeon, & Mellon, 2015). Meanwhile, Spehar (2006) stated that educated consumers nowadays are increasingly worried about the effects of consuming products toward their health, society and environment in a long term. Consequently, most millennials who known as highly educated individuals portray favourable attitudes toward green products and are willing to pay more for green services, products, or brands (Smith, 2010) and demanded a workplace that is more environmentally sensitive (Guevarra, 2010). Millennials are also most likely to promote and talk about eco-friendly products among their close friends if the product is reasonably priced and were produced using recycled materials (Muralidharan, Guardia, & Xue, 2015).

In addition, marketers have also estimated that the millennial market has a spending power worth $200 billion (Fuller, 2013). The percentage of millennial generation reported to buy sustainable products is increasing 36 percent in 2012 compared to 31 percent in 2009. This growth is mainly attributed to the increased purchases of natural or organic personal care products which are 39 percent in 2012 than just 27 percent in 2009 (Rogers, 2013). Therefore, it can be seen this generation have higher expenditure rate (O'Donnell 2006). Millennial generation also has the ability to influence their family's purchase decisions (Morton 2002), thereby significantly contribute to the future economy.

These personality and financial characteristics show that millennials are an influential market segment. It is constituting a profitable market opportunity that businesses should not overlook. It is advice to green marketers and businesses to focus on their social responsibility efforts on this generation as this generation portray high

environmental concern and this attitude can affect their purchasing behaviour for green products (None & Datta, 2011). Therefore, millennial generation who has proven to show a high level of concern to the environmental problems indicate that this generation is the best segment to the tapped in the future by green marketers and manufactures Hence, this study aims to investigate the determinants that affecting millennial consumer's green purchasing behaviour toward green products in order to take the initiative to fill up the gap in Malaysia.

2.3 Variables Related to the Study

There are five variables have been chosen as the predictors in the study. It includes attitude toward green products, subjective norm, perceived behavioural control, environmental involvement and media exposure to environmental message. The subsection below describes the conceptualization of the variables and explains why the variables are important to be chosen as a predictor of the study.

2.3.1 Attitude towards Green Products

The attitude which portrays a belief in something plays an important role in decision making. Ultimately the decision to perform a behaviour is relative to an individual's attitude and his or her overall evaluation of a specific behaviour (Tonglet, Philips, & Read, 2004). An intention toward the possibility of engaging in a certain behaviour can be influenced by attitudes towards performing the behaviour (Ajzen & Fishbein 1980). Meanwhile, Fazio (1995) defined attitude is an interaction in memory between a given object and a summary evaluation of this object.

In particular, previous studies have focused on the relationship between attitudes and intention-behaviour. Tsen, Pang, Hasan, and Bucha (2006) have found that attitude is among factors that play a major role in predicting consumer's intentions to pay for green products. Cheah and Phau (2011) indicated in their study that consumers with positive attitudes toward environmentally friendly products are more willing to buy environmentally friendly products. This is consistent with previous results in other studies such as McCarty and Shrum (1994) and Meneses and Palacio (2006). Another research finding by Laroche et al., (2001) also found that there is a positive correlation between consumer's attitude and their willingness to pay more for sustainable products.

Furthermore, a strong positive relationship is also identified between attitude and purchase intention for eco-friendly apparel (Chen & Chai 2010; Cowan & Kinley 2014; Zheng & Chi 2015). This is supported by Vazifehdoust, Taleghani, Esmaeilpour, Nazari, and Khadang (2013) where they mentioned that the intention of the consumer to purchase green products is determined by a positive attitude towards green products. The literature revealed that consumers with more favourable attitude towards general green products are expected to have a high degree of their involvement in the purchase decision for such products (Lee, 2008; Chen & Chai, 2010; Joshi & Rahman, 2015). Based on previous findings, an attitude found to be having an important role in decision making in order to accept a particular behaviour. Based on literature review, the attitude has a direct influence towards purchasing of green products therefore, it is hypothesized that:

Hypothesis 1 (H1): There is a significant relationship between attitude towards green products and millennial consumer's green purchase behaviour.

2.3.2 Subjective Norm

Subjective norm refers to the perceiving of social pressure to perform or not to perform a certain behaviour (Azjen, 1991). Subjective norm plays a vital role in reflecting a consumer's perception of their personal relationship when purchasing a product. As a result, consumers have a perception to whether their significant others think they should purchase products and their motivations into something are usually conform to their significant others (Noble, Haytko, & Phillips, 2009).

In addition, subjective norm also reveals the extent to which an individual portray a morally responsible behaviour for others by buying green products and how important positive social image is to consumers (Barber, Bishop, & Gruen, 2014). Zukin and Maguire (2004) studied social norm and found that it has greatly influence consumer's consumption of green products. Other several studies also have reported that the subjective norm is an important antecedent of consumer's intention to purchase green products (Paul, Modi, & Patel, 2016), organic food (Dean et al., 2012), and for green hotel revisit intention (Han, Hsu & Sheu, 2010; Chen & Tung, 2014; Teng, Wu, Liu, 2013). Meanwhile, Lee (2009) also found that social influence or known as the subjective norm is the best predictors for young consumer's green purchase behaviour in Hong Kong.

Besides, according to Deutsch and Gerard (1955), subjective norm can be described as an extent to where someone does something that conforms to other's expectations or considers the information which he or she acquired from other people as a sign of reality. This is acknowledged by Lascu and Zinkhan (1999) where they mentioned in their study that the young consumer always favours the opinions of their

peer groups when making choices during the purchasing process. Recent studies conducted by Khare (2015) found that consumers like to discuss their green behaviour attitude with their friends and are likely to join group norms in order to gain acceptance in groups. In addition, family is an external factor which has a direct influence an individual in purchasing products (Mida, 2009). This is because the family is considered to be one of the most valuable and important sources in building individual norms and belief. Thus, according to Adilah, Lim and Raja Huda (2016), family influence is able to motivate the millennial generation in shaping their green behaviour as they are the individual that close to young people. In Malaysia, studied done by Nizam et al., (2014) also found that these subjective norms have a positive and significant correlation in explaining the purchasing behaviour among the millennial generation. Therefore, the subjective norm is an important factor in encouraging purchase behaviour for green products. Hence it could hypothesis that:

Hypothesis 2 (H2): There is a significant relationship between subjective norm and millennial consumer's green purchase behaviour.

2.3.3 Perceived Behavioural Control

Perceived behavioural control refers to an individual's perceived ease or difficulty in performing a particular behaviour (Azjen, 1991). It reflects individual's perception toward access to resources and opportunities needed to accomplish behaviour, including access to money, time, and individual's self-confidence in the ability to perform the particular behaviour (Ajzen 1991). Chen and Tung (2014) stated that the more individuals are able to have control over those resources, they are more likely to involve in the performance of that behaviour.

In addition, perceived behavioural is not only the best factor influencing attitude and behaviour change, but also is related to salient beliefs that have been considered as important attributes in making decisions (Armitage & Talibudeen, 2010). As an illustration, Li, Daugherty, and Biocca (2002) have proposed that perceived affordances were perceptions that consumers possessed and used to evaluate products before purchasing. Roberts (1996) also claims that perceived behavioural control can positively influence consumer's attitude and purchase intention. When a consumer finds that others may not agree to purchase a product, he or she may experience psychological obstacles to performing this behaviour, hence, negatively affecting to one's perceived behavioural control (Kim & Karpova, 2010).

Furthermore, perceived behavioural control has been associated with purchase intention in green hotels (Han, Hsu, & Sheu, 2010; Chen & Tung, 2014), organic foods (Thogersen, 2006; Tarkiainen & Sundqvist, 2005) and green products (Moser, 2015). Past researchers have proved that perceived behavioural control have a significant and positive impact on intention and thus lead the actual purchase of green products (Ma, Littrell, & Niehm, 2012; Wang, Liu, & Qi, 2014). Based on the collection of literature, it shows that perceived behavioural control has the impact on the consumer's green purchasing behaviour. Therefore, it is hypothesized that:

Hypothesis 3 (H3): There is a significant relationship between perceived behavioural control and millennial consumer's green purchase behaviour.

2.3.4 Environmental Involvement

A person's environmental involvement is known as a personal concern and cares toward environmental problems that occurred in the country. It is also associated with an individual's beliefs of his or her participation toward nature (Schultz et al., 2004). According to Schultz et al., (2004), environmental involvement refers to the individual portray emotions associated with the beliefs about environmental protection. In addition, Tanner and Kast (2003) mentioned that the positive attitude of consumers towards environmental protection will strongly stimulates their purchasing behaviour toward green products. In the context of environmental involvement, consumer's behaviour usually becomes affected by their collective and regular actions (Promotosh & Sajedul, 2011). For a person who works in an environmental organization, he or she is bound to perform activities that reduce the company's environmental footprint (Abella & Yap, 2012). Consequently, environmental involvement within an organization helps it to build a positive attitude toward environment (Nas & Dekker, 1996).

Petty and Cacioppo (1990) mentioned that involvement is an important factor in determining how individuals are motivated when processing incoming message or information. In the context of green purchase, emotional involvement has been found to be a major determinant of a decision to buy organic food (Grunert, 1993). Bang, Ellinger, Hadjimarcou, & Traichal (2000) reported that consumers who are more involved with environmental problems show much more willingness and readiness to pay higher prices for green energy than those who were less concerned about the environment. Apart from that, past researchers have reported that consumers who are actively engaged in environment-related activities are more involved in the decision

making regarding pro-environmental issues (Lee, 2010; Gentina & Muratore, 2012). Based on the literatures, it is argued in this article that individual's involvement in local environmental issue can motivate consumers to adopt green purchase behaviour. Therefore, based on a review of the past literature, it is hypothesized that:

Hypothesis 4 (H4): There is a significant relationship between environmental involvement and millennial consumer's green purchase behaviour.

2.3.5 Media Exposure to Environmental Message

Many researchers agree that media plays an important role in spreading information regarding the importance of preserving the environment (Lowe & Rudig, 1987; Lowe & Morrison 1984). Due to the massive amount and types of media coverage regarding environmental issues and conflicts has helped transform many specific problems into a major public issue (Iman Khalid & Yuserrie, 2011). According to DeFleur and Dennis (1998), no one can ignore the fact that media can help to shape individual's behaviour and beliefs. Besides, in a study conducted by Fisk (1959) has found mass media play an effective role as a good communication tool for conveying a message. He also discovered that regardless of people's age, education and social status, media exposure has the direct and significant influence on consumer's purchase decisions.

Young people's purchase decision which influenced by mass media has been proposed in a number of studies by previous researchers (Promotosh & Sajedul, 2011). For instance, Good (2006) and Holbert et al., (2003) have proved that exposure to environmental messages through mass media positively affects young consumer's environmental concerns. The ability of media to raise the importance of the environmental issue and suggest to the audience which environmental problems

needed the most attention has resulted in a positive association in consumer ecological concern (Holbert et al., 2003). McNeal and Ji (1999) have also studied the role of mass media in influencing young consumer's product perception and preference.

Furthermore, another study by Atwater, Salwen, and Anderson (1985) have found that consumers can collect information about environmental issues through mass media which include TV, magazine, radio, and newspapers. Overall, 83 percent of respondents indicated that they got information related to the environment from various types of media sources. In a study among Chinese children, they showed that they become affected and emotional when they see any new product information on television. Therefore, television commercial has been considered as the most preferable source of information by these young consumers (McNeal & Ji, 1999). In addition, communication campaigns run through various media sources have been found to positively influence recycling behaviour of consumers (Mee & Clewes, 2004). Lee (2014) also found that environmental messages that publicize through the mass media have significantly affected consumer's purchase behaviour towards environmentally friendly products. Thus, on the basis of the existing literature on mass media research, it is posited that exposure to media messages on the environment should facilitate green purchase behaviour in the millennial generation. Therefore, based on a review of the past literature, it is hypothesized that:

Hypothesis 5 (H5): There is a significant relationship between media exposure to the environmental message and millennial consumer's green purchase behaviour.

2.4 Underpinning Theory

To study consumer behaviour, many theories were formed to explain attitude especially from the social psychology's point of view (Ajzen & Fishbein, 1980). Two most prominent theories namely, Theory of Reasoned Action (TRA) and Theory of Planned Behaviour (TPB) were frequently discussed in various literature when it comes to intention to purchase green products and the purchasing behaviour of green consumers. TPB model was employed to explain the variables used in this study. This study attempts to evaluate factors that influence millennial consumer's green purchasing behaviour by using the extended TPB model which are the attitude towards green products, subjective norm, perceived behavioural control, environmental involvement and media exposure to environmental message.

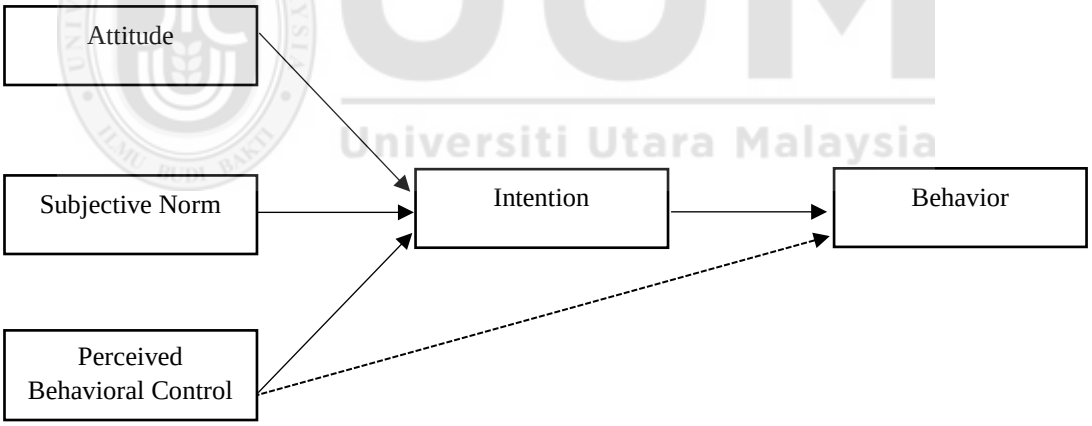

Figure 2.1

Azjen (1991) *Theory of Planned Behaviour*

A number of researchers had used TPB in their research on green consumerism. Chan and Lau (2001) used the TPB model to show an acceptable level of external validity in measuring green purchase behaviour among American and Chinese consumers. Likewise, Mostafa (2006) used TPB to assess an attitude intention

purchase model to explain Egyptian green consumerism. Other than that, a study by Yadav and Pathak (2017) has applied the TPB model in their study in order to understand Indian consumer behaviour to buy green products. Noor, Jumain, Yusof, Ahmat, and Kamaruzaman, (2017) also has adapted TPB approach to identify key factors that motivate consumer's green consumerism. This theory has been proven over time to be a robust theory to explain individual's behaviour and has thus gained reliability and credibility when it comes to predicting behavioural intention. Therefore, the conceptual framework for this research was formalized using Ajzen's (1991) Theory of Planned Behaviour.

Azjen and Fishbein (2005) suggested that additional factors can be added to the theory of planned behaviour to become the powerful predictors of the study. Thus, this present study further added two new variables that are, environmental involvement and media exposure to the environmental message as predicting factors to consumer's green purchasing behaviour. Environmental involvement was chosen because TPB does not account for another factor into behavioural intention such as emotion and besides not taking into account environmental factors that may influence a person's intention to perform a behaviour. As mentioned by Uddin and Khan (2016), it was the most important determinant of green purchase behaviour. Meanwhile, media exposure to the environmental message was selected due to the limited study of the importance of media toward millennial generation's green purchase behaviour. Hence, these two components were added to behavioural theory to make it a more integrated model for pro-environmental behaviour.

2.5 Theoretical Framework

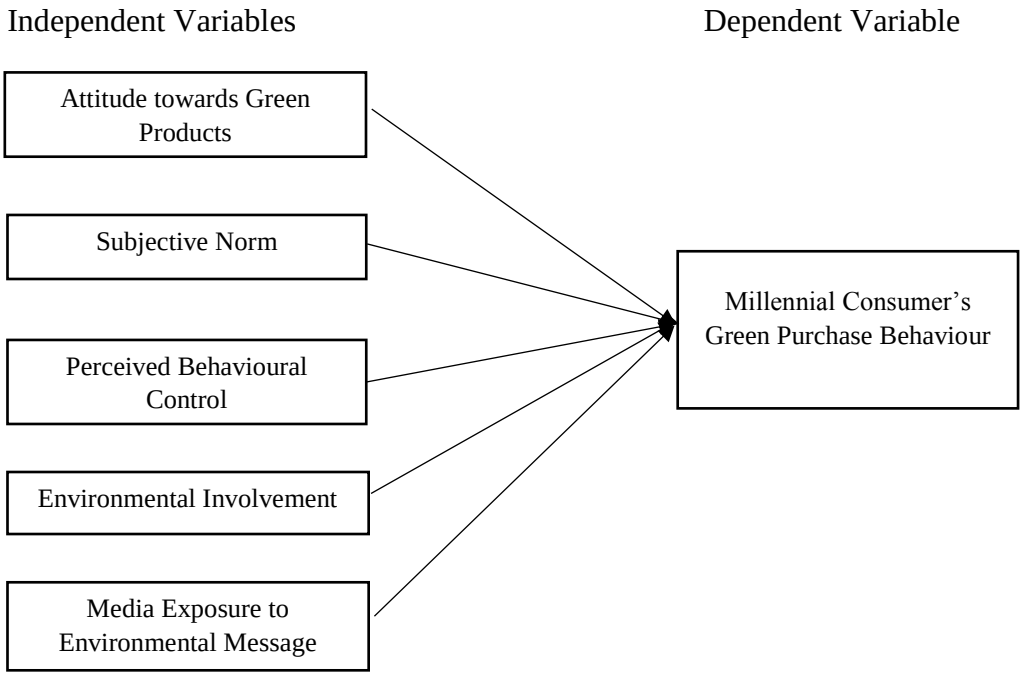

Figure 2.2

Theoretical Framework of Study

2.6 Research Hypothesis

The hypothesis of the study are as follows:

Hypothesis 1 (H1): There is a significant relationship between attitude towards green products and millennial consumer's green purchase behaviour.

Hypothesis 2 (H2): There is a significant relationship between subjective norm and millennial consumer's green purchase behaviour.

Hypothesis 3 (H3): There is a significant relationship between perceived behavioural control and millennial consumer's green purchase behaviour.

Hypothesis 4 (H4): There is a significant relationship between environmental involvement and millennial consumer's green purchase behaviour.

Hypothesis 5 (H5): There is a significant relationship between media exposure to environmental message and millennial consumer's green purchase behaviour.

2.7 Conclusion

The discussion of this chapter has revealed that green purchase behaviour has numerous determinants which were examined by different authors. In this chapter, it clearly shows that attitude toward green products, subjective norm, perceived behavioural control, environmental involvement and media exposure to the environmental message are important factors in determining millennial consumer's green purchasing behaviour. This chapter also discussed the underpinning theory which is the Theory of Planned Behaviour and subsequently listed five hypotheses to answer the research questions as stated in chapter one.

CHAPTER 3

RESEARCH METHODOLOGY

3.0 Introduction

This chapter explains in detail the way how the study was conducted, and the method used to collect and analyse data in order to achieve research objectives. It consists of research design, sample design, measurement of variables, instruments, data collection procedures and techniques of data analysis.

3.1 Research Design

The research design is a framework or plan of action to carry out research projects. Sekaran and Bougie (2013) defined research design as a blueprint for a research as it provides guidelines regarding collection, measurement and analysis of data, based on the research questions of the study. This study being conducted as correlational research (Sekaran & Bougie, 2013) due to this study attempts to examine the relationship between attitude toward green products, subjective norm, perceived behavioural control, environmental involvement and media exposure to environmental message. This provides an insight on the factors that have a significant relationship with millennial consumer's green purchase behaviour and to determine which independent variables have the most influence on millennial consumer's green purchase behaviour among students in University Utara Malaysia (UUM).

To test the variables, this study used the application of quantitative approach through questionnaires. Questionnaires are the most useful instrumentation of data collection method. It enables researchers to access data fairly and the responses are

easily coded. The researcher also able to get more accurate results with the right target market or sample (Sekaran and Bougie, 2013). Furthermore, a cross-sectional study is undertaken in this research due to data were gathered just once, over a period of two weeks starting from 4th April 2018 until 18th April 2017. Both primary and secondary data method also applied in this study. Most secondary data obtained from journals through online and library, books and websites from the internet.

3.2 Sample Design

3.2.1 Population

Population refers to the entire group of people, events or thing of interest that the researcher wishes to investigate (Sekaran & Bougie, 2013). Other than that, Zikmund, Babin, Carr, and Griffin (2013) defined population as any complete group of entities that share some common set of characteristics. As for this study, the research population focus on all students from University Utara Malaysia. In accordance with UUM Student's Accommodation Center (SAC), the total numbers of students who stayed inside the student residential area called Inapan Siswa (Inasis) are about 13,920 on the semester 2017/2018 (A172). The classification of the students based on fifteen Inasis in UUM, namely Malaysia Airlines (MAS), Tenaga Nasional Berhad (TNB), Proton, Tradewinds, Petronas, Grantt, Sime Darby, Telekom Malaysia (TM), Bank Simpanan Nasional (BSN), Malaysia International Shipping Corporation (MISC), Maybank, Bank Muamalat, Yayasan Al-Bukhari (YAB), Bank Rakyat and Small Medium Enterprise Development Bank Malaysia Berhad (SME Bank) are demonstrated in Table 3.1.

Table 3.1
Total Number of Students in Each Inasis in UUM

Name of Inasis	Total Number of Students
MAS	870
TNB	706
Proton	62
Tradewinds	569
Petronas	916
Grantt	809
Sime Darby	940
TM	881
BSN	749
MISC	641
YAB	1375
Bank Muamalat	1319
Bank Rakyat	1603
SME Bank	1691
Maybank	230
TOTAL	**13920**

Source: UUM Student Accommodation Centre (2018)

Hence, based on the Table 3.1, the total population of this study is 13,920 students from University Utara Malaysia.

3.2.2 Sample and Unit of Analysis

According to Bryman and Bell (2015), the sample is a segment of the population that is selected for investigation. It is a subset of the population. The basic idea of sampling is by selecting some of the elements in a population, the researcher may draw conclusions about the entire population (Cooper & Schindler, 2003). The sample used

in this research was drawn from the total population of students in University Utara Malaysia which is 193,920. About 375 sample of students was collected from the total population of entire students in UUM as in accordance with the table of determining sample size by Krejcie and Morgan (1970).

By doing this research, the researcher hopes to determine the behaviour of a millennial generation towards green purchase while enhancing the knowledge about the importance of green purchase which may then contribute to the better health of the environment. Selecting the university students as a sample in this study is appropriate as students represent the youth generation as a whole. Thus, the unit of analysis for this study is in the form of individual basis among the UUM students.

3.2.3 Sample Size

A sample is referred as a subset of the population (Sekaran & Bougie, 2013). In other words, only a fraction of the total number of population is selected as sample for the research. By studying the sample, it enables the researchers to draw conclusions that generalize to the population of interest (Sekaran & Bougie, 2013). In this study, the criteria for the sample size were set in accordance with the guidelines based on the formula proposed by Krejci and Morgan (1970) in order to determine the suitable sample size for this study.

By referring to the current statistic provided by UUM Student's Accommodation Center (SAC), about 13,920 students who stayed inside the Inasis in UUM during the semester 2017/2018 (A172). With the population that obtained, the adequate sample size is 375 referring to the table of determining sample size by Krejcie

and Morgan (1970). Thus, the sample size for this study is selected among 375 students of UUM respondents based on the formula proposed by Krejcie and Morgan (1970).

Table 3.2
Summary of Table for Determining Sample Size from a Given Population

Population (N)	**Sample Size (S)**
3,000	341
3,500	346
4,000	351
4,500	354
5,000	357
6,000	361
7,000	364
8,000	367
9,000	368
10,000	370
15,000	375
20,000	377
30,000	379
40,000	380
50,000	381
75,000	382
1,000,000	384

Source: Table by Krejcie and Morgan (1970)

3.2.4 Sampling Procedure

There two major types of sampling, which are non-probability and probability sampling. Non-probability sampling comprises three types which are convenience sampling, judgment sampling and quota sampling. Meanwhile, probability sampling includes simple random sampling, systematic sampling, stratified random sampling, cluster sampling, proportional and disproportional stratified sampling and multi-stage area sampling. In this study, following a probability sampling technique, the proportionate sampling has been used as recommended by Bruwer and Haydam (1996) in order to collect data that are sufficiently representing the population of study.

3.2.5 Sampling Technique

Proportionate sampling technique is used in this study. According to Sekaran and Bougie (2013), the sampling involves a process of segregation of population into divisions. The sample of members from each division was then drawn in proportionate to the number of elements in the divisions. The benefits of using proportionate sampling is that it reduces selection bias. By segregating the population, it helps to ensure the samples are adequate and accurately reflects the population being studied in terms of criteria used for this study.

In this study, the population of UUM student's is clustered into fifteen Inasis accordingly, namely MAS, TNB, Proton, Tradewinds, Petronas, Grantt, Sime Darby, TM, BSN, MISC, Maybank Muamalat, YAB, Bank Rakyat and SME Bank. The proportionate is calculated according to a total number of students in each Inasis divided by the total numbers of students in University Utara Malaysia. The total of respondents in each Inasis is measuring through the multiplication of proportionate

and sample size. The sample size of 375 was allocated proportionately among fifteen Inasis in UUM as presented in Table 3.3.

Table 3.3
Number of Respondents using Proportionate Sampling

Name of Inasis	Number of Students	Proportionate (%)	Total Number of Respondents
MAS	870	(870/13,920) x 100 = 6.25%	6.25% x 375 = 23
TNB	706	(706/13,920) x 100 = 5.07%	5.07% x 375 = 19
Proton	621	(621/13,920) x 100 = 4.46%	4.46% x 375 = 17
Tradewinds	569	(569/13,920) x 100 = 4.09%	4.09% x 375 = 15
Petronas	916	(916/13,920) x 100 = 6.58%	6.58% x 375 = 25
Grantt	809	(809/13,920) x 100 = 5.81%	5.81% x 375 = 22
Sime Darby	940	(940/13,920) x 100 = 6.75%	6.75% x 375 = 25
TM	881	(881/13,920) x 100 = 6.33%	6.33% x 375 = 24
BSN	749	(749/13,920) x 100 = 5.38%	5.38% x 375 = 20
MISC	641	(641/13,920) x 100 = 4.60%	4.60% x 375 = 17
Maybank	230	(230/13,920) x 100 = 1.65%	1.65% x 375 = 6
YAB	1375	(1375/13,920) x 100 = 9.88%	9.88% x 375 = 37
Bank Muamalat	1319	(1319/13,920) x 100 = 9.48%	9.48% x 375 = 36
Bank Rakyat	1603	(1603/13,920) x 100 = 11.52%	11.52% x 375 = 43
SME Bank	1691	(1691/13,920) x 100 = 12.15%	12.15%x 375 = 46
TOTAL	**13920**	**100%**	**375**

3.3 Research Instrument Development

For the purpose of the research, one research instrument namely questionnaire was developed. Sekaran and Bougie (2013) mentioned that questionnaire is a preformulated written set of questions in which selected respondents to record their answers. In this study, there are five independent variables have been being examined which are the attitude towards green products, subjective norm, perceived behavioural control, environmental involvement and media exposure to environmental message. Meanwhile, the dependent variable being examined was millennial generation's green purchase behaviour. All the variables were operationalized according to the social science's scale and past literature as well.

The structure of this questionnaire was divided into three sections. Section A is about respondent's demographic profile, Section B consist of general behavioural questions regarding respondent's concern toward the environment and their past behaviour toward green purchases and lastly is Section C which comprises of questions regarding both dependent and independent variables. The questionnaire was embedded with the cover page and short notes regarding the operational definition in order to let the respondent have a clear understanding of the key terms.

In section C, the items of the dependent variable are being examined on millennial generation's green purchase behaviour. The questionnaire was adapted from Lee (2009) (α=0.87). Next, the first independent variable to be determined is the attitude towards green products. The questionnaire was adapted from Shaik Ismail (2014) (α=0.75). Another independent variable which is subjective norm was adapted from Abdullah et al., (2014) (α=0.70).

Furthermore, the questionnaire of perceived behavioural control was adapted from Maichum et al., (2016) (α=0.85). For environmental involvement, the questionnaire has been adapted from Uddin and Khan (2016) (α=0.73). Lastly, the last variables needed to be measured is media exposure to environmental message. The questionnaire was adapted from Lee (2010) (α=0.80). The overview of the measurement of items in this study and summary of reliability from the previous study is summarized in Table 3.4

Table 3.4

Overview of Measurement Items of the Study and Reliability from Previous Study

CONSTRUCTS	OPERATIONAL DEFINITION	MEASUREMENT ITEMS	NUMBER OF ITEMS	SOURCES	RELIABILITY
Green Purchase Behaviour	Green purchase behaviour refers to the consumption of product that are environmentally beneficial, conservable and responding to environmental concern	1.I often buy organic products 2.I often buy products that are labelled as environmentally safe 3. I often buy products that are against animal-testing 4.I often buy products that contain no or fewer chemical ingredients 5. When I consider buying a product, I will look for a certified environmentally-safe or organic stamp 6. I often buy products that support fair community trades 7. I often buy products that use recycled/ recyclable packaging	7	Lee (2009)	0.87
Attitude toward Green Products	Attitude refers as a state in which human moves to act or do with certain feelings in response to the object or situation surrounding environmental conditions	1. I feel that green products have a positive impact on the environment 2. I think choosing green products is beneficial to consumers 3. I think choosing green products is a good idea 4. I feel that using green products is a wise idea 5. I think using green products would be pleasant to me 6. I feel that I need to appreciate green products	6	Shaik Ismail (2014)	0.75
Subjective Norm	Subjective norm refers to the perceived social influences to indulge or not to indulge in a given behaviour and reveal the beliefs of individuals about how they would be viewed by their reference groups if they perform a certain behaviour	1. The trend of buying green products among people around me is increasing 2. People around me generally believe that it is better for health to use green products 3. My close friends and family members would appreciate if I buy green products 4. I would get all the required support (money, time, information related) from friends and family to buy green products	4	Abdullah et al. (2014)	0.70

Table 3.4 (continued)

Perceived Behavioural Control	Perceived behavioural control refers to an individual's perceived ease or difficulty in performing a particular behaviour	1. I am confident that I can purchase green products rather than normal products when I want 2. I see myself as capable of purchasing green products in future 3. I have resources, time and willingness to purchase green products 4. There are likely to be plenty of opportunities for me to purchase green products	4	Maichum et al. (2016)	0.85
Environmental Involvement	Environmental involvement refers to the emotions associated with beliefs about environmental protection	1. I am very concerned about environmental protection 2. I am very involved in greening the environment 3. I often think about how environmental quality can be improved 4. I fully support the environmental activities of the government	4	Uddin & Khan (2016)	0.73
Media Exposure to Environmental Message	Media exposure to environmental message refers to the messages related to environmental protection from the following sources: TV programs, radio, internet, and advertisements	1. I often come across environment-related topics/ issues on TV 2. I often come across environmental messages on advertisements 3. I often come across environment-related topics/issues in radio 4. I often come across environment-related topics/issues on the Internet	4	Lee (2010)	0.80

3.3.1 Section A: Demographic Information

Section A consists of five questions which are related to the respondent's demographic information such as gender, race, age, education level and monthly personal income. In this section, two different scales were used which are ratio and nominal scale. A ratio scale is applied to question age and monthly personal income due to the numerical properties of the variables that it has a true zero point. Moreover, the nominal scale was applied to the rest of questions which are gender, race and education level as those items can be well categorised and analyse without having any order or structure. The items are presented in Table 3.5.

Table 3.5
Items for Demographic Information

Measurement of Items
1. Gender:
2. Race:
3. Age:
4. Education Level
5. Monthly Personal Income (RM):

3.3.2 Section B: General Behavioural

In section B, the questions consist of general behavioural questions. This section was developed to verify the respondent's concern toward the environment as well as their general knowledge about the topic being studied in this research. As mentioned by few researchers in the past, respondent's knowledge on issue studied is vital to ensure the selected respondents have a clear understanding on the questions that are being asked in the questionnaire (Slater & Atuahene-Gima, 2004). The measurement items are presented in Table 3.6.

Table 3.6
Items for General Behavioural

Measurement of Items
1. Do you concern about environment in Malaysia?
2. Do you think environmental friendly is important?
3. Have you ever bought or considered buying products with environmental issue in mind?
4. Have you purchased any of the following similar products in the past?
5. What is the most restriction of choosing eco-friendly product?
6. Which one of these do you believe should have the primary responsibility for protecting the environment in our nation?
7. Using the scale below, please indicate how important environmental issue are to you?

3.3.3 Section C: Independent and Dependent Variables

In Section C, the questions include measurement items for both independent and dependent variables. The dependent variable which is green purchase behaviour was adapted from an article by Lee (2009). There is a total of seven questions being used to test the millennial generation's green purchase behaviour. For testing purpose, a seven-point Likert scale is used in this study and range "1" stated as strongly disagree and "7" stated as strongly agree. Table 3.7 below summarises the items under green purchase behaviour.

Table 3.7
Items for Green Purchase Behaviour

Measurement of Items
1. I often buy organic products
2. I often buy products that are labelled as environmentally safe
3. I often buy products that are against animal-testing
4. I often buy products that contain no or fewer chemical ingredients
5. When I consider buying a product, I will look for a certified environmentally-safe or organic stamp
6. I often buy products that support fair community trades
7. I often buy products that use recycled/ recyclable packaging

Source: Lee (2009)

Meanwhile, the independent variable of attitude towards green purchase was adapted from Shaik Ismail (2014). The questions for attitude towards green products consist of six items and there were some modification done to it. The wording of 'organic food' was changed to 'green products' to better suit the purpose of the study. For testing purpose, a seven-point Likert scale is used in this study and range "1" stated as strongly disagree and "7" stated as strongly agree. The items are presented in Table 3.8.

Table 3.8
Items for Attitude towards Green Products

Measurement of Items
1. I feel that green products have a positive impact on the environment
2. I think choosing green products is beneficial to consumers
3. I think choosing green products is a good idea
4. I feel that using green products is a wise idea
5. I think using green products would be pleasant to me
6. I feel that I need to appreciate green products

Source: Shaik Ismail (2014)

Next variables that need to be measure is subjective norm. It consists of four questions and the items were adapted from an article by Abdullah et al., (2014). For testing purpose, a seven-point Likert scale is used in this study and range "1" stated as strongly disagree and "7" stated as strongly agree. The items are presented in Table 3.9.

Table 3.9
Items for Subjective Norm

Measurement of Items
1. The trend of buying green products among people around me is increasing
2. People around me generally believe that it is better for health to use green products
3. My close friends and family members would appreciate if I buy green products
4. I would get all the required support (money, time, information related) from friends and family to buy green products

Source: Abdullah et al. (2014)

As for perceived behavioural control, all the four items were adapted from Maichum et al., (2016) without any modification. For testing purpose, a seven-point Likert scale is used in this study and range "1" stated as strongly disagree and "7" stated as strongly agree. The items are presented in Table 3.10.

Table 3.10
Items for Perceived Behavioural Control

Measurement of Items
1. I am confident that I can purchase green products rather than normal products when I want
2. I see myself as capable of purchasing green products in future
3. I have resources, time and willingness to purchase green products
4. There are likely to be plenty of opportunities for me to purchase green products

Source: Maichum et al. (2016)

For environmental involvement, the measurement of this variable consists of four items that have been adapted from an article by Uddin and Khan (2016). For testing purpose, a seven-point Likert scale is used in this study and range "1" stated as strongly disagree and "7" stated as strongly agree. The items are presented in Table 3.11.

Table 3.11
Items for Environmental Involvement

Measurement of Items
1. I am very concerned about environmental protection
2. I am very involved in greening the environment
3. I often think about how environmental quality can be improved
4. I fully support the environmental activities of the government

Source: Uddin and Khan (2016)

Lastly, the last variable is media exposure to environmental message. This variable consists of four items which have been adapted from Joshi and Rahman (2016). For testing purpose, a seven-point Likert scale is used in this study and range "1" stated as strongly disagree and "7" stated as strongly agree. The items are shown in Table 3.12.

Table 3.12
Items for Media Exposure to Environmental Message

Measurement of Items
1. I often come across environment-related topics/ issues on TV
2. I often come across environmental messages on advertisements
3. I often come across environment-related topics/issues in radio
4. I often come across environment-related topics/issues on the Internet

Source: Lee (2010)

3.3.4 Translation or Research Instrument

The measurement of items used in this study was adapted from several related articles of different researchers. In this study, the primary language used for the measurement items is only one language which is English. As all the university students are associated with high level of educational background and have the capability in understanding the language as English has been extensively used as an education language in universities. Hence, there is no translation process involved in this questionnaire.

3.3.5 Types of Measurement Scales

Section A contains five questions related to respondent's demographic information. In this section, there are two scales used to measure items which are nominal scale and ratio scale. The nominal scale was applied to category group such as gender, race and education level as those items can be divided into certain categories without having any order and structure. Items for age and monthly personal income used ratio scale as this items as they have an absolute zero point.

In addition, section B comprises of seven questions regarding general behavioural of respondents. In this section, general behavioural questions were developed to study the respondent's concerns toward the environment in Malaysia as well as their past purchase behaviour toward green products. This general behavioural question is vital to predicting their future behaviour. In this section, the nominal scale was used for the first six items as all items can be divided into certain categories without having any order or structure. The last questions using interval scale as this question intended to measure respondents the differences in the preferences among individuals.

As for Section C, it consists of all the dependent and independent variables. The variables of attitude towards green products have six items while the rest of variables namely subjective norm, perceived behavioural control, environmental involvement and media exposure to environmental message contain four items. Variables for dependent variables which is green purchase behaviour contains seven items all together. All these items were measured using interval scale. According to Sekaran and Bougie (2013), using interval scale not only groups individuals into

certain categories, it also measures the magnitude of differences in the preferences among the individuals such as their attitude, perceived of importance, perception and others.

3.3.6 Scaling Design

In this study, Section A and B nominal scale are used. Based on Sekaran and Bougie (2013), the nominal scale used to assign subjects to certain categories or groups. In other words, the nominal scale is used for labelling variables without any quantitative value. By using a nominal scale, it helps the researcher to obtain basic information from the respondents. Other than that, it also helps the researcher to get an overview of respondent's attitude and preferences in a quick manner.

Moreover, in section C, the questions were constructed based on interval scale in the form of seven-point Likert Scale for each item on a scale of 1 to 7 which are "1= Strongly Disagree, 2= Disagree, 3= Somewhat Disagree, 4= Neutral, 5= Somewhat Agree, 6= Agree and 7= Strongly Agree". The seven-point Likert scale was chosen because it provides a more sensitive indication of respondents feeling and have higher reliability (Andrews & Withey, 1976).

3.4 Pilot Test Procedures

A pilot test can be defined as a small study to test research protocols, data collection instruments and other research techniques in preparation for a larger study (Zailinawati, Schattner, & Mazza, 2006). Furthermore, Stangor (2010) also described pilot test where a group of individuals gathered to answer survey questions and toss their ideas regarding the project before the final version of the questionnaire is distributed. It is an important stage in a research project. By conducting a pilot test, any potential problems and lacks in the research instrument can be identified prior the implementation of the full study.

In this study, a pilot test with 30 respondents was conducted in order to test the reliability and validity of the research instruments. A total of 30 set of the questionnaire has been distributed to 30 students in UUM. To make sure all the indicators fall under the standard requirement of reliability analysis test, where Cronbach Alpha is should not less than 0.70, reliability test is necessary to be executed (Nunnally, 1978). If Cronbach's alpha value is less than 0.60, the items used are considered poor. If the value is in the range of 0.70, the items are considered acceptable, and if the value is more than 0.80, the items are considered good (Sekaran and Bougie, 2013).

The result of reliability analysis for the pilot test of 30 respondents in this study is considered acceptable as all items for both independent and dependent variables for Cronbach's alpha coefficient is above 0.7. It showed that all items scales has a good internal consistency and the result is presented in Table 3.13.

Table 3.13
Reliability Test for Pilot Test

Variables	No of items	Cronbach's Alpha
Green Purchase Behaviour	7	0.716
Attitude towards Green Products	6	0.904
Subjective Norm	4	0.858
Perceived Behavioural Control	4	0.803
Environmental Involvement	4	0.861
Media Exposure to Environmental Message	4	0.888

3.5 Data Collection Procedure

Data collection is an important aspect of any type of research study. The inaccuracy of data collection could lead to invalid results. Data are usually collected through qualitative and quantitative methods. Sekaran and Bougie (2013) stated that there are few data collection methods that can be used including telephone interview, personal interview, observation, questionnaire, mail questionnaire, fax and email.

This study is using a quantitative approach. Subsequently, for the quantitative method, the self-completion questionnaire was used as the instrument for the survey. An advantage of using self-completion questionnaire was that they were an entirely standardized measuring instrument because the questions were always phrased exactly in the same way for all respondents (Sapsford, 2007). The population of this study is 13,920 students from UUM who stayed inside the Inasis, thus the sample size is 375 referring to the table of Krejcie and Morgan (1970). Due to the name list of all students in each Inasis cannot be obtain caused by the private and confidential information issues, the questionnaire was distributed using systematic sampling to the students in each Inasis.

Data collection was conducted for two weeks starting from 4th April 2018 till 18th April 2018. To reduce the percentage of bias, a systematic sampling was used in selecting the sample respondents. The questionnaires were distributed to all Inasis in UUM. The researcher selected every 5th room in each block. In other words, every room number that ended with either zero or five was selected and later the questionnaire was given to students who stay in those rooms. In a situation where students in the chosen room number did not present in the room, the questionnaire is given to next 5th room as a substitute. Furthermore, respondents were given a duration of time to answer the questions; approximately ten to fifteen minutes. After respondent's finish completing the questions, the questionnaire is then collected back by the researcher.

3.6 Technique of Data Analysis

The data in this study were analysed using "Statistical Package for Social Science" (SPSS) version 24.0. SPSS is a good statistical package for researcher wanting to perform quantitative research in social science. SPSS not only easy to use, it also can be a good starting point to learn more advanced statistical packages. Moreover, to ensure the questions are reliable and capable to achieve all the objectives, the questionnaires were adapted from reliable sources based on previous research on the related topic.

3.7 Statistical Data Analysis

The data collected from respondents analysed by using SPSS computer program in order to answer research questions and objectives as well to test the hypothesis. By using SPSS program, data on respondents has been analysed based on different statistical methods. This includes reliability analysis in order to examine the goodness of measures, descriptive statistics to explain respondent's characteristic, correlation analysis in order to find the relationship between variables and lastly, regression analysis to measure the relationship between dependent variables and one or more independent variables.

3.7.1 Reliability Analysis

Reliability is referred as the extent to which a test, measurement procedure or a questionnaire generates common outcomes on repeated trials. Zikmund (2003) has defined reliability as the degree to which the measures yield stable results and are free from error. If a procedure or measurement device stably assigns a similar score to objects or individuals with common values, the components are assumed reliable.

3.7.2 Descriptive Statistic

According to Zikmund, Carr, and Griffin (2010), descriptive statistic provide simple summaries of the sample measures. In this study, descriptive is used to describe the characteristic of the population or sample regarding the respondent's demographic background, such as gender, age, race, education level and monthly personal income.

3.7.3 Hypothesis Testing

3.7.3.1 Correlation Analysis

Correlation looks at the relationship between two variables in a linear fashion which has been used to analyse objective. In this study, Pearson correlation was conducted in order to interpret the strength and dissection of the relationship between a variable and another (Pallant, 2011). Malhotra (2010) also mentioned that Pearson correlation analysis is commonly used to summarize the strong association between metric variables.

3.7.3.2 Multiple Regression Analysis

According to Pallant (2011), multiple regression analysis is family of techniques that can be used to discover the relationship between one continuous dependent variable on the independent variable. Moreover, regression analysis can be used to determine whether the independent variables explain a significant variation independent variable, determine how much of the various independent variable can be explained by independent variable, the strength of the relationship and determine the relationship structure by developing statistical equation relating the independent and dependent variable (Malhotra, 2010).

3.8 Conclusion

This chapter has described in detail the way this research been conducted. It explains the methods used for this research such as research design and sampling design. Data collection procedures, data analysis using few statistical techniques as well as the development of questionnaire also discussed in this chapter. The analysis of the results of this study is presented in the next chapter.

CHAPTER 4

FINDINGS

4.0 Introduction

This chapter discusses the results and findings of the study. At the beginning of this chapter, response rate and data screening process are explained, followed by the analysis of descriptive statistic for the demographic background. Next, in order to test the hypothesis, the statistical measurement of correlation and regression analysis was performed that the results are discussed in this chapter. The analysis of the data was performed using the software Statistical Package for Social Sciences (SPSS) version 24.0.

4.1 Participation and Response Rate

From 4th April 2018 till 18th April 2018, the total number of 375 questionnaires were distributed to UUM students. Out of these 375 questionnaires, only 357 questionnaires were usable for analysis yielding a response rate at approximate of 95.2%. Less than 5% (18 questionnaires) were not included in data coding and analysis due to some technical errors such as missing and incomplete answer.

4.2 Data Screening

Data was first screened before it was analysed. This procedure is known as data screening or data cleaning. It is the process of checking all the results obtained from respondents. This process inessential as it ensures all the data is clean before conducting the further statistical analysis. According to Abdulwahab, Dahalin, and Galadima, (2011) neglecting this stage lead to poor quality output and correctness of the type of analysis to be used. Through data screening, the researcher gets to ensure

whether respondents provide an answer for each of the questions in the questionnaire. It also helps the researcher to identify any unengaged response or outliers from the responses.

Furthermore, a number of studies have shown that missing is an issue that needs to be addressed by researchers. Failed to so, it can negatively affect the results of any empirical research (Cavana, Delahaye, & Sekaran, 2001). Therefore, in this study, the preventive measure was taken by the researcher by checking all the questionnaire distributed was completed appropriately. After entering the data into the SPSS and run a preliminary descriptive statistics, the result shows no missing values.

However, in this study, there are 11 responses were deleted due to unengaged responses. The outliers have been identified through the calculation of standard deviation in Microsoft Excel. Coherently, to ensure a valid data is obtained, the responses with id numbers 4, 17, 54, 57, 98, 243, 257, 263, 312, 333 and 335 were deleted. Thus, the number of response that good to go for further analysis decreased to 346 from the total of 357 returned questionnaires from respondents.

4.3 Descriptive Statistic of Demographic Profile

In this section, the demographic information of the respondents has been analysed using the frequency distribution technique of descriptive statistic. In the present study, the respondent's background information consists of five categories which are gender, age, race, education level and monthly personal income (RM). The results of this data were summarised below in Table 4.1 by using the frequency and percentage level of respondents for each of the categories in the questionnaire of the demographic section.

Table 4.1

Summary of Demographic Profile of Respondent (N=346)

Variable	Frequency	Percentage (%)
Gender:		
Male	91	26.3
Female	255	73.7
Total	**346**	**100.0**
Race:		
Malay	205	59.2
Chinese	91	26.3
Indian	27	7.8
Others	23	6.6
Total	**346**	**100.0**
Age:		
19-22	199	57.5
23-26	131	37.9
27-30	10	2.9
31-34	6	1.7
Total	**346**	**100.0**
Education Level:		
STPM/Diploma	74	21.4
Bachelor Degree	251	72.5
Master Degree	16	4.6
PHD	5	1.4
Total	**346**	**100.0**
Monthly Personal Income (RM):		
Less than 1000	301	87.0
1001-2000	25	7.2
2001-3000	6	1.7
3001-4000	5	1.4
4001-5000	5	1.4
5000 and above	4	1.2
Total	**346**	**100.0**

4.3.1 Gender

Based on Figure 4.1, the majority of respondents is among female respondents which equal to 255 (73.7%) while the minority respondents are among male with only 91 (26.3%). Together, both gender added up to the total of 346 respondents.

4.3.2 Race

In this study, there are 205 (59.2%) of the respondents are Malay while Chinese is 91 (26.3%). Followed by Indian with 27 respondents (7.8%) and the lowest responses come from others race 23 (6.6%).

4.3.3 Age

According to Figure 4.1, the result shows that the majority of respondents in this study are respondents who fall in the age range of 19-22 years old with a total number of 199 (57.5%). Follows with the second highest age group of respondents is between 23-26 years old 131 (37.9%). 10 (2.9%) of the respondents are age from 27-30 years old and the lowest age range of respondents come from 31-34 years old with total only 6 (1.7%) respondents.

4.3.4 Education Level

In this study, four level of education has been selected which are STPM/Diploma, Degree Bachelor, Master Bachelor and PhD. In figure 4.1, the results indicated that most of the respondents are having Bachelor's Degree with a total of 251 (72.5%). Followed by STPM/Diploma level with 74 (21.4%). In addition, it is reported that respondents with Master Degree is 16 (4.6%) and PhD level is only 5(1.4%) respondents.

4.3.5 Monthly Personal Income (RM)

In terms of monthly personal income, most of the respondents are having less than RM1000 which contributed to 301(87.0%) respondents. This is because as most of them are students and do not have jobs at the moment. The second highest monthly income is between RM1001-RM2000 with a total of 25 (7.2%) respondents. In addition, respondents having an income level between RM2001-RM3000, RM3001-4000, RM4001-RM5000 and RM5000 above shows relatively low among UUM students. It only contributed to 6 (1.7%), 5 (1.4%), 5 (1.4%) and 4 (1.2%) respectively.

4.4 Descriptive Statistic for Normality Assumption

The normality assumption of data is the pre essential condition for many inferential statistical techniques. It measures the degree to which the distribution of samples corresponds to a normal distribution. Veal (2005) describes central tendency as to how the scores on a variables tend to be "on average" their distribution, whereas dispersion is described as to how the score on a variable are dispersed across the measurement scale.

Kurtosis and skewness are the methods used to assess the normality of data distribution. The skewness value provides an indication of the symmetry of the distribution whereas kurtosis provides information about the "peakedness" of the distribution (Pallant, 2011). When the data shows a relatively high value, it will tails off to the right and this known as positively skewed distribution. Meanwhile, negatively skewed distribution happens when there are relatively few small values and it will tails off to the left (Hair, Black, Babin, Anderson, & Tatham, 2006). Positive kurtosis values indicate that the distribution is rather peaked or clustered in the centre

with long thin tails. Kurtosis values below 0 indicates a distribution that is relatively flat or equal (Pallant, 2011). Apart from that, Khine (2013) indicate that the value for skewness must not exceed value 3 while as the kurtosis value must not exceed the value 20 in order to avoid from violating assumption for parametric statistical analysis. Furthermore, the results of descriptive statistic provides some useful information for data analysis. The output such as mean and standard deviation enable thorough checking on the data and assess the normality of data distribution. The descriptive result is presented in Table 4.2.

According to Sekaran (2003), skewness and kurtosis valued which range from 2 to -2 are consider acceptable while Coakes and Steed (2003) further explained the kurtosis valued between 3 to -3 is considered satisfactory for social science study. Byrne (2010) also suggest that kurtosis value of 3 consider normal, while values exceeding 5 indicates the data are unnormally distributed. Therefore, based on the results of descriptive statistic for normality assumption as summarized in Table 4.2, it shows that all the data fall within suggested range.

Apart from that, the mean values for dependent variables of green purchase behaviour is equal to 5.1548, while the other five independent variables which are attitude toward green products, subjective norm, perceived behavioural control, environmental involvement and media exposure to environmental message ranges from 5.9403 to 5.0925. In general, all the means values of all variables were exceeded 3.0 which explained that all variables have a strong influence in affecting millennial's green purchase behaviour. In addition, the result shown that all standard deviation are lower than the mean which indicate satisfactory of data collection.

Table 4.2

Descriptive Statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Attitude towards Green Products	346	5.8882	.74354	-.491	.131	.163	.261
Subjective Norm	346	5.0925	.86190	-.163	.131	-.152	.261
Perceived Behavioural Control	346	5.3468	.79583	-.066	.131	-.410	.261
Environmental Involvement	346	5.4595	.73831	-.170	.131	-.704	.261
Media Exposure to Environmental Message	346	5.2218	.85874	-.205	.131	-.243	.261
Green Purchase Behaviour	346	5.1548	.79329	-.016	.131	-.224	.261
Valid N (listwise)	346						

4.5 Reliability Analysis

Reliability analysis was conducted on both dependent and independent variables using the Cronbach's Alpha in order to measure the consistency and stability of variables involved. Churchill (1979) suggested that reliability analysis must be first done to assess the quality of data. This is supported by Zikmund (2003) who suggested that as the research variables comprise many items, a test need to be done to check the degree to which measures are free from error and therefore, able to yield a consistent result in this study. According to Sekaran and Bougie (2013), the value that is above 0.7 is considered as acceptable internal consistency. The value of Cronbach's alpha and its internal consistency is shown in Table 4.3 and the result of a reliability test as shown in Table 4.4.

Table 4.3
Internal Consistency Measurement

Cronbach's Alpha	Internal Consistency
< 0.6	Weak
0.6 to < 0.7	Medium
0.7 to < 0.8	Good
0.8 to < 0.9	Very Good
> 0.9	Excellent

Source: Hair, Anderson, Tatham, and Black (2007)

Table 4.4

Summary of Reliability Test Result

Variables	No of items	No. of Items Deleted	Cronbach's Alpha	Strength of Association
Green Purchase Behaviour	7	-	0.835	Very Good
Attitude towards Green Products	6	-	0.896	Very Good
Subjective Norm	4	-	0.840	Very Good
Perceived Behavioural Control	4	-	0.858	Very Good
Environmental Involvement	4	-	0.792	Good
Media Exposure to Environmental Message	4	-	0.846	Very Good

From the table, it was noted that the coefficient alphas of the variables after were within the range of 0.792 to 0.896, indicating that the internal consistency reliability of the measurement scales used for the variables was considered reliable and acceptable. Further to that, Gliem and Gliem (2003) and Hair, Anderson, Tatham, and Black (1998) also posited that the reliability of a measure is considered stronger if the coefficient alpha value is closer to one.

4.6 Correlation Analysis

Pearson Correlation is a bivariate analysis that examined the relationship between two variables respectively measured using interval or ratio scale. This test is able to describe the correlation or relationship between independent variables with the dependent variable and to identify whether there any significant relationship between the independent variables and dependent variable. Table 4.5 shows Pearson's Correlation scale that describes relationship strength between the dependent variable and independent variables while Table 4.6 is the summary of the result obtained from correlation analysis between the independent variables and dependent variables.

Table 4.5

Pearson's Correlation Scale

r Value	**Correlation Strength**
0.01 – 0.09	Very low correlation
0.10 – 0.29	Low correlation
0.30 – 0.49	Moderate correlation
0.50 – 0.69	Strong correlation
0.70 – 1.0	Very strong correlation

Source: Sekaran (2003)

Table 4.6

Summary of Pearson Correlation

Variables	Green Purchase Behaviour	Attitude towards Green Products	Subjective Norm	Perceived Behavioural Control	Environmental Involvement	Media Exposure to Environmental Message
Green Purchase Behaviour	1.000					
Attitude towards Green Products	.430**	1.000				
Subjective Norm	.551**	.351**	1.000			
Perceived Behavioural Control	.562**	.437**	.614**	1.000		
Environmental Involvement	.452**	.452**	.372**	.469**	1.000	
Media Exposure to Environmental Message	.465**	.421**	.406**	.428**	.544**	1.000

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

Correlation 1: There is a significant correlation between attitude towards green products towards millennial consumer's green purchase behaviour.

Based on the summary of Pearson correlation in Table 4.6, the result shows the p-value is 0.000 which is smaller than α value of 0.01. Therefore, it can be concluded that there was moderate relationship exists between attitudes toward green products and millennial consumer's green purchase behaviour, in which the correlation coefficient value, r = 0.430.

Correlation 2: There is a significant correlation between subjective norm towards millennial consumer's green purchase behaviour.

The result of correlation analysis showed that there was a strong relationship between subjective norm and millennial's green purchase behaviour where $p < 0.01$ and $r = 0.551$.

Correlation 3: There is a significant correlation between perceived behavioural control towards millennial consumer's green purchase behaviour.

A Pearson correlation coefficient was computed to assess the correlation between perceived behavioural control and millennial consumer's green purchase behaviour. The result shows that there is a positive and strong relationship between the two variables in which r = 0.562 and p is below 0.01.

Correlation 4: There is a significant correlation between environmental involvement towards millennial consumer's green purchase behaviour.

The correlation between environmental involvement and millennial's green purchase behaviour was investigated through Pearson correlation analysis. The data indicates that there was a positive and moderate relationship, $r = 0.452$ and $p < 0.01$.

Correlation 5: There is a significant correlation between media exposure to environmental messages towards millennial consumer's green purchase behaviour.

Based on the results of Pearson correlation in Table 4.6, it shows the p-value is 0.000 which is smaller than α value of 0.01. Therefore, it can be concluded that there was moderate relationship exists between media exposure to environmental messages and millennial consumer's green purchase behaviour, in which the correlation coefficient value, $r = 0.465$.

4.7 Descriptive Analysis

Descriptive analysis highlighted the mean and standard deviation for independent variables and the dependent variable involves in this study. The mean and standard deviation data can determine the variability of the variables. In this study, descriptive analysis was analysed to measure the minimum, mean and standard deviation for millennial consumer's green purchasing behaviour, attitude toward green products, subjective norm, perceived behavioural control, environmental involvement and media exposure to environmental message. In addition, all items in the questionnaires was measured by using Likert scale of 1 to 7 starting from a scale of 1 represents as

"Strongly Disagree" to scale 7 represents as "Strongly Agree". Summary of descriptive analysis results for all variables described in Table 4.7 below.

Table 4.7
Summary of Descriptive Statistics

	N	Mean	Std. Deviation
Attitude toward Green Products	346	5.8882	.74354
Subjective Norm	346	5.0925	.86190
Perceived Behavioural Control	346	5.3468	.79583
Environmental Involvement	346	5.4595	.73831
Media Exposure to Environmental Message	346	5.2218	.85874
Green Purchase Behaviour	346	5.1548	.79329

From Table 4.7, it shows that attitude towards green products has the highest mean values compared to the other four independent variables which is equal to 5.8882 (Std. Dev. = 0.74354). This clearly indicates that the majority of millennial generation consumer portray positive attitude towards green products. This is followed by environmental involvement and perceived behavioural control with the value of mean equal to 0.4595 (Std. Dev. = 0.73831) and 5.3468 (Std. Dev. = 0.79583) respectively.

Next, media exposure to environmental message reported mean values equal to 0.52218 (Std. Dev. = 0.85874). The high number mean values indicate that millennial generation are often seeing the environmental message through mass media. The last independent variable is the subjective norm is the mean value is 5.0925 (Std. Dev. = 0.86190). Meanwhile, the mean value for a dependent variable of millennial consumer's green purchase behaviour is 5.1548 (Std. Dev = 0.79329) which imply that most respondent showing a high green purchase behaviour. In addition, from the table

above, it shows that all the standard deviations seem to fall between the ranges 0.73831 and 0.86190 which reflect the existence of considerably acceptable variability within the dataset.

4.8 Regression Analysis

Regression analysis was used to predict the influence of independent variables on the dependent variable. Sekaran and Bougie (2013) indicated that, when there is a situation where one or more independent variables are hypothesized to affect dependent variable, then regression analysis is needed. Regression test shows how much variance in the independent variables is explained by the dependent variable.

In this study, multiple regression analysis was used to analyse the influence of attitude toward green products, subjective norm, and perceived behaviour control, environmental involvement and media exposure to environmental message towards millennial consumer's green purchasing behaviour. Multiple regression analysis was applied in an attempt to answer research questions, research objectives and also all the research hypotheses. The following hypotheses are subject for further analysis and the results are summarized in this section.

H1: There is a significant relationship between attitude towards green products and millennial consumer's green purchase behaviour.

H2: There is a significant relationship between subjective norm and millennial consumer's green purchase behaviour.

H3: There is a significant relationship between perceived behavioural control and millennial consumer's green purchase behaviour.

H4: There is a significant relationship between environmental involvement and millennial consumer's green purchase behaviour.

H5: There is a significant relationship between media exposure to environmental message and millennial consumer's green purchase behaviour.

Table 4.8
Summary of Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.670[a]	.449	.440	.59339

Note:

a. Predictors: (Constant), Media Exposure to Environmental Message, Subjective Norm, Attitude toward Green Products, Environmental Involvement and Perceived Behavioural Control

The result of regression the five independent variables that are entered into the regression model show R (0.670) which is the correlation of the independent variables with the dependent variable. After all, the intercorrelations among five independent variables are taken into account, the R Square Value is 0.449. Hence, the studied independent variables explained 44.9 percent of millennial consumer's green purchase behaviour.

Table 4.9
Summary of Coefficients

Model	Standardized Coefficients Beta	T	Sig.
(Constant)		1.739	.083
Attitude towards Green Products	.121	2.519	.012
Subjective Norm	.263	5.036	.000
Perceived Behavioural Control	.228	4.106	.000
Environmental Involvement	.118	2.328	.020
Media Exposure to Environmental Message	.152	3.062	.002

The coefficient summary presented in Table 4.9 provides the estimated of the proposed model parameters. The estimated equation for the proposed model is given in Table 4.10.

Table 4.10
Estimated Equation for the Proposed Model

Y = 0.527 + 0.129 X1 + 0.242X2 + 0.227X3 + 0.126X4 + 0.140X5

Y = Dependent Variable: Green Purchasing Behaviour

XI = Attitude towards Green Products

X2 = Subjective Norm

X3 = Perceived Behavioural Control

X4 = Environmental Involvement

X5 = Media Exposure to Environmental Message

4.8.1 Interpretation for Hypothesis Result

H1: There is a significant relationship between attitude towards green products and millennial consumer's green purchase behaviour.

In this study, multiple regression analysis was used to test whether attitude towards green products has a significant relationship on millennial consumer's green purchase behaviour in Malaysia. Based on the Table 4.9, it showed that attitude toward green products value for Standardized Coefficients Beta is ($B=0.121$, $p < 0.05$), which indicate that attitude has a significant influence toward millennial consumer's green purchasing behaviour. This also implies that most of the millennial generation have a favourable attitude toward green products which resulted in green purchasing behaviour. Therefore, hypothesis H1 is supported. This is supported by Vazifehdousta et al., (2013) where they mentioned that consumer's willingness to purchase green products is determined by a positive attitude towards green products.

H2: There is a significant relationship between subjective norm and millennial consumer's green purchase behaviour.

Multiple regression analyses were used to test whether subjective norm has a significant relationship on millennial consumer's green purchasing behaviour in Malaysia. From the observation of Table 4.9, the subjective norm has the highest Coefficients Beta ($B = 0.263$, $p < 0.05$), which indicate that subjective norm is the best predictor in influencing millennial's green purchasing behaviour. This is further supported by Lee (2009) in which he found that social influence or known as the subjective norm is the top predictors of young consumer's green purchasing behaviour.

Consistent with the result by Joshi and Rahman (2016) where they found that social influence also known as subjective norm have the highest predictive power over the other studied variables. This result can be explained with the help of consumer socialization theory, which suggests that social groups have a wider influence on younger consumption behaviour (John, 1999). Millennial consumers usually might find themselves obliged to follow these norms to get social approval and acceptance in the group.

H3: There is a significant relationship between perceived behavioural control and millennial consumer's green purchase behaviour.

Multiple regression analysis was conducted to examine whether the perceived behavioural control has a significant relationship on millennial consumer's green purchasing behaviour. Referring to the Table 4.9, perceived behavioural control has a Coefficients Beta ($B = 0.228$ $p < 0.05$). This result shows that perceived behavioural control appeared to be the second most dominant factor that has significant influence toward millennial generation's green purchase behaviour. This implies that the majority of respondents agree in which if they have substantial resources and control over certain behaviour, they are likely to perform such behaviour, in this case, green purchase behaviour. This supported by past researcher where they found perceived behavioural control have a significant and positive impact on intention and actual purchase of green products (Ma et al., 2012; Wang et al., 2014).

H4: There is a significant relationship between environmental involvement and millennial consumer's green purchase behaviour.

Multiple regression applied to assess whether environmental involvement has a significant relationship with millennial's green purchase behaviour. The results from Table 4.9 shows that environmental involvement has a significant influence on millennial's purchase behaviour where Coefficient Beta ($B = 0.118$, $p < 0.05$). This indicates that consumer involvement in environmental activities and their emotion toward environmental protection affect their decision in purchasing eco-friendly products. This fact is supported by Lee (2010) in which environmental involvement exerts a far greater influence on the younger generation's green purchase behaviour. This is also in line with existing environmental research that suggests that the environmental behaviour of youngsters is more emotionally involved, rather than rationally (Bang et al., 2000).

H5: There is a significant relationship between media exposure to environmental message and millennial consumer's green purchase behaviour.

Finally, multiple regression was used to examine the relationship between media exposure to the environmental message and millennial consumer's green purchasing behaviour. As refer to the Table 4.9 above, media exposure to environmental message has a positive and significant relationship toward millennial consumer's green purchasing behaviour with Coefficient Beta ($B = 0.152$, $p < 0.05$). This result is supported by Lee (2014) where he found environmental messages that publicize

through the mass media has significantly affected consumer's purchase behaviour towards the environmentally friendly product.

Table 4.11
Summary of Hypothesis Results

	Standardized Beta's Coefficient	Results	Direction of Influence
Attitude towards Green Products	0.121**	Supported	Positive influence
Subjective Norm	0.263**	Supported	Positive influence
Perceived Behavioural Control	0.228**	Supported	Positive influence
Environmental Involvement	0.118**	Supported	Positive influence
Media Exposure to Environmental Message	0.152**	Supported	Positive influence

Note. ** $p < 0.05$

4.9 Conclusion

From a study conducted on a sample of 346 respondents from students in University Utara Malaysia, it can be summarized that all five hypotheses examined gave significant results. There is two level of statistical analysis were conducted which are a descriptive statistic (an overview of the basic characteristics of the data) and statistical analysis (Pearson correlation and multiple regression). As referring to the results, all the hypotheses are accepted. It can be concluded that this study has achieved the objectives as set out in chapter one. The last chapter explains explained on research summary, discussion of study based on research objective achievement, the contribution of the study, limitation of study, recommendation for future result and conclusion for a research study.

CHAPTER 5

DISCUSSION AND CONCLUSION

5.0 Introduction

In this chapter, the discussion and finding of the study based on the research objectives presented in chapter one. It begins with the research summary and followed with the achievement of investigation objectives. Followed with the contribution of the study in the theoretical and practical field, discussion of limitation and future research is included within this chapter. This chapter ends with a conclusion of the study.

5.1 Research Summary

In particular, the researched were proposed to test the Theory of Planned Behaviour together with extended two variables which are environmental involvement and media exposure to environmental message. Moreover, the motivation of this study was to determine the factors that contribute to millennial consumer's green purchasing behaviour in Malaysia.

Concisely, there are five independent variables were introduced in the framework of this study namely attitude towards green products, subjective norm, perceived behavioural control, environmental involvement and media exposure to environmental message to examine which independent variables have the most significant relationship and influence on millennial consumer's green purchase behaviour. There was five main hypothesis that has been proposed in this study which including:

H1: There is a significant relationship between attitude towards green products and millennial consumer's green purchase behaviour.

H2: There is a significant relationship between subjective norm and millennial consumer's green purchase behaviour.

H3: There is a significant relationship between perceived behavioural control and millennial consumer's green purchase behaviour.

H4: There is a significant relationship between environmental involvement and millennial consumer's green purchase behaviour.

H5: There is a significant relationship between media exposure to environmental message and millennial consumer's green purchase behaviour.

The sampling frame for the present study was students who stayed inside the Inasis in University Utara Malaysia with a population size of 13,920. Approximately, a total amount of 375 students which comprised of students who stayed in fifteen different Inasis namely MAS, TNB, Proton, Tradewinds, Petronas, Grantt, Sime Darby, TM, BSN, MISC, Maybank, Bank Muamalat, YAB, Bank Rakyat and SME Bank have been selected as the respondents for this study. The total number of respondents was in accordance with the table of determining sample size by Krejcie and Morgan (1970). Additionally, the sample size for this study has been allocated proportionately among fifteen Inasis by using proportionate sampling method.

Besides that, as for data collection purpose, the questionnaires were distributed to all Inasis in UUM. The researcher selected the selected every 5th room in each level of block. In other words, every room number that ended with either zero or five was selected and later the questionnaire was given to students who stay in those rooms.

Furthermore, in an attempt to answer the research questions as stated in chapter one, five hypotheses were developed. The results from the analysis as presented in chapter four demonstrated the positive and moderate relationship between the five independent variables (attitude towards green products, subjective norm, perceived behavioural control, environmental involvement and media exposure to the environmental message) and millennial consumer's green purchasing behaviour as indicated in the correlation analysis using Pearson correlation. Subsequently, multiple regression analysis was run to test the hypotheses and the results showed that all five hypotheses were supported (H1, H2, H3, H4, H5).

5.2 Discussion of Study based on Research Objectives

The discussion of this study was established based on the five research objectives which have been presented in the earlier chapter. In this study, the all the research objectives were aimed to determine the relationship between five independent variables and dependent variable. To be more specific, the research objective is an attempt to discover whether there is any significant relationship between attitude toward green products, subjective norm, perceived behavioural control, environmental involvement and media exposure to environmental message with millennial consumer's green purchase behaviour.

5.2.1 Discussion of Correlation Analysis

Based on the result of Pearson correlation analysis in chapter four, it has proved that there was a significant relationship between all five independent variables including attitude toward green products, subjective norm, perceived behavioural control, environmental involvement and media exposure to environmental message with dependent variable which is millennial consumer's green purchase behaviour.

The correlation results suggested there was strong, positive correlation between perceived behavioural control and millennial's green purchase behaviour. The result shows that there is a positive and strong relationship between the two variables in which r = 0.562 and p is below 0.01. Hence, this result showed that perceived behavioural control as the predictor which hold the highest value of correlation. Thus, H3 is accepted.

Besides that, subjective norm also showed a positive relationship between millennial consumers' green purchase behaviour where the p-value is less than 0.01. The positive value of a Pearson correlation (r = 0.551) signifies that the strength of the relationship is high which possessed the second highest coefficient value for correlation. Hence, H2 can be accepted.

Next, the result from correlation analysis showed there was a moderate, positive correlation between media exposure to environmental message toward millennial consumer's green purchase behaviour where ($p < 0.01$) and $r = 0.465$. Thus, indicating that this variable is the third highest coefficient value of correlation and H5 is acceptable.

Another variable that showed positive correlation is environmental involvement toward millennial consumer's green purchase behaviour in which r = 0.452 and p < 0.01. The positive value of Pearson correlation indicates the strength of the relationship between the two variables is moderate. Thus, H4 is accepted.

Finally, the result of correlation analysis showed that attitude toward green products has the lowest coefficient value for correlation. The result of correlation suggested that there were moderate, positive correlation between attitude toward green products and millennial consumer's green purchase behaviour where (p < 0.01) and r = 0.430. There is a significant correlation between attitudes toward green products towards millennial consumer's green purchasing behaviour. Therefore, H1 is accepted.

5.2.2 Discussion of Regression Analysis

The result based on multiple regression analysis has indicated that all independent variables have significant influence toward millennial consumer's green purchase behaviour. The first variable which is the attitude towards green products was found significant in influencing millennial consumer's green purchase behaviour in which (Beta = 0.121, p < 0.05). Moreover, as the mean score for attitude toward green products is above five, this indicated that millennial students in UUM have a good and favourable attitude toward green products. This is the result is consistent with the previous study by Vazifehdousta et al., (2013) where they mentioned that consumer's willingness to purchase green products is determined by a positive attitude towards green products. It is also supported by a recent study by Yadav and Pathak (2017) where the attitude towards green products was found to have significant positive

influence toward consumer's green purchase behaviour. Therefore, it can be summed up that the higher the consumer attitude toward green products, the higher their purchase behaviour toward green products.

On the other hand, the findings showed that subjective norm has the highest Coefficients Beta ($B = 0.263$, $p < 0.05$) which indicate that subjective norm has the major impact and positive significant in influencing the millennial consumer in UUM toward their green purchase behaviour. The finding of this study consistent with the result from Joshi and Rahman (2016) where they found subjective norm have the highest predictive power and has a significant effect on green purchasing behaviour. In this research, the influences factors come from two groups of close people surrounding the young consumers, namely friends and family members. The results indicate that most of the young consumer always look up to the behaviour of peoples that close to them to make decisions. This is proven by Lascu and Zinkhan (1999) where they mentioned in their study that the young consumer always favour the opinions of their peer groups when making choices during the purchasing process. This fact was further supported by Noor et al., (2017) where it can be obviously seen that the influence of family and friends are very important to stimulate the millennial generation's green purchase decision. Hence, it can be said that subjective norm has a positive and significant influence on millennial consumer's green purchase behaviour.

Next, perceived behavioural control appeared to be the second most dominant factor that has significant influence toward millennial generation's green purchase behaviour where ($B = 0.228$ $p < 0.05$). This supported by past researchers where they found perceived behavioural control have a significant and positive impact on

intention and actual purchase of green products (Ma et al., 2012; Wang et al., 2014). The results of this study indicate that majority of UUM respondents have substantial resources, time and willingness to purchase green products. Even though the findings on respondent demographic information regarding student's personal monthly income showed the majority of student's having less than RM1000 which contributed to 301 (87%) respondents, they still portray positive attitude towards sustainable behaviour and willing to purchase green products in near future although the price of green products is higher compared to conventional products. Likewise, a study done by Smith (2010) found that consumers who possess positive attitudes toward green products are willing to pay more for green services, products, or brands. Therefore, it can be concluded that perceived behavioural control has a significant influence on the millennial consumer's green purchase behaviour.

In addition, media exposure to environmental message comes as the third variable that has a positive and significant relationship toward the millennial consumer's green purchase behaviour where the results showed ($B = 0.152$, $p < 0.05$). This is because most students in UUM have received early exposure regarding green movement in university. There are many green advertisements and posters have been patched on every notice board in each Inasis and cafeterias. Other than that, each block in Inasis was equipped with television room that can be entered by students at any times. Additionally, as wireless networking technology known as Wi-Fi is also accessible in almost anywhere in UUM, students have the capabilities to browse through internet no matter what time and place. For these reasons, student's media exposure to the environmental message was considered high in UUM which has affected them to change their behaviour toward sustainability and influence their green

purchase behaviour. Hence, the finding of the study has shown that exposure to environmental messages through media can influence young consumer's environmental concern (Good, 2006; Holbert et al., 2003) and has significantly affected young consumer's purchase behaviour towards environmentally friendly products (Lee, 2014). Thus, it can be said that media exposure to the environmental message has greatly influenced young consumer's green purchase behaviour.

Besides that, results from regression analysis also indicate that environmental involvement has a significant influence on millennial's green purchase behaviour ($B = 0.118$, $p < 0.05$). This data showed that consumer involvement in environmental activities and their emotion toward environmental protection affects their decision in purchasing eco-friendly products. UUM has been known as one of the top green universities in the world. According to the UI Green Metric World University Ranking (2017), UUM was ranked 83rd place and 5th place in Malaysia. As UUM has been associated as a green campus, many green campaigns have been successfully implemented to raise awareness among students and staffs in UUM about the importance of preserving the environment. For instance, Program Greener, Cleaner and Campus Initiative (GCCI) were conducted among 18,000 students from 15 Inasis in UUM. Specifically, each Inasis has come out their own green campaign namely Green Day BSN, Green Campus, Spring Cleaning, Recycling Campaign, Green Run and few others. As a result, these programs have successfully increased the student's awareness on the importance of protecting the environment and successfully respondent to the government and the world's intention to produce graduates who are sensitive to the importance of safeguarding the environment. Therefore, this has proven that students in UUM have good green involvement. Subsequently, their

involvement in greening the environment has influenced their purchase behaviour towards environmentally friendly products. This fact is supported by Lee (2010) in which environmental involvement is better in influence on the younger generation's green purchase behaviour.

This is also in line with existing environmental research that suggests that the environmental behaviour of youngsters is more emotionally involved, rather than rationally (Bang et al., 2000). Several studies have also revealed that an individual's environment-related perception, cognition and emotion are positively associated with environmental behaviour (Kollmuss & Agyeman, 2002; Schultz et al., 2004). Therefore, it can be concluded that the higher the individual's green involvement toward nature, the higher the likeness and readiness of consumers to adopt green lifestyle specifically in their green buying behaviour.

5.3 Contribution of the Study

Under this section, both theoretical and practical contributions of this study will be discussing in detail.

5.3.1 Theoretical Contribution

Theoretically, this paper contributes to the fields of consumer behaviour and green marketing. It added to current literature on predictors and motivators of green purchase behaviour among the millennial generation consumers in Malaysia and thus provided better insight and understanding the green behaviour of this generation.

The Theory of Planned Behaviour is constructed with three determinants which are the attitude toward green products, subjective norm and perceived behavioural control. Environmental involvement and media exposure to the environmental message has been integrated into the Theory of Planned Behaviour and has become extended for the proposed theoretical model. Throughout the finding, all hypotheses are confirmed to have positive significant influence millennial consumer's green purchasing behaviour. Therefore, this research has been conducted to bridge the gap in the relationship between millennial consumer's green purchase behaviour with five predictors and provide better understanding within this cohort's generation. The findings in the present study fully supported the role of Theory of Planned Behaviour variables in determining the consumer's purchase behaviour towards the green products. This shows the applicability of this theory in determining the consumer's intention and behaviour to purchase green products in the Malaysian context.

5.3.2 Practical Contribution

Practically, the outcome of this study contributes to both manufacturers and marketers with a clearer understanding of prominent factors that have a significant influence on millennial consumer's green purchase behaviour in Malaysia. Hence, by gaining better insights and understanding of millennial consumer green consumption, retailers will be able to exhibit and enhance more effective and efficient marketing plan and communication strategies to attract and gain a larger number of consumers within this cohort. As millennial has become the most important for the future green market segment, through appropriate marketing strategies that appeal to this market segment will enable the businesses to drive sales and increase market share.

Besides that, the findings of this study will greatly assist the government bodies in promoting sustainable consumption among Malaysian. This present study found that environmental involvement and media exposure has significant contribution in influencing millennial consumer's green purchase behaviour. Therefore, the government in Malaysia can now vigorously introduce several green campaigns via advertisements and social media exposure to attract more young generation to participate in the campaign. Any green messages that disseminate through various mass media channels will be very helpful in promoting green lifestyle among millennial generation in Malaysia.

5.4 Limitation of Study

There are several limitations in this study. First and foremost, the limitation is regarding the information gathered from secondary data which may be outdated in which may cause slightly inaccurate information for the research related to the factors that contribute toward green purchase behaviour.

The second limitation of this study is the research paper only cover the small scope of study related to the millennial generation purchase behaviour in Malaysia context which may not represent the population worldwide. Hence, this study cannot be generalized to other Asian or Europe country as this paper scope of the study only focuses on Malaysian millennial generation. The sample of this study also was taken from a particular location. Therefore, characteristics of the sample may show different results to other locations because young people's behaviour is also influenced by other

background factors, for example, culture, personality, emotion, values, general attitudes, experience, income and others.

The independent variables studied in this research which consist of five dominant factors such as attitude toward green products, subjective norm, perceived behavioural control, environmental involvement and media exposure to environmental message may not be sufficient since there are many other factors suggested by past researchers that can contribute toward green purchase among millennial consumer in Malaysia.

5.5 Recommendation for Future Research

For the study, the researcher only uses population at University Utara Malaysia as respondents. So, it is recommended to compare students in different universities in Malaysia in order to examine whether the geographical and environmental factors influence the way of students to reflect on the green product as well as their green purchase behaviour. As the respondents are only among students in University Utara Malaysia, Kedah, it does not reflect the overall population in Malaysia It is suggested that other researcher can do a more comprehensive study Malaysia which covering the total of 13 states. The response received might be better and more accurately reflects the behaviour of millennial consumer in green purchases and the result will show the behaviour in purchasing green products by the entire population in Malaysia.

Furthermore, comparison study is highly suggested if replication of this research is to be conducted in future. The comparison should be conducted between different type of group generation which is between old millennial and young millennial because it might have divergent results and perspective in millennial consumer's green purchase behaviour. Concisely, the comparison study might exhibit more insights and understanding that may enhance the findings of the research.

Lastly, for further study, other variables should be taken into consideration. Other variables should include the study such as culture, past experience, perceptions, personality, trust and many more. Perhaps, moderator and mediating effects should be considered. Furthermore, as the present study explored the millennial's green purchase behaviour in general product, it suggested that other researcher to study millennial consumer's green purchase behaviour toward a particular green product that is more specific.

5.6 Conclusion

Based on overall findings, this study has provided empirical evidence on the relationship between attitude towards green products, subjective norm, perceived behavioural control, environmental involvement and media exposure to environmental message with millennial consumer's green purchase behaviour. Most importantly, this study has succeeded in answering the research objective as mentioned in chapter one.

The findings from Pearson correlation analysis also indicated that all independent variables including attitude toward green products, subjective norm, perceived behavioural control, environmental involvement and media exposure to

environmental message demonstrate a positive and significant relationship with dependent variables which is millennial consumer's green purchase behaviour. Additionally, through the analysis of regression, it also found that all the studied variables had a significant influence on millennial's consumer green purchase behaviour and also showed that subjective norm was the best predictor in influencing millennial's consumer green purchase behaviour.

This study has adopted, modified and validated a model related to the millennial generation green product purchase decision in Malaysia originated from the Theory of Planned Behaviour. It can be declared that millennial generation in UUM is aware of the green lifestyle and know their roles in safeguarding the environment. They have the willingness to purchase and consume environmentally friendly products despite the majority of them were having low monthly personal income. Marketers must understand that this generation is ready for a better lifestyle in the future. They have portrayed their commitment through positive attitude towards green products.

Apart from that, subjective norm was found to be very important in stimulating the millennial generation green purchase decision. Therefore, it can be concluded that subjective norms must be treated as the main driver to influence millennial consumer's green purchase behaviour in Malaysia.

REFERENCES

Abdelaziz, S. I., Saeed, M. A., & Benleulmi, A. Z. (2015). Social Media Effect on Sustainable Products Purchase. *Proceedings of the Hamburg Inter*.

Abdullah, A. S., Sheikh Mohammad, R. H., Muhammad, H., & Mohd Noor, M. S. (2014). The Role of Subjective Norms in Theory of Planned Behavior in the Context of Organic Food Consumption. *British Food Journal, 116*(10), 1561 - 1580.

Abdulwahab, L., Dahalin, Z. M., & Galadima, M. B. (2011). Data Screening and Preliminary Analysis of the Determinants of User Acceptance of Telecentre. *Journal of Information Systems: New Paradigms, 1*(1).

Abella, D. D., & Yap, D. C. (2012, December 30). *The Organizational Benefits of Going Green*. Retrieved April 6, 2018, from Inquirer.Net: http://business.inquirer.net/100449/the-organizational-benefits-of-going-green

Adilah, M. D., Wanni, L., & Raja Huda, R. S. (2016). Factor Affecting Green Awareness on Generation Y Purchasing Behavior Factor Affecting Green Awareness on Generation Y Purchasing Behavior. *Journal of Applied Environmental and Biological Sciences, 6*(11), 36-43.

Ajzen, I. (1985). *From Intention to Actions: A Theory of Planned Behaviour.* Springer, Berlin, Heidelberg.

Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and, 50*, 179-211.

Ajzen, I., & Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behavior.* Englewood Cliffs, NJ: Prentice-Hall.

Ajzen, I., & Fishbein, M. (2005). *The Influence of Attitudes on Behavior.* New Jersey: Lawrence Erlbaum Associates: The Handbook of Attitudes.

Amireault, S., Godin, G., Vohl, M. C., & Pérrusse, L. (2008). Moderators of the Intention-Behaviour and Perceived Behavioural Control-Behaviour Relationships for Leisure Time Physical Activity. *International Journal of Behavioral Nutrition and Physical Activity, 5*(7). doi:10.1186/1479-5868-5-7

Andrews, F. M., & Withey, S. B. (1976). *Social Indicators of Well-Being: Americans Perceptions of Life Quality*. Springer.

Armitage, C. J., & Talibudeen, L. (2010). Test of a Brief Theory of Planned Behaviour-based Intervention to Promote Adolescent Safe Sex Intention. *British Journal of Psychology*, *101*(1), 155–172.

Atwater, T., Salwen, M. B., & Anderson, R. B. (1985). Media Agenda-Setting With Environmental Issues. *Journalism Quarterly, 62*(2), 393-397.

Bang, H. K., Ellinger, A. E., Hadjimarcou, J., & Traichal, P. A. (2002). Consumer Concern, Knowledge, Belief, and Attitude Toward Renewable Energy: An Application of the Reasoned Action Theory. *Psychology & Marketing, 17*(1), 6-26.

Barber, N. A., Bishop, M., & Gruen, T. (2014). Who Pays More (or Less) for Pro-environmental Consumer Goods? Using the Auction Method to Assess Actual Willingness To Pay. *Journal of Environmental Psychology, 40*, 218-227.

Bockman, S., Razzouk, Y., & Sirotnik, B. (2009). Going Green – From Left to Center Stage: An Empirical Perspective. *Journal of the American Academy of Business, 14*(2), 8-17.

Bronfman, N. C., Cisternas, P., Vázquez, E. L., Maza, C., & Oyanedel, J. C. (2015). Understanding Attitudes and Pro-Environmental Behaviors in a Chilean Community. *Sustainability, 7*(10), 14133-14152.

Bruwer, J. D., & Haydam, N. E. (1996). Reducing Bias In Shopping Mall-Intercept Surveys: The Time-Based Sytematic Sampling Method. *South African Journal Business Management, 27*(1), 9-17.

Bryman, A., & Bell, E. (2015). *Business Research Methods* (4th ed.). Oxford, United Kingdom: Oxford University Press.

Byrne, B. M. (2010). *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming.* New York, NY: Routledge.

Cavana, R., Delahaye, B. L., & Sekaran, U. (2001). *Applied Business Research: Qualitative and Quantitative Methods.* Singapore: Markono Print Media Ltd,.

Chan, R. Y. (2001). Determinants of Chinese Consumers' Green Purchase Behavior. *Psychology & Marketing, 18*(4), 389-413.

Chan, R. Y., & Lau, L. B. (2002). Explaining Green Purchasing Behavior: A Cross-Cultural Study on American and Chinese Consumers. *Journal of International Consumer Marketing, 14*(2-3), 9-40.

Cheah, I., & Phau, L. (2011). Attitudes Towards Environmentally Friendly Products: The Influence of Ecoliteracy, Interpersonal Influence and Value Orientation. *Marketing Intelligence & Planning, 29*(5), 452-472.

Chen, M. F., & Tung, P. J. (2014). Developing an Extended Theory of Planned Behaviour Model to Predict Consumer's Intention to Visit Green Hotels. *International Journal of Hospitality Management, 36*, 221-230.

Chen, T. B., & Chai, L. T. (2010). Attitude Towards the Environment and Green Products: Consumers' Perspective. *Management Science and Engineering, 4*(2), 27-39.

Churchill, G.A. (1979). A Paradigm for Developing Better Measures of Marketing Constructs. *Journal of Marketing Research, 16*, 64-73.

Coakes, S. J., & Steed, L. G. (2003). *SPSS: Analysis Without Anguish Using SPSS Version 11.0 for Windows.* Wiley.

Connell, K. Y. (2010). Internal and External Barriers to Eco-conscious Apparel Acquisition. *International Journal of Consumer Studies, 34*(3), 279-286.

Cooper, D. R., & Schindler, P. S. (2003). *Business Research Methods* (8th ed.). New York: McGraw Hill.

Cowan, K., & Kinley, T. (2014). Green Spirit: Consumer Empathies for Green Apparel. *International Journal of Consumer, 38*(5), 493-499.

Dagher, G. K., Itani, O., & Kassar, A. N. (2015). The Impact of Environment Concern and Attitude on Green Purchasing Behavior: Gender as The Moderator. *Contemporary Management Research, (11)*2, 179-206. doi:10.7903/cmr.13625

Danjelico, R. M., & Pujari, D. (2010). Mainstreaming Green Product Innovation: Why and How Companies Integrate Environmental Sustainability. *Journal of Business Ecthics, 95*(3), 471–486.

Deal, J. J., Altman, D. G., & Rogelberg, S. G. (2010). Millennials at Work: What We Know and What We Need To Do (if anything). *Journal of Business and Psychology, 25*, 191-199.

Dean, M., Raats, M. M., & Shepherd, R. (2012). The Role of Self-identity, Past Behaviour and their Interaction in Predicting Intention to Purchase Fresh and Processed Organic Food. *Journal of Applied Social Psychology, 42*(3), 669-688.

Deepak, J., & Rishi, K. (2018). Green Purchasing Behaviour: A Conceptual Framewok and Empirical Investigation of Indian Consumer. *Journal of Retailing and Consumer Services, 41*, 60-69.

DeFleur, M., & Dennis, E. (1998). *Understanding Mass Communication* (6th ed.). Boston: Houghton Mifflin.

Deutsch, M., & Gerard, H. (1955). A Study of Normative and Informational Social Influences Upon Individual Judgment. *Journal of Abnormal & Social Psychology, 51*(3), 629-636.

Diamantopoulos, A., Schlegelmilch, B. B., Sinkovics, R., & Bohlen, G. M. (2003). Can Socio-demographics still Play a Role in Profiling Green Consumers? A Review of the Evidence and an Empirical Investigation. *Journal of Business Research, 56*(6), 465-480.

Dolan, E., McKeon, N., & Mellon, S. (2015). Easy Being Green? The Effects of Environmental Marketing on Millennials Consumer Behaviour.

Donald, I., Cooper, S. R., & Conchie, S. M. (2014). An Extended Theory of Planned Behaviour Model of the Psychological Factors Affecting Commuters Transport Mode Use. *Journal of Environmental Psychology, 40*, 39-48.

D'souza, C., Taghian, M., & Khosla, R. (2007). Examination of Environmental Beliefs and its Impact on the Influence of Price, Quality and Demographic Characteristics with Respect to Green Purchase Intention. *Journal of Targeting, Measurement and Analysis for Marketing, 15*(2), 69-78.

Eastman, J., & Liu, J. (2012). The Impact of Generational Cohorts on Status Consumption: An Exploratory Look at Generational Cohort and Demographics on Status Consumption. *Journal of Consumer Marketing, 29*(2), 93-102.

Eze, U. C., & Ndubisi, N. O. (2013). Green Buyer Behavior: Evidence from Asia Consumers. *Journal of Asian and African Studies, 48*(4), 413-426.

Fazio, R. (1995). Attitudes as Object-Evaluation Associations: Determinants, Consequences, and Correlates of Attitude Accessibility. *Attitude Strength: Antecedents and Consequences*, 247-282.

Fisk, G. (1959). Media Influence Reconsidered. *Public Opinion Quarterly, 23*(1), 83-91.

Fuller, B. (2013). *Baby-boomer Marketers are Misreading Millennials' Media Behavior.* Retrieved April 4, 2018, from Advertising Age: http://adage.com/article/guest-columnists/marketers-losing-money-misreading-millennials/241407/

Gadenne, D., Sharma, B., Kerr, D., & Smith, T. (2011). The Influence of Consumers' Environmental Beliefs and Attitudes on Energy Saving Behaviours. *Energy Policy, 39*(12), 7684-7694.

Gentina, E., & Muratore, I. (2012). Environmentalism at Home: The Process of Ecological Resocialization by Teenagers. *Journal of Consumer Behaviour, 11*(2), 162-169.

Gliem, J., & Gliem, R. (2003). *Calculating, Interpreting, and Reporting Cronbach's Alpha Reliability Coefficient for Likert-Type Scales.* Columbus, OH: Midwest Research to Practice Conference in Adult, Continuing and Community Education.

Goh, Y. N., & Nabsiah, A. W. (2015). A Review on Green Purchase Behaviour Trend of Malaysian Consumers. *Asian Social Science, 11*(2), 103-110.

Good, J. (2006). *Internet Use and Environmental Attitudes: A Social Capital Approach* (Vol. 3). New York, NY: The Environmental Communication Yearbook.

Grunert, S. (1993). Everybody Seems Concerned about the Environment but is this Concern Reflected in Danish Consumers' Food Choice? *European Advances in Consumer Research, Iss, 1*, 428-433.

Guevarra, L. (2010, May 19). *Gen Y's Green Demands for the Workplace*. Retrieved April 6, 2018, from https://www.greenbiz.com/news/2010/05/19/gen-y-green-demands-workplace

Ha, H. Y., & Janda, S. (2012). Predicting Consumer Intentions to Purchase Energy Efficient Products. *Journal of Consumer Marketing, 29*(7), 461-469.

Hair, J. E., Anderson, R. E., Tatham, R. L., & Black, W. (2007). *Multivariate Data Analysis* (4th ed.). New York: Prentice-Hall International.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate Data* (5th ed.). New Jersey: Prentice Hall International.

Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2006). *Multivariate Data Analysis* (6th ed.). Uppersaddle River, N.J: Pearson Prentice Hall.

Han, H., Hsu, L. T., & Sheu, C. (2010). Application of The Theory of Planned Behaviour to Green Hotel Choice: Testing the Effect of Environmental Friendly Activities. *Tourism Management, 31*(3), 325-334.

Han, H., Hsu, L., & Lee, J. (2009). Empirical Investigation of the Roles of Attitudes toward Green Behaviors, Overall Image, Gender and Age in Hotel Customer's Eco-friendly Desicion Making Proces. *International Journal of Hospitality Management, 28*(4), 519-528.

Heaney, J. (2006). 2006. Generations X and Y's Internet Banking Usage in Australia. *Journal of Financial Services Marketing, 11*(3), 196-210.

Hershatter, A., & Epstein, M. (2010). Millennials and The World of Work: An Organization and Management Perspective. *Journal of Business and Psychology, 25*(2), 211-223.

Hines, J. M., Hungerford, H. R., & Tomera, A. N. (1987). Analysis and Synthesis of Research on Responsible Environmental Behavior: A Meta-Analysis. *The Journal of Environmental Education, 18*(2), 1-8.

Holbert, R., Kwak, N., & Shah, D. (2003). Environmental Concern, Patterns of Television Viewing, and Pro-environmental Behaviours: Integrating Models

of Media Consumption and Effects. *Journal of Broadcasting & Electronic Media, 47*(2), 177-196.

Hood, M. (2012). The Big Shift: The Next Generation Has Arrived. *Direct Selling News*, 10-14.

Hume, M. (2010). Compassion Without Action: Examining the Young Consumers Consumption and Attitude to Sustainable Consumption. *Journal of World Business, 45*(4), 385-394.

Iman Khalid, A. Q., & Yuserrie, Z. (2011). The Impact of Media Exposure on Intention to Purchase Green Electronic Products amongst Lecturers. *International Journal of Business and Management, 6*(3).

John, D. R. (1999). Consumer Socialization of Children: A Retrospective Look at Twenty-Five Years of Research. *Journal of Consumer Research, 26*(3), 183-213.

Joshi, Y., & Rahman, Z. (2015). Factors Affecting Green Purchase Behaviour and Future Research Directions. *International Strategic Management Review, 3*(1-2), 128-143.

Joshi, Y., & Rahman, Z. (2016). Predictors of Young Consumer's Green Purchase Behaviour. *Management of Environmental Quality: An International Journal, 27*(4), 452-472.

Kahn, M. E. (2007). Do Greens Drive Hummers or Hybrids? Environmental Ideology as A Determinant of Consumer Choice. *Journal of Environmental Economics and Management, 54*(2), 129-145.

Kalafatis, S. P., Pollard, M., East, R., & Tsogas, M. H. (1999). Green Marketing and Azjen's Theory of Planned Behaviour: A Cross Market Examination. *Journal of Consumer Marketing, 16*(5), 441-460.

Kanchanapibul, M., Lacka, E., Wang, X., & Chan, H. K. (2014). An Empirical Investigation of Green Purchase Behaviour Among the Young Generation. *Journal of Cleaner Production, 66,* 528-536.

Khare, A. (2015). Antecedents to Green Buying Behaviour: A Study on Consumers in An Emerging Economy. *Marketing Intelligence and Planning, 33*(3), 309-329. doi:10.1108/mip-05-2014-0083

Khine, M. S. (2013). *Application of Structural Equation Modeling in Educational Research and Practice.* Rotterdam, The Netherland: Sense Publishers.

Khor, M. (2016, October 24). *Act on Air Pollution, the Silent Killer*. Retrieved from The Star Online : https://www.thestar.com.my/opinion/columnists/global-trends/2016/10/24/act-on-air-pollution-the-silent-killer-curb-the-problem-for-it-kills-eight-million-people-yearly-wor/

Kim, H. Y., & Chung, J. E. (2011). Consumer Purchase Intention for Organic Personal Care Products. *Journal of Consumer Marketing, 28*(1), 40-47.

Kim, H., & Karpova, E. (2010). Consumer Attitudes toward Fashion Counterfeits: Application of the Theory of Planned Behavior. *Clothing and Textiles Research Journal, 28*(2), 79-94.

Kim, Y. J., Njite, D., & Hancer, M. (2013). Anticipated Emotion in Consumer's Intention to Select Eco-Friendly Restaurants: Augmenting the Theory of

Planned Behaviour. *International Journal of Hospitality Management, 34*(1), 255-262.

Kollmuss, A., & Agyeman, J. (2002). Mind the Gap: Why Do People Act Environmentally and What Are the Barriers to Pro-environmental Behavior? *Environmental Education Research, 8*(3), 239-260.

Kotler, P., & Armstrong, G. (2009). *Principles of Marketing* (13th ed.). Pearson Prentice Hall.

Kowske, B., Rasch, R., & Wiley, J. (2010). Millennials' (Lack of) Attitude Problem: An Empirical Examination of Generational Effects on Work Attitudes. *Journal of Business and Psychology, 25*, 265-279.

Krejcie, R. V., & Morgan, D. W. (1970). Determining Sample Size For Research Activities. *Educational and Psychological Measurement, 30*(1), 607-610.

Laroche, M., Bergeron, J., & Barbaro - Forleo, G. (2001). Targeting Consumers Who Are Willing to Pay More for Environmentally Friendly Products. *Journal of Consumer Marketing, 18*(6), 503-520.

Lascu, D. N., & Zinkhan, G. (1999). Consumer Conformity: Review and Applications for Marketing Theory and Practice. *Journal of Marketing Theory and Practice, 7*(3), 1-12.

Lee, J. S., Hsu, L. T., Han, H., & Kim, Y. (2010). Understanding How Consumers View Green Hotels: How A Hotel's Green Image Can Influence Behavioural Intentions. *Journal of Sustainable Tourism, 18*(7), 901-914.

Lee, K. (2008). Opportunities for Green Marketing: Young Consumers. *Marketing Intelligence & Planning, 26*(6), 573-586.

Lee, K. (2009). Gender Differences in Hong Kong Adolescent Consumers' Green Purchasing Behavior. *Journal of Consumer Marketing, 26*(2), 87-96.

Lee, K. (2010). The Green Purchase Behavior of Hong Kong Young Consumers: The Role of Peer Influence,Local Environmental Involvement, and Concrete. *Journal of International Consumer Marketing, 23*(1), 21-44.

Lee, K. (2014). Predictors of Sustainable Consumption Among Young Educated Consumers in Hong Kong. *Journal of International Consumer Marketing, 26*(3), 217-238.

Li, H., Daugherty, T., & Biocca, F. (2002). Impact of 3-D Advertising on Product Knowledge, Brand Attitude, and Purchase Intention: The Mediating Role of Presence. *Journal of Advertising, 31*(3), 43–57.

Lowe, P. D., & Morrison, D. (1984). Bad News or Good News: Environmental Politics and Mass Media. *Sociological Review, 32*(1), 75–90.

Lowe, P. D., & Rudig, W. (1987). Review Rrticle: Political Ecology and the Social Science - The State of Art. *British Journal of Political Science, 16*, 513–550.

Lu, L., Bock, D., & Joseph, M. (2013). Green Marketing: What the Millennials Buy. *Journal of Business Strategy, 34*(6), 3-10.

Ma, Y. J., Littrell, M. A., & Niehm, L. (2012). Young Female Consumers' Intentions Toward Fair Trade Consumption. *International Journal of Retail & Distribution, 40*(1), 41-63.

Maichum, K., Parichatnon, S., & Peng, K. (2016). Application of the Extended Theory of Planned Behavior Model to Investigate Purchase Intention of Green Products among Thai Consumers. *Sustainability, 8*(1077).

Malhotra, N. (2010). *Marketing Research An Applied Orientation.* Pearson Education, Inc.

Markert, J. (2004). Demographics of Age: Generational and Cohort Confusion. *Journal of Current Issues and Research in Advertising,, 26*(2), 11-25.

McCarty, J. A., & Shrum, L. G. (1994). The Recycling of Solid Waste: Personal Values, Value Orientations and Attitudes About Recycling As Antecedents of Recycling Behaviour. *Journal of Business Research, 30*(1), 53-62.

McKay, L. (2010). Generation Green: Why Gen Y and the Millennials are Greener than You'll Ever Be. *CRM Magazine, 14*(4), 12.

McNeal, J. U., & Ji, M. F. (1999). Chinese Children as Consumers: An Analysis of Their New Product Information Sources. *Journal of Consumer Marketing, 16*(4), 345-365.

Mee, N., & Clewes, D. (2004). The Influence of Corporate Communications on Recycling. *Corporate Communications: An International Journal, 9*(4), 265-275.

Menesses, G. D., & Palacio, A. B. (2006). Different Kinds of Consumer Response to the Reward Recycling Technique; Similarities at the Desired Routine Level. *Asia Pacific Journal of Marketing and Logistic, 18*(1), 43-60.

Mida, S. (2009). Factors Contributing in The Formation of Consumer's Environmental Conciousness and Shaping Green Purchasing Decision. *In the*

Proceedings of the 2009 Symposium on Computers and Industrial Engineering, 957-962.

Mohammad Hasbullah, S. I. (2014). *Intention to Use Green Products Among Consumers*. Master's Thesis, Universiti Utara Malaysia.

Morton, L. P. (2002). Targeting Generation Y: Segmenting. *Public Relations Quarterly, 47*, 46-48.

Moser, A. K. (2015). Thinking Green, Buying Green? Drivers of Pro Environmental Purchasing Behaviour. *Journal Consumer Marketing, 32*(3), 167-175.

Mostafa, M. (2007). Gender Differences in Egyptian Consumers' Green Purchase Behavior: The Effects of Environmental Knowledge, Concern and Attitude. *International Journal of Consumer Studies, 31*(3), 220-229.

Mostafa, M. M. (2006). Antecedents of Egyption Consumer's Green Purchase Intention: A Hierarchical Multivariate Regression Model. *Journal of International Consumer Marketing, 19*(2), 97-126.

Muniady, R., Al-Mamun, A., Permarupan, P. Y., & Noor Raihani, B. Z. (2014). Factors Influencing Consumer Behavior: A Study among University Students in Malaysia. *Asian Social Science, 10*(9). doi:10.5539/ass.v10n9p18

Muralidharan, S., & Guardia, F. R., & Xue, F. (2015). Understanding the Green Buying Behavior of Younger Millennials from India and the United States: A Structural Equation Modeling Approach. *Journal of International Consumer Marketing*, 28(1) 1-22.

Naman, S., Shankar, P., & Pradip, S. (2018). Impact of Culture, Behaviour and Gender on Green Purchase Intention. *Journal of Retailing and Consumer Services, 41*(C), 177-189.

Nas, M., & Dekker, P. (1996). Environmental Involvement in Four West European Countries: A Comparative Analysis of Attitudes and Actions. *Innovation: The European Journal of Social Sciences, 9*(4), 509-535.

Nizam, N. Z., Rajiani, N. M., & Yahaya, S. N. (2014). Understanding Green Purchasing Behaviour among Gen Y in Malaysia by Examining the Factors Influenced. *Interdisiplinary Journal of Contemporary Research in Business, 6*(2), 1-14.

Noble, S. M., Haytko, D. L., & Phillips, J. (2009). What Drives College Age Generation Y Consumers? *Journal of Business Research, 62*(2), 617-628.

None, I., & Datta, S. K. (2011). Pro-environmental Concern Influencing Green Buying: A Study on Indian Consumers. *International Journal of Business and Management, 6*(6). doi:10.5539/ijbm.v6n6p124

Noor, M. N., Jumain, R. S., Yusof, A., Ahmat, M. A., & Kamaruzaman, I. F. (2017). Determinants of Generation Z Green Purchase decision: A SEM-PLS. *International Journal of Advanced and Applied Sciences, 4*(11), 143-147.

Noranida, M., & Khairulmaini, O. S. (2014). Malaysia's Efforts toward Achieving a Sustainable Development: Issue, Challenges and Prospects. *Procedia - Social and Behavioral Sciences, 120*, 299-307.

Nunnally, J. (1978). *Psychometric Theory* (2nd ed.). New York: McGraw-Hill.

O'Donnell, J. (2006). *Gen Y Sits on Top of Consumer Food chain: They're Savvy Shoppers with Money and Influence*. Retrieved April 4, 2018, from USA Today: 1. http://usatoday30.usatoday.com/money/advertising/2006-10-11-retail-teensusat_x.htm

Ooi, J. M., Kwek, C. L., & Keoy, K. H. (2012). The Antecedents of Green Purchase Intention among Malaysian. *Proceeding in the International Conference on Economics, Business Innovation, 38*, 34-38.

Ooi, J. M., Kwek, C. L., & Tan, H. P. (2012). The Antecedents of Green Purchase Intention among Malaysian. *Asian Social Science, 8*(13), 248-263. doi:10.5539/ass.v8n13p248

Osbaldiston, R., & Schott, J. P. (2011). Meta-Analysis of Pro-environmental Behavior Experiments. *Environmental Sustainability and Behavioral Science, 44*(2), 257-299.

Pallant, J. (2011). *Spss Survival Manual: A Step by Step Guide to Data Analysis* (4th ed.). Midlent Typesetters, Australia.

Paul, J., Modi, A., & Patel, J. (2016). Predicting Green Product Consumption Using Theory of Planned Behaviour and Reasoned Action. *Journal of Retailing and Consumer Services, 29*, 123-134.

Petty, R. E., & Cacioppo, J. T. (1990). Involvement and Persuasion: Tradition versus Integration. *Psychological Bulletin, 107*(3), 367-374. doi:1037/0033-2909.107.3.367

Promotosh, B., & Sajedul, I. M. (2011). *Young Consumers' Purchase Intentions of Buying Green Products: A Study Based on The Theory of Planned Behavior*. Master Thesis, UMEA University.

Punyatoya, P. (2014). Linking Environmental Awareness and Perceived Brand Eco-friendliness to. *Global Business Review, 15*(2), 279-289.

Regis, D. (1990). *Self-concept and Conformity in Theories of Health Education.* Doctoral Dissertation, School of Education, University of Exeter.

Roberts, J. A. (1996). Green Consumers In the 1990s: Profile and Implications for Advertising. *Journal of Business Research, 36*(3), 217–231.

Rogers, G. (2013, February 4). *The Rise of Generation Y In the Sustainable Marketplace*. Retrieved April 6, 2018, from The Guardian: https://www.theguardian.com/sustainable-business/blog/rise-generation-y-sustainable-marketplace

Salazar, H. A., Oerlemans, L., & Stroe-Biezen, S. (2013). Social Influence on Sustainable Consumption: Evidence from a Behavioural Experiment. *International Journal of Consumer Studies, 37*(2), 172-180.

Sapsford, R. (2007). *Survey Research* (2nd ed.). SAGE Publications.

Schmeltz, L. (2012). Consumer-oriented CSR Communication: Focusing On Ability Or Morality? *Corporate Communications: An International Journal, 17*(1), 29-49.

Schrum, L., McCarty, J., & Lowrey, T. (1995). Buyer Characteristics of the Green Consumer and Their Implications For Advertising Strategy. *Journal of Advertising, 24*(2), 71-82.

Schultz, P., Shriver, C., Tabanico, J., & Khazian, A. (2004). Implicit Connections With Nature. *Journal of Environmental Psychology, 24*(1), 31-42.

Sekaran, U. (2003). *Research Methods For Business A Skill-Building Approach* (4th ed.). New York: John Wiley and Sons Ltd.

Sekaran, U., & Bougie, R. (2013). *Research Methods for Business: A Skill-Building Approach* (6th ed.). John Wiley & Sons Ltd.

Shaik Ismail, M. H. (2014). *Intention to Use Green Products Among Consumers.* Master Thesis, Universiti Utara Malaysia.

Sheeran, P. (2002). Intention-Behavior Relations: A Conceptual and Empirical Review. *European Review of Social Psychology, 12*(1), 1-36.

Singh, A., & Bansal, M. (2012). Green Marketing: A Study of Consumer Attitude and Environmental Concern. *The Indian Journal of Commerce, 65*(2), 273-283.

Sinnapan, P., & Rahman, A. A. (2011). Antecedents of Green Purchasing Behavior Among Malaysian Consumers. *International Business Management, 5*(3), 129-139. doi:10.3923/ibm.2011.129.139

Slater, S. F., & Atuahene-Gima, K. (2004). Conducting Survey Research in Strategic Management. *Research Methodology In Strategy Management, 1*(1), 227-249.

Smith, K. T., & Brower, T. R. (2012). Longitudinal Study of Green Marketing Strategies that Influence Millennials. *Journal of Strategic Marketing, 20*(6), 535-551.

Smith, K.T. (2010). An Examination of Marketing Techniques that Influence Millennials' Perceptions of Whether A Product is Environmentally Friendly. *Journal of Strategic Marketing. 18*(6), 437-450.

Smith, S., & Poladino, A. (2010). Eating clean and Green? Investigating Consumer Motivations Towards the Purchase of Organic Food. *Australasian Marketing Journal, 18*(2), 93-104.

Smola, K. W., & Sutton, C. D. (2002). Generational Differences: Revisiting Generational Work Values for the New Millennium. *Journal of Organizational Behaviour, 23*, 363-382.

Spehar, C. (2006). Marketing To Teens: Hip 2 B Green. *Natural Foods Merchandiser*, *27*(10), 45-56.

Stangor, C. (2010). *Research Methods for the Behavioral Sciences* (4th ed.). Publication Manual Of The American Psychological Association.

Sullivan, P., & Heitmeyer, J. (2008). Looking at Gen Y Shopping Preferences and Intentions: Exploring the Role of Experience and Apparel Involvement. *International Journal of Consumer Studies, 32*(3), 285-295.

Ta Fang, W., Ng, E., Wang, C. M., & Hsu, M. L. (2017). Normative Beliefs, Attitudes and Social Norms: People Reduce Waste As An Index of Social Relationship When Spending Leisure Time. *Sustainability*, *9*(10), 1696. doi:10.3390/su9101696

Tan, B. C. (2011). The Roles of Knowledge, Threat, and PCE on Green Purchase Behaviour. *Intenational Journal of Business Management, 6*(12), 14.

Tanner, C., & Kast, S. W. (2003). Promoting Sustainable Consumption : Determinants of Green Purchases by Swiss Consumer. *Psychological Marketing, 20*(10), 883-902.

Tarkiainen, A., & Sundqvist, S. (2005). Subjective Norms, Attitudes and Intentions of Finnish Consumers In Buying Organic Food. *British Food Journal, 107*(11), 808-822.

Teng, Y. M., Wu, K. S., & Liu, H. H. (2013). Integrating Altruism and The Theory of Planned Behaviour to Predict Patronage Intention of a Green Hotel. *Journal of Hospitality and Tourism Research*, *39*(3), 299-315.

The UN Global Compact. (2010). *Accenture - A New Era of Sustainability.* Retrieved April 6, 2018, from https://archive.epa.gov/wastes/conserve/tools/stewardship/web/pdf/accenture.pdf

Thogersen, J. (2006). Consumer Decision Making with Regard to Organic Food Products: Results from the Condor Project. *In Proceeding of The Traditional Food Processing and Technological Innovation Conference.* Faro, Portugal.

Tonglet, M., Phillips, P. S., & Read, A. D. (2004). Using the Theory of Planned Behaviour to Investigate the Determinants of Recycling Behaviour: A Case Study from Brixworth, UK. *Resources, Conservation and Recycling, 41*(3), 191-214.

Tsen, C. H., Phang, G., Hasan, H., & Buncha, M. R. (2006). Going Green: A Study of Consumer's Willingness to Pay for Green Products in Kota Kinabalu. *International Journal of Business and Society, 7*(2), 40-54.

Tseng, M., Wang, R., Chiu, S. F., Geng, Y., & Lin, Y. (2013). Improving Performance of Green Innovation Practices Under Uncertainty. *Journal of Cleaner Production, 40*, 71-82.

Tseng, W. C., & Chang, C. H. (2015). A Study of Consumers' Organic Products Buying Behavior in Taiwan - Ecologically Conscious Consumer Behavior as A Segmentation Variable. *International Proceedings of Management and Economy, 84*.

Uddin, S. M., & Khan, M. N. (2016). Exploring Green Purchasing Behaviour of Young Urban Consumers. *South Asian Journal of Global Business Research, 5*(1), 85-103.

UI Green Matric World University Ranking. (2017). Retrieved April 6, 2018, from http://greenmetric.ui.ac.id/

Valentine, D. B., & Powers, T. L. (2013). Generation Y Values and Lifestyle Segments. *Journal of Consumer Marketing, 30*(7), 597-606.

Vazifehdoust, H., Taleghani, M., Esmaeilpour, F., Nazari, K., & Khadang, M. (2013). Purchasing Green to Become Greener: Factors Influence Consumers' Green Purchasing Behavior. *Management Science Letters* , 3(9), 2489–2500.

Veal, A. J. (2005). *Business Research Methods : A Managerial Approach* (2nd ed.). Pearson Education Canada.

Vermillion, L., & Peart, J. (2010). Green Marketing: Making Sense of the Situation. *Allied Academies International Conference: Proceedings of the Academy of Marketing Studies, 15*(1), 68-72.

Wang, P., Liu, Q., & Qi, Y. (2014). Factors Influencing Sustainable Consumption Behaviors: A Survey of the Rural Residents in China. *Journal of Cleaner Production, 63*, 152-165.

Wang, X., & Chan, H. K. (2013). A Hierarchical Fuzzy TOPSIS Approach to Assess Improvement Areas When Implementing Green Supply Chain Initiatives. *International Journal of Production Research, 51*(10), 3117-3130.

Welsch, H., & Kuhling, J. (2009). Determinants of Pro-environmental Consumption: The role of Reference Groups and Routine Behavior. *Ecological Economics, 69*(1), 166-176.

Wiernik, B. M., Deniz, S. O., & Dilchert, S. (2013). Age and Environmental Sustainability: A Meta-Analysis. *Journal of Managerial Psychology, 28*(7), 826-856.

Wong, N., & Smith, J. (2010). *College Students Spend $200 Billion Per Year*. Retrieved April 4, 2018, from http://www.harrisinteractive.com/news/allnewsbydate.asp?NewsID=480

Wong, W. K. (2010). *Factors Affecting Malaysian Generation Y's Green Brand Perception and Purchase Decision*. Unpublished MBA Thesis. Universiti Sains Malaysia.

Yadav, R., & Pathak, G. (2017). Determinants of Consumers' Green Purchase Behavior in A Developing Nation: Applying and Extending the Theory of Planned Behavior. *Ecological Economics, 134*, 114-122.

Zagata, L. (2012). Consumers' Beliefs and Behavioural Intentions Towards Organic Food. Evidence from the Czech Republic. *Appetite, 59*(1), 81-89.

Zailinawati, A. H., Schattner, P., & Mazza, D. (2006). Doing a Pilot Study: Why Is It Essential? *Malaysian Family Physician, 1*, 2-3.

Zheng, Y., & Chi, T. (2015). Factors Influencing Purchase Intention Toward Environmentally Friendly Apparel: An Empirical Study of US Consumer. *International Journal of Fashion Design, 8*(2), 68-77.

Zikmund, W. G. (2003). *Business Research Methods* (7th ed.). Thomson South Western, Ohio.

Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2010). *Business Research Methods* (8th ed.). Mason, HO: CENGAGE.

Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). *Business Research Methods* (9th ed.). USA: CENGAGE.

Zukin, S., & Maguire, J. S. (2004). Consumers and Consumption. *Annual Review of Sociology, 30*, 173-197.

APPENDIX A1: SET OF QUESTIONNAIRES

SCHOOL OF BUSINESS MANAGEMENT

MASTER OF SCIENCE (MANAGEMENT)

Dear Participants,

I am Nurul Amanina binti Abdul Basir, a postgraduate student from University Utara Malaysia (UUM), Sintok, Kedah. I am soliciting your co-operation to participate in this research project entitle **"Consumer Green Purchase Behaviour among Millennial Generation"**. The purpose of this study is to identify the factors that significantly influence millennial generation's green behaviour in Malaysia.

I will be grateful if you could complete the enclosed questionnaire based on your genuine feelings. The success of this study is highly dependent on your valuable, sincere and honest response. To help you completing this questionnaire, please read the instructions carefully and refer to the NOTE attached in the questionnaire regarding the definitions of terms used in this study. The following questionnaire will require approximately 10 – 15 minutes to complete. For your information, your responses will be used for academic purposes only. All personal information shall be treated as strictly private and confidential.

Thank you for taking the time to assist me in my educational endeavours. The data collected will provide useful information in understanding the behaviour of this market segment. If you require additional information or have any enquiries pertaining to this study, please contact me at 018-7793934 or mail to amaninabasir@gmail.com .

Thank you for your precious time and participation.

Nurul Amanina binti Abdul Basir

Student,

OYAGSB, UUM

Note:

Specific term and word in this study refers to the following:

Green Purchase Behaviour: Green purchase behaviour refers to the consumption of product that are environmentally beneficial, conservable and responding to environmental concern.

Attitude towards Green Products: Attitude refers as a state in which human moves to act or do with certain feelings in response to the object or situation surrounding environmental conditions.

Subjective Norm: Subjective norm refers to the perceived social influences/pressures to indulge or not to indulge in a given behaviour and reveal the beliefs of individuals about how they would be viewed by their reference groups if they perform a certain behaviour.

Perceived Behavioural Control: Perceived behavioural control refers to an individual's perceived ease or difficulty in performing a particular behaviour.

Environmental Involvement: Environmental involvement refers to the affect or the emotion associated with beliefs about environmental protection.

Media Exposure to Environmental Messages: Media exposure to environmental message refers to the messages related to environmental protection from the following sources: TV programs, radio, internet and advertisements.

Section A: Demographic Question

***Instruction*: Please tick (✓) on the answer that you choose.**

1. **Gender:**

   Male ☐ Female ☐

2. **Race:**

   Malay ☐ Indian ☐

   Chinese ☐ Others ☐ (Please specify): _____

3. **Age:**

   19 – 22 ☐ 31 – 34 ☐

   23 – 26 ☐ 35 and above ☐

   27 – 30 ☐

4. **Education Level:**

STPM/Diploma	☐	Master Degree	☐
Bachelor Degree	☐	PHD	☐

5. **Monthly Personal Income (RM):**

Less than 1000	☐	3001 – 4000	☐
1001 – 2000	☐	4001 – 5000	☐
2001 – 3000	☐	5001 and above	☐

Section B: General Behavioural Question

***Instruction*: Please tick (✓) on the answer that you choose. You may choose one answer only.**

1. **Do you concern about environment in Malaysia?**
   - ☐ Yes
   - ☐ No

2. **Do you think environmental friendly is important?**
   - ☐ Yes
   - ☐ No

3. **Have you ever bought or considered buying products with environmental issue in mind?**
   - ☐ Yes
   - ☐ No

4. **Have you purchased any of the following similar products in the past?**

   - ☐ Bio-cosmetics
   - ☐ Paper bags or recycled materials
   - ☐ Natural hair oil
   - ☐ Bio-degradable detergents / hand wash

5. **What is the most restriction of choosing eco-friendly product?**

   - ☐ Eco-friendly assurance
   - ☐ Not easy to find
   - ☐ Relatively expensive
   - ☐ Others (Please specify): _____

6. **Which one of these do you believe should have the primary responsibility for protecting the environment in our nation?**

   - ☐ The government
   - ☐ Business and industry
   - ☐ Individual citizens and citizen's group
   - ☐ Others (Please specify): _____

7. **Using the scale below, please indicate how important environmental issue are to you?**

   (1= Extremely unimportant... 7= Extremely important)

No.	Statements	Extremely Unimportant 1	Very Unimportant 2	Somewhat Unimportant 3	Neutral 4	Somewhat Important 5	Very Important 6	Extremely Important 7
1.	Climate change	1	2	3	4	5	6	7
2.	Pollution	1	2	3	4	5	6	7
3.	Resource depletion	1	2	3	4	5	6	7
4.	Waste generation	1	2	3	4	5	6	7

Section C:

Please circle the numbers that best indicate the extent of you agree or disagree with the following statements.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Extremely Agree

No.	Statements	Strongly Disagree 1	Disagree 2	Somewhat Disagree 3	Neutral 4	Somewhat Agree 5	Agree 6	Extremely Agree 7
	Green Purchase Behaviour							
1.	I often buy organic products	1	2	3	4	5	6	7
2.	I often buy products that are labelled as environmentally safe	1	2	3	4	5	6	7
3.	I often buy products that are against animal-testing	1	2	3	4	5	6	7
4.	I often buy products that contain no or fewer chemical ingredients	1	2	3	4	5	6	7
5.	When I consider buying a product, I will look for a certified environmentally-safe or organic stamp	1	2	3	4	5	6	7
6.	I often buy products that support fair community trades	1	2	3	4	5	6	7
7.	I often buy products that use recycled/ recyclable packaging	1	2	3	4	5	6	7

No.	Statements	Strongly Disagree 1	Disagree 2	Somewhat Disagree 3	Neutral 4	Somewhat Agree 5	Agree 6	Extremely Agree 7
	Attitude towards Green Product							
1.	I feel that green products have a positive impact on the environment	1	2	3	4	5	6	7
2.	I think choosing green products is beneficial to consumers	1	2	3	4	5	6	7
3.	I think choosing green products is a good idea	1	2	3	4	5	6	7
4.	I feel that using green products is a wise idea	1	2	3	4	5	6	7
5.	I think using green products would be pleasant to me	1	2	3	4	5	6	7

6.	I feel that I need to appreciate green products	1	2	3	4	5	6	7

No.	Statements	Strongly Disagree 1	Disagree 2	Somewhat Disagree 3	Neutral 4	Somewhat Agree 5	Agree 6	Extremely Agree 7
	Subjective Norm							
1.	The trend of buying green products among people around me is increasing	1	2	3	4	5	6	7
2.	People around me generally believe that it is better for health to use green products	1	2	3	4	5	6	7
3.	My close friends and family members would appreciate if I buy green products	1	2	3	4	5	6	7
4.	I would get all the required support (information related, time, money) from friends and family to buy green products	1	2	3	4	5	6	7

No.	Statements	Strongly Disagree 1	Disagree 2	Somewhat Disagree 3	Neutral 4	Somewhat Agree 5	Agree 6	Extremely Agree 7
	Perceived Behavioural Control							
1.	I am confident that I can purchase green products rather than normal products when I want	1	2	3	4	5	6	7
2.	I see myself as capable of purchasing green products in future	1	2	3	4	5	6	7
3.	I have resources, time and willingness to purchase green products	1	2	3	4	5	6	7
4.	There are likely to be plenty of opportunities for me to purchase green products	1	2	3	4	5	6	7

No.	Statements	Strongly Disagree 1	Disagree 2	Somewhat Disagree 3	Neutral 4	Somewhat Agree 5	Agree 6	Extremely Agree 7
	Environmental Involvement							
1.	I am very concerned about environmental protection	1	2	3	4	5	6	7
2.	I am very involved in greening the environment	1	2	3	4	5	6	7
3.	I often think about how environmental quality can be improved	1	2	3	4	5	6	7
4.	I fully support the environmental activities of the government	1	2	3	4	5	6	7

No.	Statements	Strongly Disagree 1	Disagree 2	Somewhat Disagree 3	Neutral 4	Somewhat Agree 5	Agree 6	Extremely Agree 7
	Media Exposure to Environmental Message							
1.	I often come across environment-related topics/ issues on TV	1	2	3	4	5	6	7
2.	I often come across environmental messages on advertisements	1	2	3	4	5	6	7
3.	I often come across environment-related topics/issues in radio	1	2	3	4	5	6	7
4.	I often come across environment-related topics/issues on the Internet	1	2	3	4	5	6	7

End of Question. Thank you.

APPENDIX A2: STATISTIC DATA FOR UUM STUDENTS IN EACH INASIS

Name of Inasis	Male	Female
MAS	0	870
TNB	179	527
Proton	99	522
Tradewinds	309	260
Petronas	219	697
Grantt	219	590
Sime Darby	0	940
TM	426	455
BSN	0	749
MISC	213	428
YAB	731	644
Bank Muamalat	0	1319
Bank Rakyat	638	965
SME Bank	683	1008
Maybank	173	57
Total	3889	10031
Grand Total	**13920**	

APPENDIX A3: RESULT FROM IBM SPSS STATISTIC 24

1) Reliability Analysis for Each Independent and Dependent Variables

a) Green Purchase Behaviour

Case Processing Summary

		N	%
Cases	Valid	346	100.0
	Excluded[a]	0	.0
	Total	346	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.835	7

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
GPB1	31.1879	22.901	.621	.807
GPB2	30.9277	23.053	.649	.804
GPB3	30.9682	23.428	.497	.828
GPB4	30.6734	23.055	.559	.817
GPB5	30.8526	22.688	.618	.808
GPB6	31.0838	23.242	.637	.806
GPB7	30.7746	23.839	.534	.821

b) Attitude towards Green Products

Case Processing Summary

		N	%
Cases	Valid	346	100.0
	Excluded[a]	0	.0
	Total	346	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.896	6

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ATT1	29.2659	14.428	.704	.880
ATT2	29.2861	14.129	.772	.870
ATT3	29.3237	13.408	.817	.862
ATT4	29.3988	13.881	.731	.875
ATT5	29.8121	14.385	.645	.889
ATT6	29.5607	14.427	.654	.887

c) Subjective Norm

Case Processing Summary

		N	%
Cases	Valid	346	100.0
	Excluded[a]	0	.0
	Total	346	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.840	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
SN1	15.4884	7.225	.625	.818
SN2	15.0318	7.399	.690	.792
SN3	15.1763	6.864	.701	.784
SN4	15.4133	6.684	.682	.794

d) Perceived Behavioural Control

Case Processing Summary

		N	%
Cases	Valid	346	100.0
	Excluded[a]	0	.0
	Total	346	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.858	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PBC1	16.0751	5.861	.700	.820
PBC2	15.9220	6.142	.697	.822
PBC3	16.0549	5.948	.720	.812
PBC4	16.1098	5.930	.693	.823

e) Environmental Involvement

Case Processing Summary

		N	%
Cases	Valid	346	100.0
	Excluded[a]	0	.0
	Total	346	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.792	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
EI1	16.1618	5.626	.573	.754
EI2	16.6821	5.215	.603	.739
EI3	16.5751	4.813	.659	.709
EI4	16.0954	5.333	.572	.755

f) Media Exposure to Environmental Message

Case Processing Summary

		N	%
Cases	Valid	346	100.0
	Excluded[a]	0	.0
	Total	346	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.846	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ME1	15.6503	6.657	.705	.795
ME2	15.7399	7.057	.753	.778
ME3	16.0202	7.069	.642	.822
ME4	15.2514	7.128	.640	.823

2) Frequency Table for Demographic Profile

a) Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	91	26.3	26.3	26.3
	Female	255	73.7	73.7	100.0
	Total	346	100.0	100.0	

b) Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malay	205	59.2	59.2	59.2
	Chinese	91	26.3	26.3	85.5
	Indian	27	7.8	7.8	93.4
	Others	23	6.6	6.6	100.0
	Total	346	100.0	100.0	

c) Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	19-22	199	57.5	57.5	57.5
	23-26	131	37.9	37.9	95.4
	27-30	10	2.9	2.9	98.3
	31-34	6	1.7	1.7	100.0
	Total	346	100.0	100.0	

d) Educational Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	STPM/Diploma	74	21.4	21.4	21.4
	Bachelor Degree	251	72.5	72.5	93.9
	Master Degree	16	4.6	4.6	98.6
	PHD	5	1.4	1.4	100.0
	Total	346	100.0	100.0	

e) Monthly Personal Income (RM)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1000	301	87.0	87.0	87.0
	1001-2000	25	7.2	7.2	94.2
	2001-3000	6	1.7	1.7	96.0
	3001-4000	5	1.4	1.4	97.4
	4001-5000	5	1.4	1.4	98.8
	5001 and above	4	1.2	1.2	100.0
	Total	346	100.0	100.0	

3) Descriptive Statistic Analysis

Descriptive Statistics

		Green Purchase Behaviour	Attitude towards Green Products	Subjective Norm	Perceived Behavioural Control	Environmental Involvement	Media Exposure to Environmental Message
N	Valid	346	346	346	346	346	346
	Missing	0	0	0	0	0	0
Mean		5.1548	5.8882	5.0925	5.3468	5.4595	5.2218
Std. Deviation		.79329	.74354	.86190	.79583	.73831	.85874
Variance		.629	.553	.743	.633	.545	.737
Skewness		-.016	-.491	-.163	-.066	-.170	-.205
Std. Error of Skewness		.131	.131	.131	.131	.131	.131
Kurtosis		-.224	.163	-.152	-.410	-.704	-.243
Std. Error of Kurtosis		.261	.261	.261	.261	.261	.261
Range		4.29	4.33	4.75	4.25	3.75	4.50
Minimum		2.71	2.67	2.25	2.75	3.25	2.50
Maximum		7.00	7.00	7.00	7.00	7.00	7.00

4) Pearson Correlation Analysis

		Green Purchase Behaviour	Attitude towards Green Products	Subjective Norm	Perceived Behavioural Control	Environmental Involvement	Media Exposure to Environmental Message
Green Purchase Behaviour	Pearson Correlation	1	.430**	.551**	.562**	.452**	.465**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	346	346	346	346	346	346
Attitude towards Green Products	Pearson Correlation	.430**	1	.351**	.437**	.452**	.421**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	346	346	346	346	346	346
Subjective Norm	Pearson Correlation	.551**	.351**	1	.614**	.372**	.406**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	346	346	346	346	346	346
Perceived Behavioural Control	Pearson Correlation	.562**	.437**	.614**	1	.469**	.428**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	346	346	346	346	346	346
Environmental Involvement	Pearson Correlation	.452**	.452**	.372**	.469**	1	.496**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	346	346	346	346	346	346
Media Exposure to Environmental Message	Pearson Correlation	.465**	.421**	.406**	.428**	.496**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	346	346	346	346	346	346

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

5) Multiple Regression Analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.670[a]	.449	.440	.59339

a. Predictors: (Constant), Media Exposure to Environmental Message, Subjective Norm, Attitude towards Green Products, Environmental Involvement, Perceived Behavioural Control

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	97.398	5	19.480	55.323	.000[b]
	Residual	119.716	340	.352		
	Total	217.114	345			

a. Dependent Variable: Green Purchase Behaviour

b. Predictors: (Constant), Media Exposure to Environmental Message, Subjective Norm, Attitude towards Green Products, Environmental Involvement, Perceived Behavioural Control

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.527	.303		1.739	.083
	Attitude toward Green Products	.129	.051	.121	2.519	.012
	Subjective Norm	.242	.048	.263	5.036	.000
	Perceived Behavioural Control	.227	.055	.228	4.106	.000
	Environmental Involvement	.126	.054	.118	2.328	.020
	Media Exposure to Environmental Message	.140	.046	.152	3.062	.002

a. Dependent Variable: Green Purchase Behaviour