

**THE STUDY OF FACTORS THAT INFLUENCE CONSUMER'S PURCHASE
BEHAVIOR OF GREEN PRODUCTS**

ANIS ASHILA BINTI RAZAKI

Universiti Teknikal Malaysia Melaka

Supervisor's Approval

'I hereby declared that I had read through this thesis and in my opinion that this thesis is adequate in terms of scope and quality which fulfill the requirements for the award of Bachelor of Technology Management (High Technology Marketing)'.

SIGNATURE :

NAME OF SUPERVISOR : PN MISLINA BINTI ATAN @ MOHD SALLEH

DATE :

SIGNATURE :

NAME OF PANEL : PN NOR RATNA BT MASROM

DATE :

**THE STUDY OF FACTORS THAT INFLUENCE CONSUMER'S PURCHASE
BEHAVIOR OF GREEN PRODUCTS**

ANIS ASHILA BINTI RAZAKI

**This thesis is submitted in partial fulfillment of the requirement for the award of
Bachelor Degree of Technology Management (High Technology Marketing)**

Faculty of Technology Management and Technopreneurship

Universiti Teknikal Malaysia Melaka

June 2019

DECLARATION OF ORIGINAL WORK

'I hereby declared that this project is the result of my own research except as cited in the references. This research project has not been any degree and is not concurrently submitted in candidate of other degree'.

SIGNATURE :

NAME : ANIS ASHILA BINTI RAZAKI

DATE :

DEDICATION

This research paper is exclusively dedicated to my parents who give me their endless love, support, motivation and concern while I am conducting this research. Next, I would like to thanks my friends for generous information sharing during project completion. Finally, I would like to express my heartfelt gratitude for both of my supervisor, Dr. Mohammed Hariri Bin Bakri and Madam Mislina Binti Atan for their guidance, patience and precious time.

ACKNOWLEDGEMENT

With boundless of love and appreciation, I would like to express my heartfelt gratitude and appreciation to the people who has helped and supported me throughout completing my final year project.

First of all, I would like to express my deep sense and sincere gratitude to both of my supervisor, Dr. Mohammed Hariri Bin Bakri and Madam Mislina Binti Atan because of their consideration, patience, guidance and motivation to help me pursue this research. Their supervision and assistance despite their busy schedule helped me to understand my research topic clearer.

Next, I would like to appreciate the assistance of my panel, Pn Nor Ratna Bt Masrom for her advice and meticulous scrutiny had been valuable and constructing for my research as well as her willingness to spend time is highly appreciated. I also want to thanks all my lecturer that has taught me and shown their concern in my study.

Last but not least, I am grateful to my family and friends who give me their love, support and concern and also for being my biggest source of motivation in completing this final year project. Not to forget, my sense of gratefulness to everyone who have lent their helping hand to me in a direct or indirect way.

ABSTRACT

Today, rapid development of technology has caused both positive and negative effect and changes in the environment. While enjoying the convenience provided by technology, people should have the right mind-set in keeping and protecting their environment healthy. Therefore, the aim to conduct this study is to examine the factors that influence consumers' green purchase behavior. They are five independent variables were used in this research project to identify the factors that influence consumers' purchasing behavior toward green products; social influences, environmental concern, perceived effectiveness of environmental behavior, perceived environmental responsibility, and government initiative.

Three hundred and eighty four consumers are the sole targeted respondents in this study. It is found that there are no significant differences for the gender and race variables whereas monthly income variable was found a significant difference on it. In addition, the study findings also discovered that there is a significant relationship between the factors influence and working consumers' purchasing behavior towards green products.

Consequently, these research findings have provided some insight and feedback to businesses who basically facing a lot of challenges in convincing consumers to purchase green products. By gathering this information, marketers can understand the route that shifts the environmental factors to green purchase behavior. They also would be able to formulating their various strategies to effectively attract more consumers to purchase green products

TABLE OF CONTENTS

CHAPTER	TITLE	PAGES
	DECLARATION OF ORIGINAL	i
	DEDICATION	ii
	ACKNOWLEDGEMENT	iii
	ABSTRACT	iv
	TABLE OF CONTENTS	v
	LIST OF TABLES	ix
	LIST OF FIGURES	xi
	LIST OF ABBREVIATIONS	xii

CHAPTER 1	INTRODUCTION	PAGES
	1.1 Background of the Study	1
	1.2 Problem Statements	3
	1.3 Research Question	5
	1.4 Objectives of the Study	5
	1.5 Scope of the Study	6
	1.6 Limitation	6
	1.7 Significant of the Study	7
	1.8 Summary	7

CHAPTER 2	LITERATURE REVIEW	PAGES
	2.1 Overview	8
	2.2 Green Consumers	9
	2.3 Green Products	9
	2.4 Green Purchase Behavior	10
	2.5 Theory of Planned Behavior (TPB)	13
	2.6 Subjective Norm (SN)	14
	2.6.1 Social Influence (SI)	14
	2.7 Attitude (AT)	15
	2.7.1 Environmental Concern (EC)	16
	2.8 Perceived Behavioral Control (PBC)	17
	2.8.1 Perceived Environmental Responsibility (PER)	17
	2.8.2 Perceived Effectiveness of Environmental Behavior (PEB)	18
	2.10 Research Framework	21
	2.11 Hypothesis Development	22
	2.12 Summary	24
CHAPTER 3	RESEARCH METHOD	PAGES
	3.1 Research Design	25
	3.1.1 Descriptive Research	26
	3.2 Research Method	27
	3.2.1 Quantitative Research	27
	3.3 Sampling Design	29
	3.3.1 Target Population	32
	3.4 Data Sources	31
	3.5 Data Analysis Method	32
	3.5.1 Validity and Reliability	33
	3.5.2 Descriptive Statistics	33
	3.5.3 Pilot Test	34
	3.5.4 Factor Analysis	34

RESEARCH METHOD		PAGES
	3.5.5 Pearson Correlation Coefficient	34
	3.5.6 Multiple Linear Regressions (MLR)	35
	3.6 Summary	36
CHAPTER 4	DATA ANALYSIS	PAGES
	4.1 Pilot Test	37
	4.1.1 Reliability Test	39
	4.2 Respondents Rate	40
	4.3 Demographic Analysis	40
	4.3.1 Gender of respondents	41
	4.3.2 Age of Respondents	42
	4.3.3 Race of Respondents	43
	4.3.4 Status of Employment of Respondents	44
	4.3.5 Income Level of Respondents	45
	4.3.6 Awareness of Respondents	46
	4.3.7 Consideration towards Environmental Impact When Buying a New Product	47
	4.3.8 Level of Awareness towards Green Products	48
	4.4 Descriptive Statistics of Independent Variables	49
	4.4.1 Independent Variable I: Social Influence	50
	4.4.2 Independent Variable II: Environmental Concern	51
	4.4.3 Independent Variable III: Perceived Environmental Responsibility	52
	4.4.4 Independent Variable IV: Perceived Effectiveness of Environmental Behavior	53
	4.4.5 Independent Variable V: Government Initiatives	54
	4.5 Reliability Test	55
	4.6 Inferential Statistics	56
	4.6.1 Factor Analysis	56
	4.6.2 Correlation Analysis	59

4.6.3 Multiple Linear Regression Analysis (MLR)	60
4.7 Hypothesis Testing	64
4.7.1 Hypothesis 1	65
4.7.2 Hypothesis 2	65
4.7.3 Hypothesis 3	66
4.7.4 Hypothesis 4	66
4.8 Summary	67
CHAPTER 5 DISCUSSION, RECOMMENDATIONS & CONCLUSION	PAGES
5.1 Summary of Descriptive	68
5.2 Discussion of Research Objectives	69
5.3 Limitation of Study	71
5.4 Implication of Study	72
5.5 Recommendation	73
5.6 Conclusion	74
REFERENCES	75
APPENDICES	85

LIST OF TABLES

TABLE	TITLE	PAGE
3.1	Krejcie and Morgan Sampling Size	30
3.2	Cronbach's Alpha Coefficient Range	33
4.1	Validity Test for Pilot Test Research	39
4.2	Overall Reliability Statistics of Pilot Test	40
4.3	Gender of Respondents	42
4.4	Age of Respondents	43
4.5	Race of Respondents	44
4.6	Status of Employment of Respondents	45
4.7	Income Level of Respondents	46
4.8	Awareness of Respondents	47
4.9	Consideration towards environmental impact when buying a new product	48
4.10	Level of Awareness towards Green Products	49
4.11	Descriptive Statistics	50
4.12	Statistic of Social Influence	51
4.13	Statistic of Environmental Concern	52
4.14	Statistic of Perceived Environmental Responsibility	53
4.15	Statistic of Perceived Effectiveness of Environmental Behavior	54
4.16	Statistic of Government Initiatives	55
4.17	Reliability Test	56

4.18	Table of the Rotated Component Matrix	57
4.19	New Item Listing corrected from Rotated Component Matrix	59
4.20	The result of correlation analysis for all variables	60
4.21	Model Summary of Multiple Linear Regressions	62
4.22	ANOVA of Multiple Linear Regressions	62
4.23	Table of Coefficient	63
4.24	Hypothesis Testing Table	65

LIST OF FIGURES

FIGURE	TITLE	PAGE
2.1	Research Framework	21
4.1	Gender of Respondents	42
4.2	Age of Respondents	43
4.3	Race of Respondents	44
4.4	Status of Employment of Respondents	45
4.5	Income Level of Respondents	46
4.6	Awareness of Respondents	47
4.7	Consideration towards environmental impact when buying a new product	48
4.8	Level of Awareness towards Green Products	49
5.1	New Research Framework	70

LIST OF ABBREVIATIONS

AT	=	Attitude
EC	=	Environmental Concern
DV	=	Dependent Variable
IV	=	Independent Variable
H0	=	Null Hypothesis
H1	=	Alternatives Hypothesis
PBC	=	Perceived Behavior Control
PEB	=	Perceived Effectiveness of Environmental Behaviour
PER	=	Perceived Environmental Responsibility
TPB	=	Theory of Planned Behavior
SI	=	Social Influence
SN	=	Subjective Norms
SPSS	=	Statistical Package for the Social Science

CHAPTER ONE

INTRODUCTION

The purpose of this research is to study the factors that influence consumers' purchasing behavior towards green products. This chapter explained about introduction and the background of the research, problem statement, list of objectives and the scope of study.

1.1 Background of the Study

According to Frank (2002), consumer behavior is about learning humans' responses towards products, services and marketing of the products and services in the market. Consumer behavior involved the relationship between the effects of emotions, moods, feelings, and other evaluations and also cognitions, behavior and environmental events. Environmental issues have now attracted the attention not only of global citizens, but also of companies and institutions around the world. According to the study by Papadopoulos cited in Zand Hessami & Yousefi (2013), consumers are more concerned about their environments compared to the past and their buying behavior will change. Thus, from the consumer's perspective, environmental concern will greatly influence their decision-making in the selection or purchase of goods or products.

According to Our Green World (2008), an online survey conducted by the global market insight and information group TNS in 2008 showed that approximately 35% of Malaysian respondents showed that "green" promotion launched by companies would influence their buying decisions. Meanwhile, online survey respondents from around 83 percent of Malaysians showed that their purchasing decision would be affected based on their perceptions of how a company implemented environmental protection.

According to a survey conducted online by the global market insight and information group TNS in 2008, about 60 percent of total Malaysian respondents rank the natural environment in Malaysia as mediocre with the major concern on air pollution (Our Green World, 2008). When surveyed on the eco-friendliness aspect of habits and behaviors, only 8 percent of Malaysian respondents responded that they had significantly changed their behavior to benefit the environment (Our Green World, 2008).

Emerson, Esty, Kim, Mara, Sherbinin, & Srebotnjak (2010) stated that in addressing environmental challenges, Malaysia ranked 54 out of 163 countries reviewed and performed better. This showed that Malaysia enjoyed one of Asia's least polluted environments. However, due to an increase in urbanization and vehicle use, massive industrial development in recent years has caused Malaysia to still face a number of environmental problems. Approximately 56 percent of waste is recycled in Singapore, according to Waltraud Mayr (2010), while Malaysia is expected to reach only 22 percent by 2020. This shows that compared to Singapore, Malaysia has lower public awareness of recycling.

Malaysia is ranked 27 in the 2008 Environmental Performance Index published by Yale University, with a score of 84 out of 100 (Yale University, 2008). This index "deploys a proximity-to-target methodology in which national performance is quantitatively tracked on a core set of environmental policy objectives for which each government should be held accountable" (Yale University, 2008). Malaysia performed better than its 53rd-ranked neighbor Thailand. This shows the Malaysian government's commitment to conservation of the environment.

Malaysia realized that it is becoming increasingly important to invest in environmental protection. Therefore, the environmental awareness is increasing. The

government is currently implementing several other initiatives to encourage consumers and industries to fully implement energy efficiency. After realizing the seriousness of the environmental issues, people from all over the world are willing to fulfill their own responsibility to save and protect their environment because they believe that their efforts can improve their future quality of life. People are becoming more aware of environmental issues and have led to a green revolution and changed the demands of people and the behavior of buyers. Consumers who buy these green and environmentally friendly products and services believe that it will have a positive impact on the environment. Today's consumers are gradually changing their attitude, behavior and approach in matters of consumption.

1.2 Problem Statements

Although everyone knew the importance of green product and is concern about the environment, customers still have difficulties in making purchase decisions. "Green" can now be considered in the mainstream of the business as it can be seen from the finding that approximately 83 percent of Malaysian respondents responded from the online survey showed that their purchasing decision would be affected based on their perception of how a company implemented environmental protection (Our Green World, 2008). It would therefore be a very lucrative market for businesses to offer green products and services. According to Abdul Wahid and Abustan (2002), "Consumers appears to be concerned about the environment and willing to exhibit buying behavior that reflects this concern (Polonsky et al., 1995) in support of a green brand (Oyewole, 2001)".

Despite consumers have expressed their concerns for the global environment, the market share of green products is considered as very small in Malaysia. The released carbon dioxide gas in the atmosphere is more than what can be absorbed by the

ecosystems, oceans and geological systems. There are already bounty signs that the global pollution is too much for the planet to handle in the form of a warmer climate that is causing the glaciers to melt, ocean levels to rise and at the same time droughts and flooding are increasing. Ohtomo and Hirose (2007) states that, the lack of information to the consumers about green products often results in an attitude-behavior gap between their environmental concern and actual buying behavior thus hindering the market share for green products.

Studying the factors that affect consumers ' buying behavior towards green products could certainly provide important information and foresight, including advantages for green marketers in this highly competitive business world. However, the findings of numerous studies conducted by former researchers with respect to the behavior of green purchases are often in conflict. This may be because the research outcome may only be relevant in a given period, geographical, demographic or cultural context due to the changing behavior of consumers buying green products.

According to Grunert (1993), only a few clients insist on environmental concerns and demonstrate them in the actual purchasing behavior. Although many environmentally friendly products have been introduced in the markets with green attributes and features, consumers have not yet completely changed their taste and old habits. Many people are aware of environmental issues and willing to respond in environmentally friendly products or services, but survey results show that only 8% of respondents have changed their buying behavior to benefit the environment (Our Green World, 2008).

A study by Nik Abdul Rashid (2009) shows that consumers may not necessarily buy green products or services, even though they have extensive knowledge of green products and eco-labels. A research found that while consumers are concerned about their environment, they have not yet purchased green products or services (Alwitt & Bergers ' study as cited in YamTang and Chan, 1998). This means that although they realized on the environmental degradation, they did not perform in a green manner. Therefore, it is worth finding out why consumers should not behave in an environmentally friendly manner despite being aware of environmental issues.

1.3 Research Question

This study attempts to address the following research question:

- i. What are the factors that affect consumers' purchasing behavior towards green products?
- ii. What are the relationships between the factors that influence on consumers' purchasing behavior towards green products?
- iii. What is the most significant factor that will affect consumers' purchasing behavior of green products?

1.4 Objectives of the Study

The objectives of this study is to identify factors that influence consumers' green purchasing behavior. The research objectives are generated as the following:

- i. To study the factors that affect consumers' purchasing behavior towards green products
- ii. To identify whether there is a relationship between factors that influence consumers' purchasing behavior towards green products.
- iii. To validate the most significant factor that affect consumer purchasing behavior of green products

1.5 Scope of the Study

The scope of this project was to identify the factors that would affect customer buying behavior towards green products in Malacca area. The study would determine the relationship between the factors that would affect consumer buying behavior towards green products. This study is conducted in Malacca area and involved 384 respondents. Malacca City is also named as the 'Green Technology City' and has lots of shopping complex that could attract consumer to make a purchase.

1.6 Limitation

There are a few limitations that have been confronted while conducting this research. One of the limitations found was the time constraints. This is because data collection was a time consuming task. Not only that, many assignments and project had to be completed, not to mention tests and presentation as well. There were no sufficient time and it was not so easy to carry out many tasks at the same time. Besides that, the sample sizes of respondents may not represent the overall picture of Malacca. Other than that, it was assumed that every respondent has provided honest and accurate answers. It was not guaranteed the answers from the respondents were totally accurate.

1.7 Significant of the Study

As people all over the world become more aware about the importance of protecting the environment and using green products, the demand for them is becoming increasingly higher. However, consumer buying behavior changed dramatically all the time. By understanding the consumer buying behavior in the market, it helped marketers to understand the market. It's worth discovering what drives consumers from the emerging market to buy green products and give foresight to green marketers who want to target in the market segment. Marketers would be able to implement appropriate strategies to promote the products in the market and help their company to achieve the goals and survive in this ever changing market.

1.8 Summary

In this chapter, the background of the study was briefly explained and gone through. The main contents in this chapter are the research objectives, research questions, and research hypothesis. Besides, this chapter also explained about the limitations that were faced while conducting this research. Other than that, the researcher had also explained about the importance of study of this report and the contribution of this research towards publics.

CHAPTER TWO

LITERATURE REVIEW

This chapter presented the issues, factors, ideas, opinions and the results of the research that others had undertaken in the study area. The conceptual framework that best described the theory with the relevant variables identified and discussed how they were related.

2.1 Overview

Consumers acquired goods and services for their ultimate consumption of use. Consumer is someone who can make decision whether or not to purchase an item in store. There are three roles of customers. According to Chandler and Heinzerling (1998) customers could be the decision maker who made the decision on the needs of good or service, the buyer who purchased the good or service and the user who used the product or services.

2.2 Green Consumers

Soonthonsmai (2007) states that green consumers always have a clear attitude that they are responsible for the protection of the environment and are concerned about environmental issues. Green consumers therefore always buy products that have less impact on the environment. Renfro (2010) also defined green consumers as those who support businesses that trade in an environmentally friendly or green manner. Therefore, green consumers will not only buy organic products, but green consumers will always choose those products that have an eco-label or eco-friendly packaging.

2.3 Green Products

Ottman (1998), Nimse, Vijayan, Kumar, and Varadarajan (2007) and Pavan (2010) defined green products as products made from recyclable materials, less waste or minimal packaging, less or non-toxic substances, and less energy and water wastage. In general, green products also known as environmentally friendly products or environmentally friendly products that enhance or protect the environment and have less negative impact or harmful effects on both the environment and human beings.

Schlegelmilch, Bohlen and Diamantopoulos (1996), Lee (2008) and also Pavan (2010) classified green products into a few categories containing natural ingredients, originally grown, not polluting the environment, not tested on animals, containing recyclable and reusable recycled content and containing only approved chemical products.. Examples of green products include organic farming or food, green (lead-free) electronics, alternative fuel vehicles and hybrids, environmentally friendly clothing, and other green products.