

THE RELATIONSHIP BETWEEN CONSUMER PERCEPTION OF
ECO-FRIENDLY PRODUCT AND CONSUMER BEHAVIOR

NURUL HUDA BINTI AHAMAD SABRI

Report is submitted in fulfilment of the requirement for
Bachelor Degree of Technology Management (High Technology Marketing) with
Honours (BTMM)

Faculty of Technology Management and Technopreneurship
Universiti Teknikal Malaysia Melaka

JUNE 2018

DECLARATION

“I hereby declare that the work of this exercise is mine except for the quotations and summarize that have been duly acknowledge.”

Signature :

Name : Nurul Huda Binti Ahamad Sabri

Date :

DEDICATION

I dedicate this research to

My mother, Mrs. Rosni Bin Mohd Yunus
and my father, Mr. Ahamad Sabri Bin Mohd Salleh
Thank you for raising and support me until now.

My beloved siblings, Siti Khadijah, Muhammad Fikri,
Muhammad Amin, Salihah, Nur Ain
My greatest supporter. You are truly blessing from Allah.

My brother and sisters in law, Md Azahar, Ayu Natasha, Lailatul Nurayunni
Thank you for having faith in me.

My best friend, Syahira Binti Nasir
Thank you for being there.

and all my friends especially 4 BTMM
Thank you, guys. We made it!

ACKNOWLEDGEMENT

Firstly, I am very grateful and I would like to thank to God due to His love and blesses that He has given to me to complete Final Year Project after eight months of hard work. I also would like to express my gratitude for His blessing to ease everything since the first day till the last day completing this project.

I would like to take the opportunity to express a great appreciation to my supervisor, Encik Amir bin Aris for sharing his knowledge, showing the guidance and assisting when needy. He has inspired me and guided me right from initial stages when this dissertation was just a piece of an idea. With his help, positive suggestion and generous encouragement have shown me how to move from one step to the next step along my dissertation journey. He has helped me in my tasks, given his full effort in guiding me in achieving my target and provided endless encouragement to maintain my progress.

I also would like to say thank you to all my friends who always give moral support and helping so much during completing this project. Every aspect of this work is connected, directly or indirectly, through several situations to some key people. These are aspects that I may have found challenging and inflexible, however aspects that have turned out to be rewarding in having built my knowledge and experience.

Finally, I am obligated to my family. I wish to thank them for giving me endless support in boosting my morale. They always be my backbone for me when I tramped along my most uncertain periods when I felt lost or overwhelmed. This touched my heart and gave me strength to move forward towards completing what I had started. Their encouragement and belief in me have built me into the person that I am who does not back down from challenges.

ABSTRACT

Today, people are concerning about green product rather than conventional product. While enjoying the convenience provided by technology, people should have the right mind-set in keeping and protecting their environment healthy. The “going-green” trend is now extending to the Asian region. Therefore, for this research, the aim to conduct this study is to (1) to identify the level of consumer perception of eco-friendly product, (2) to identify the level of consumer behavior and (3) to study the relationship between consumer perception of eco-friendly product towards consumer behavior. The concept of consumer perception of eco-friendly product including product price, product quality, brand loyalty and also consumer behavior of willingness to pay more and willingness to recycle waste. This research covered at Melaka only. This research will take place at Melaka because of Melaka is a city that applied in green technology. This research is using convenience sampling method which is 400 of people are the randomly targeted respondents in this study. The result of the analysis showed that only price and brand loyalty had significant towards consumer behavior. Recommendation for the future research is to reach greater responses and improve the scope of research in understanding of green product use not only in Melaka but advisable to all consumers including Sabah and Sarawak in Malaysia.

Keywords: Eco-friendly product, Consumer Perception, Consumer Behavior

ABSTRAK

Hari ini, orang ramai mengenal produk hijau selain produk konvensional. Semasa menikmati kemudahan yang disediakan oleh teknologi, orang ramai harus mempunyai minda yang betul dalam memastikan dan melindungi alam sekitar mereka. Trend "pergi-hijau" kini diperluaskan ke rantau Asia. Oleh itu, menurut kajian, tujuan utama untuk kajian ini dijalankan adalah (1) untuk mengenal pasti tahap persepsi pengguna terhadap produk mesra alam, (2) untuk mengenal pasti tahap tingkah laku pengguna dan (3) mengkaji hubungan antara pengguna persepsi terhadap produk mesra alam terhadap tingkah laku pengguna. Konsep persepsi pengguna terhadap produk mesra alam termasuk harga produk, kualiti produk, kesetiaan jenama dan juga kelakuan pengguna kesediaan membayar lebih dan kesediaan untuk mengitar semula sisa. Penyelidikan ini dijalankan di Melaka sahaja. Penyelidikan ini hanya berlaku di Melaka kerana Melaka merupakan bandar yang menerapkan amalan teknologi hijau. Kajian ini menggunakan kaedah pensampelan kemudahan iaitu 400 orang responden yang dipilih secara rawak dalam kajian ini. Keputusan analisis menunjukkan bahawa hanya harga dan kesetiaan jenama yang signifikan manakala kualiti tidak penting dalam persepsi pengguna terhadap mesra alam terhadap tingkah laku pengguna. Cadangan untuk penyelidikan masa depan adalah untuk mencapai maklum balas yang lebih besar dan meningkatkan skop penyelidikan dalam memahami penggunaan produk hijau bukan sahaja di Melaka tetapi kepada semua pengguna di Malaysia termasuk Sabah dan Sarawak.

Kata kunci: *Produk mesra alam, Persepsi Pengguna, Kelakuan Pengguna*

TABLE OF CONTENTS

CHAPTER	CONTENTS	PAGE
	APPROVAL	i
	DECLARATION	ii
	DEDICATION	iii
	ACKNOWLEDGEMENT	iv
	ABSTRACT	v
	ABSTRAK	vi
	TABLE OF CONTENTS	vii
	LIST OF TABLES	xi
	LIST OF FIGURES	xii
	LIST OF ABBREVIATIONS	xiii
	LIST OF APPENDIX	xiv

Chapter 1 Introduction

1.0	Introduction	1
1.1	Background of Study	2
1.2	Problem Statement	3
1.3	Research Question	5
1.4	Research Objective	5
1.5	Scope of Study	5
1.6	Limitation of Study	6
1.7	Significance of Study	
1.7.1	Practical View	6
1.7.2	Academic View	7
1.8	Conceptual and Operational View	
1.8.1	Consumer Perception of Eco-Friendly Product	7
1.8.2	Consumer Behavior	10
1.9	Summary	12

Chapter 2 Literature Review

2.0	Introduction	13
2.1	Consumer Perception of Eco-Friendly Product	14
2.1.1	Product Price Perception	15
2.1.2	Product Quality Perception	16
2.1.3	Brand Loyalty	18
2.2	Consumer Behavior	19
2.2.1	Customer Willingness To Recycle Waste	20
2.2.2	Customer Willingness To Pay More For Green Product	22
2.3	Past Research	24

2.4	Research Hypothesis	26
2.5	Research Framework	26
2.6	Summary	27
Chapter 3	Research Methodology	
3.0	Introduction	28
3.1	Research Design	29
3.2	Sampling	31
3.3	Research Instrument	31
3.4	Reliability	34
3.5	Research Location	35
3.6	Pilot Test	35
3.7	Research Procedure	37
3.8	Data Analysis Method	38
3.9	Summary	39
Chapter 4	Data Analysis and Discussion	
4.0	Introduction	40
4.1	Respondent Demographic	41
4.1.1	Gender	43
4.1.2	Race	44
4.1.3	Age	45
4.1.4	Educational Level	46
4.1.5	Income	47
4.1.6	Occupation	48
4.2	Data analysis	49
4.2.1	Independent Variable 1: Price	50
4.2.2	Independent Variable 2: Quality	51

4.2.3	Independent Variable 3: Brand Loyalty	52
4.2.4	Dependent Variable : Consumer Behavior	53
4.3	Result of Descriptive Analysis	54
4.4	Hypothesis Testing	55
4.4.1	Multiple Linear Regression	56
4.4.2	ANOVA	57
4.4.3	Coefficient	58
4.5	Summary	60
Chapter 5	Conclusion And Recommendation	
5.0	Introduction	61
5.1	Summary of Respondent Demography	61
5.2	Discussion on Major Findings	62
5.2.1	Objective 1	62
5.2.2	Objective 2	63
5.2.3	Objective 3	64
5.3	Implication	64
5.4	Recommendation for Future Research	65
5.5	Summary	66
References		67
Appendix A	Questionnaire	71
Appendix B	Gantt Chart of FYP I	76
Appendix C	Gantt Chart of FYP II	77

LIST OF TABLES

TABLE	TITLE	PAGE
3.0	Section of Questionnaire	32
3.1	Section of Dimension Questionnaire	33
3.2	Likert Scale	33
3.3	Strength of Association	34
3.4	Cronbach's Alpha Coefficient	36
3.5	Reliability Statistics	36
3.6	Data Analysis Method	38
4.0	Demographic Profile of Respondents	42
4.1	Independent Variable: Price	50
4.2	Independent Variable: Quality	51
4.3	Independent Variable: Brand Loyalty	52
4.4	Dependent Variable: Recycle Waste and Willingness to Pay More	53
4.5	Result of Descriptive Analysis	54
4.6	Multiple Linear Regression	56
4.7	ANOVA	57
4.8	Coefficient of Multiple Linear Regression	58
4.9	Result of Hypothesis Testing	60

LIST OF FIGURES

TABLE	TITLE	PAGE
2.0	Conceptual Framework of Consumer Perception of Eco-Friendly Product	27
4.0	Gender	43
4.1	Race	44
4.2	Age	45
4.3	Educational Level	46
4.4	Income	47
4.5	Occupation	48

LIST OF ABBREVIATIONS/SYMBOL

CSR	=	Corporate Social Responsibility
DV	=	Dependent Variable
FYP	=	Final Year Project
H ₁	=	Hypothesis Alternative
IV	=	Independent Variable
SPSS	=	Statistical Package for the Social Sciences
TQM	=	Total Quality Management
WTP	=	Willingness to Pay

LIST OF APPENDIX

Appendix	TITLE	PAGE
1	Questionnaire	72
2	Gantt Chart of FYP I & Gantt Chart of FYP II	76

CHAPTER 1

INTRODUCTION

1.0 Introduction

In this chapter, the researcher introduced the background study, problem statement, research questions and research objectives. Besides, it also covered the limitation and scope of research.

1.1 Background of Study

Currently, people are interested to buy an eco-friendly product rather than manufacturing product (Nabila and Nazdrol, 2007). Eco-friendly product also called as green product becomes a main concern among the consumers (Nabila and Nazdrol, 2007). Since early 1990s, demand for green products has increased but the numbers are still less with increasing concerns over environmental issues including green consumerism (Okada and Mais, 2010). Nowadays, Malaysia is realized that environmental protection is becoming increasingly important, so environmental awareness is enhanced (Tang, 2014). However, (Okada and Mais, 2010) studied that consumers starts to behave “green” in their daily lives especially buying decisions. The “go-green” trend is now evolving to the Asian region, given the impact of development and environmental threats increasing worrying about the citizens and governments (Lee, 2008). Thus, (Nabila and Nazdrol, 2007; Tang, 2014) conclude that from the consumer’s perspective, environmental concern greatly influence their decision making in selecting or purchasing of green products.

In addition, consumer are increasingly eager to purchase eco-friendly products or called “green products” even though these products are often more expensive (Anvar, 2014). Besides that, 49% of respondents had been purchasing behavior (Bowe’s study as cited in Zand Hessami et al., 2013; Tang, 2014) and 75% consumers become more interested to purchase in green products (Baker’s study as cited in Zand Hessami et al., 2013). In particular, it can enhance consumers perceived quality of products and consumers perception (Cristobal, Flavián et al. 2007). Hence, they willing to buying products from environmental friendly companies (Kumar and Ghodeswar, 2015). It shows that consumers are now more careful and prefer eco-friendly product. This is become more growing the number of green consumer in the market (Tang, 2014).

There are many studies on consumer behaviors concerning green products. Regarding to (Tang, 2014), there are some initiatives to encourage consumers and companies being implemented to eco-friendly product. However, companies have been trying to practice several methods to switch from manufacturing products to green products since the protection of our environment has been global issues (V.N *et al.*, 2012). Otherwise, numerous researcher (Perera and Chaminda, 2013) suggested corporate social responsibility (CSR) could enhance in sustainable competitive advantage (White, 2015) and were able to demonstrate for gaining competitive advantage.

1.2 Problem Statement

This research aims to identify the consumer perception of eco-friendly product towards consumer behavior. The study also analyses how the factors (price, quality and brand loyalty) influence consumer behavior (willingness to pay more and recycle waste).

Nowadays, people more aware about environmental issues (Norsiah, 2016) especially student who are educated person because they have been exposing by current issues in their daily life that came with bad effect to the environment (Nabila and Nazdrol, 2007). However, regarding to V.N, Yean, Ru and Yin (2012) found that educated consumer in Malaysia slightly not concern of green product. Consumer did not apply their knowledge about the effect of buying a green product even though they know that some conventional product that gave bad effect to the environment (Nabila and Nazdrol, 2007). Therefore, this research aimed to the consumer who willing to purchase the green product regarding consumer's knowledge.

To overcome the environmental issues as mentioned above, the roles of eco-friendly product is important. These product is health and good quality of life for current generation and generations (Royne, Levy and Martinez, 2011). Regarding to Nothlingset al. (2008) and Royne et al., (2011), fresh fruits and vegetables are more expensive than processed foods as known to reduce cancer risks for example breast cancer even to protect chronic conditions such as cardiovascular disease. Hence, the product innovation of eco-friendly product is important to consumer.

Most of the previous research have been carried out in other cities on consumer perception of eco-friendly product such as Johor, Labuan (Kianpour, Jusoh and Asghari, 2014a; Mohd Suki, 2016). Researches are more focusing on universities student as student are the large part of the world's population and due to their life expectancy (V.N *et al.*, 2012). Hence, in this research focus on adult that have purchasing power become the main focuses target audience because they possessed important environmental awareness and responsibilities. Adult that have purchasing power is selected because they have monthly potential expenses to buy green product rather than student.

According to Tang (2014) awareness concern to environment issues did change the consumer perception because consumer start to realize that eco-friendly product bring good impact to the environment. Eco-friendly product also called as "green product" which is do not harm and reduce impact to the environment (Morel and Kwakye, 2012). However, companies should offering corporate social responsibility (CSR) by practicing in environmental friendly products that can be competitive advantage in green product (Tang, 2014). So, the eco-friendly is very important in daily life of consumer.

As such situation, although the relationship between variables in this study have been explored in the past researches, the relationships were studied separately and in different context. Therefore, a comprehensive research will be conducted to study the relationship between consumer perception of eco-friendly product and consumer behavior.

1.3 Research Question

In order to study this issue, several research questions are specifically set as follows:

- I. What are the level of consumer perception of eco-friendly product?
- II. What are the level of consumer behavior?
- III. What are the relationship between consumer perception of eco-friendly product towards consumer behavior?

1.4 Research Objective

Three (3) main objectives have been highlighted in the research:

- I. To identify the level of consumer perception of eco-friendly product.
- II. To identify the level of consumer behavior.
- III. To study the relationship between consumer perception of eco-friendly product towards consumer behavior.

1.5 Scope of the Study

This research focus on the consumer's perception as the possible determinants of green product. This research covers two variables which are consumer perceptions of eco-friendly product as an independent variable and consumer behavior as a dependent variable. The scope of the research covers Melaka only. Questionnaire will be distributed among people at Melaka for achieving the desired objectives.

1.6 Limitation of the Study

There were several potential limitations focused on the consumer perception in this study. The topic that will be discuss is about the relationship of consumer perceptions towards consumer behavior. One limitation of this survey is limited to 300 respondents that chosen randomly around Melaka only. Besides that, this research given time constraint less than one year to complete so it is impossible to researcher get information from wide range of respondents. In addition, limit in data collection that will be gather through survey questionnaires.

1.7 Significance of Study

This study is important to recognize the relationship of perception between consumers on eco-friendly product towards consumer behavior as a reference and knowledge to next generation. The significance of this research can be dividing into two categories which academic and practical view.

1.7.1 Practical View

The result of this study may be beneficial to evaluate consumer behavior that need to be improve. Therefore, examining in deeply to this related topic will provide a clear understanding of environmentally friendly product towards consumer behavior. Typically, consumer who prefer to now may not remain the same in the future due to dynamic change in the competitive business world. Consumer behavior is constantly changed.

1.7.2 Academic View

The outcome of this study is useful to the other researcher who would like to conduct a research with similar to this topic. This research is useful by exploring continuously in the green consumption and purchasing eco product to sustain the competitive advantage because consumer green purchasing behavior is constantly changed.

1.8 Conceptual and Operational Definition

1.8.1 Consumer Perception of Eco-Friendly Product

Customer perspectives were related to purchase decisions that might be related to some requirements such as brand loyalty, product quality, innovation and pricing (Becker, 2009; Cheung & Thadani, 2010). In this research, consumer perception have three dimensions:

- 1. Product Price*
- 2. Product Quality*
- 3. Brand Loyalty*

1. *Product Price*

In marketing, (Kotler and Armstrong, 2007:266) articulated the price is the “sum of all values given by the customer to the benefits of having or using the product or service”. According to D'Souza, Taghian and Lamb (2005) also argue that price is an important determinant in the selecting process of eco-product. Since price is the antecedent of green purchases, businesses pursuing green products should avoid practicing premium pricing strategies.

Regarding to Farrell and Shapiro (2010, p. 12), price was a piece of information for the consumer. Balakrishnan (2011) called price “the sacrifice to get a product”. Consumers can associate a value to price until price plays an important role in their decision making process in selecting a product. Customers used price as a cue in evaluating their experiences with a product or service and in shaping their attitude toward a provider (Han & Ryu, 2009). In this research, the price of eco-friendly products are more expensive than non eco-friendly products and green products could effect on decision to purchase.

2. *Product Quality*

Kumar & Ghodeswar (2015) described that product quality as a result of performance, which can be labeled as a level of adjustment and freedom from defects or how reliable products meet the needs of consumer. Product quality dimensions include warranties, product packaging, product features, product designs (Chang and Fong, 2010). When the product quality is high, it will get higher product acceptance from customers and lead to satisfaction of retailers and dealers (Schellhase et al., 2000). Product quality can be a good starting point to provide customer satisfaction and generate customer loyalty. Furthermore, product quality closely related to customer satisfaction, customer loyalty and repurchase business intentions while had a direct impact on performance (Chang and Fong, 2010).

The production goods and services based on quality that used to satisfy the customer needs and wants. The green concept is lacking until consumer get a higher level of satisfaction in obtaining quality from green product (SuboohYusuf, Zeenat Fatima). It can be evaluated either success or failure from behavior and perception of consumer towards eco-friendly product. Regarding to Navan R. Sinha, a green consumer is very concern about environment and buying product that made from environmentally-friendly or eco-friendly such as product with little or no packaging and made without affecting pollution. In this research, quality of eco-products effect purchasing decision, green products are better quality than non eco-products and consumer need to switch green products if available at store. In this research, product quality of green could affect decision to purchase, product quality is better than non-green products and could recommended quality green products to friends.

3. *Brand loyalty*

Brand loyalty assign to the customer behavior to sustain a relationship through purchase of its services and products. Loyalty is a highly-purchased commitment to repurchase or rebuilding a select product or service in the future (Chang and Fong, 2010). In other words, to buying a product or service, relationship with a firm on all incident when alternatives might be seen as a future behavior commitment. Therefore, brand loyalty involved a positive attitude beneficial to product or service by encouraging behavior to buy it and recommend to others (Gronholdt, Martensen and Kristensen, 2000). Brand loyalty was a stable for firms in terms of income sources, serving at the same time as informal acting channels by suggesting product or service to family and friends (Chang and Fong, 2010).

As reported by Hartmann & Apaolaza Ibáñez, 2006; and V.N et al., (2012) “a green brand require a set of features and benefits with effects of environmental degradation and the positive effects on consumers by enhancing environmental concern and brand loyalty”. Green brand is illustrate as “a brand, and can attract consumers who make a high priority on making green purchases and offers a significant eco-edge to competitors” (Grant, 2008, Anvar, 2014). Individuals who spend money to purchase green products and have a high level of awareness and environmental knowledge refer to green customers (Norazah and Norbayah, 2015b; and Mohd Suki, 2016). In this research, Consumer could switch to green product if they were available at local store and offered promotions such as TVs ads and print coupons available at local store and consumer more likely to buy a certain product as it have a brand name.

1.8.2 Consumer Behavior

Consumer behavior are characterized by two key dimensions:

1. Willingness to pay more for eco-friendly product
2. Recycle or reduce waste

1. *Willingness to pay more for eco-friendly product*

Willingness to pay (WTP) is the price or dollar amount that someone is willing to pay for purchase goods or services. It could also define as the maximum amount of money that individual may contribute to equating utility changes. The function identifies the individual price willing to pay a certain quality level, given a certain price and utility (Lusk and Hudson, 2004).