

**FACTORS THAT INFLUENCE CUSTOMERS TO PAY
MORE FOR ENVIRONMENTALLY FRIENDLY
PRODUCTS
(GOING GREEN)
IN UNIVERSITI SAINS MALAYSIA**

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UNIVERSITI SAINS MALAYSIA

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**By
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DEDICATION

To the soul of my deceased father for his unlimited support and unforgettable encouragement without which, I would not be what I am at the moment. I owe a great debt for his guidance and care along the way from my cradle till the day he died. Heartfelt appreciation, gratitude and love go to his great soul.

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ABSTRACT

A variety of environmental problems now affect our entire world. Many countries around the world are concerned about the environmental protection. Industrial sector is also playing important role to help and support this protection by producing green products that are environmentally friendly. However, this kind of products is usually expensive. The objective of this study is to understand the factors that could affect customers to pay more for green products in University Sains Malaysia. The data were obtained from questionnaires handed out to a quota simple of 342 individuals in Universiti Sains Malaysia. .The results showed that the consumers' attitude and behavior are the most consistent explanatory factors in predicting their willingness to pay more for green products. The research finding also shows that the segments of consumers who are willing to pay green products were more likely to be married. Another finding showed that local students are more willing to pay for the environmentally friendly products more than the international students.

Chapter One

1.0 Introduction

This chapter introduces the research agenda of this study. A brief background is provided followed by the problem statement, research questions, objectives and benefits of this study, significance and scope of the study.

1.1 Background of the study:

Today, the threats posed by pollution of the biosphere and the loss of natural resources have become more and more evident. All human activities have an impact on the environment. The landscape has changed, the quality of air and water is deteriorating, and effluents and noise are increasing (Gevert, 2007).

A variety of environmental problems now affect our entire world. As globalization continues and the earth's natural processes transform local problems into international issues, many countries around the world concern about the environmental protection. Industrial sector is also playing important role to help and support this protection by producing Green products that are environmentally friendly. However, these kinds of products are usually more expensive than the conventional products. Increasing emphasis on sustainability by the investment community is only one of the forces that are changing the landscape for businesses today (Tuttle & Heap, 2008).

Over the past several years, public perceptions and attitudes concerning the causes and importance of global warming have changed (Weart, 2006). In the West “green” marketing has become a staple of corporate positioning, at the same time firms have exploited environmentally-friendly messages for short-term marketing gains (Johri, & Lalit 1998).

Recently, according to a new global survey, it was found that more than half of global consumers (53 percent/representing 1.1 billion people) prefer to purchase products and services from a company with a strong environmental reputation (figure 1). The survey sponsored by TANDBERG and conducted by IPSOS MORI, interviewed 16,823 consumers in 15 countries in order to examine consumer and worker environmental attitudes and behaviour. The TANDBERG study surveyed respondents in Australia, Brazil, Canada, China, France, Great Britain, Germany, Italy, Japan, the Netherlands, Norway, Russia, Spain, Sweden and the United States (MORI, 2007).

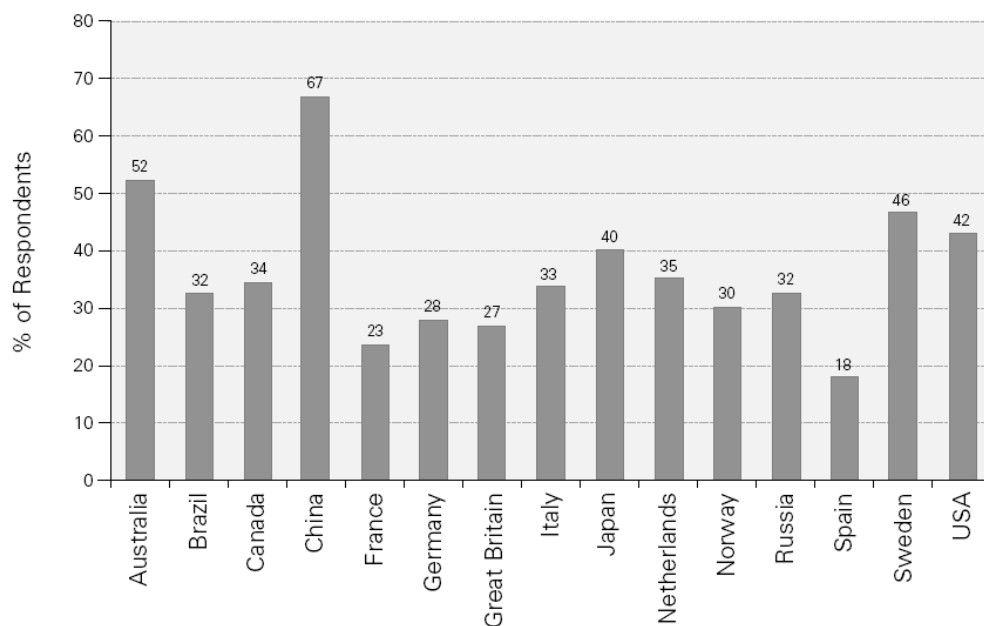


Figure 1. the purchase of green products and service in the world MORI, 2007

In the environment of Asian countries, there are growing forces for green anxiety due to the rising influences of communities on companies, the sky-rocketing cost of complying with environmental regulations, and changing consumer attitudes (Peter, Somporn, & Rajah 2006).

Malaysia is now facing a challenge in ensuring sustainable growth in its development. Air quality, river water quality, deforestation, domestic wastes and toxic wastes are some of the examples of environmental issues faced by the nation. Therefore, research should be conducted in all levels to understand the sources of pollution, control them and reduce the pollution.

1.2 Problem statement

The most obvious global environmental issues include global warming and stratospheric ozone depletion. Such issues could be global in cause (the burning of fossil fuels) or they could be global in effect (again, fossil fuel burning, ozone depletion) or both. However, there are environmental problems that are called global, but are really regional, national, or sub-national. These include desertification, acid rain, water and air pollution, biodiversity loss, coral bleaching, and tropical deforestation. In fact, these can be considered global issues, because they result in widespread interest around the globe (Glantz, 1999).

The Caspian region is an area affected by several environmental changes, some of which are of local cause and local or regional in effect. Although some of those environmental changes are locally caused, they are clearly of global interest. In Malaysia, Air pollution is approaching critical levels in a number of urban areas of Malaysia such as Kuala Lumpur, Petaling Jaya, Johore Bahru and penang (BBC, 2005).

In Malaysia the problem is expected to grow, both in complexity and extent in the face of expanding manufacturing activities and increased reliance on individually-driven private vehicles for mobility. Reducing the pollution problem and the protection of the environment is not only a government responsibility but also individuals can help to mitigate the pollution problem. Individuals can help by reducing their waste that can accumulate in the environment, by recycling or by consuming the alternative green products which usually are more expensive than the conventional products.

Customer's willing to pay for the green products must be evaluated before marketing green products. Information gained by such evaluation can help to facilitate the process of marketing of green products and benefit both the producers and the environment alike. Various effort have been forwarded with intention to create awareness improve environment concern and change attitude of the public such as educations, training program and recycling camping.

In Malaysia, data about the costumer willingness to pay for green products is scarce therefore; going green depends on many factors that encourage consumers to go forward green products. Recently, the campaign of banning the environmentally unfriendly products in USM is going on. Effective on 17th December 2007 USM banned the use of polystyrene containers as well as other non-reusable containers because of high amount of waste generated by these containers and because of its potential carcinogenic properties (healthy campus 2007). This event represents a value opportunity for researchers to understand first factors that influence consumers' behaviour toward green products. Second, lack of knowledge triggers researcher to conduct this study to fill this gap in knowledge about understanding the consumer (students) behaviour toward buying green products in USM.

1.3 Research Question

On the bases of the study background and problem statement the following research questions can be formulated as follow:-

1. What is the relationship between consumer attitudes and willingness to pay more for environmentally friendly products?
2. What is the relationship between consumer behaviours and willingness to pay more for environmentally friendly products?
3. What is the relationship between consumer values and willingness to pay more for environmentally friendly products?
4. What is the relationship between consumer knowledge and willingness to pay more for environmentally friendly products?

1.4 Objectives of the study

The specific objectives are outline as follow:

1. To understand the relationship between consumers' attitude and willingness to pay more for environmentally friendly products.
2. To investigate the relationship between consumers' behaviours and willingness to pay more for environmentally friendly products.
3. To examine the relationship between consumers' values and willingness to pay more for environmentally friendly products.
4. To explore the relationship between consumers' knowledge and willingness to pay more for environmentally friendly products.

1.5 Definition of Key Terms

1.5.1 Attitude:

Attitude is defined as the mental standpoint of individuals on a subject, object, concept or proposition. This can reflect positive or negative thinking on that subject. It may also indicate a state of indifference in customers' minds towards a subject or proposition (Yadin, 2002).

1.5.2 Behaviour

Behaviour refers to the actions or reactions of an object or organism, usually in relation to the environment. Behaviour can be conscious or unconscious, overt or covert, and voluntary or involuntary (Kotler, 2005)

1.5.3 Value

To acknowledge some feature of things as a value is to take it into account in decision making, or in other words to be inclined to advance it as a consideration in influencing choice and guiding oneself and others(Philosophy., 2007).

1.5.4 Knowledge

Davenport (1998) define knowledge as, "a fluid mix of framed experience, contextual information, values and expert insight that provides a framework for evaluating and incorporating new experiences and information.

1.5.5 Green marketing

Environmentally-responsible or "green" marketing is a business practice that takes into account consumer concerns about promoting preservation and conservation of the natural environment (Charter et al., 1999).

1.5.6 Green consumers:

A green consumer is someone who is very concerned about the environment and, therefore, purchases service or products that are environmentally-friendly or eco-friendly (Ian, Paul, & Daniel, 2002; Maggie, 2005).

1.5.7 International students:

Students who travel abroad mainly to improve their education level or to improve their language skills, others travel to advance their specialized studies. Still others study abroad because suitable tertiary education is either in short supply or unavailable altogether in their home countries (A. Binsardi, 2003).

1.6 Significance of the study

The study will be expected to contribute to the theory and practice in green marketing. In terms of theoretical significance, compared to previous studies in this area, this study intends to improve upon existing literature by addressing few issues. First, improve the understanding between the customer attitudes, behaviour, value and knowledge and willing to pay more for environmentally friendly products. Second, the outcome of the study can help contribute to the theory and practice in green marketing. Third, try to understand the variation between different groups in their behaviour toward green marketing.

1.7 Organization of chapters

The study will be divided into five chapters. Chapter one deals with the introduction, problem statement, research objectives, research questions, definition of key terms, significance of study and organization of the chapters. Chapter two deals with review of literatures related to the topic, theoretical framework and hypotheses. Chapter three deals with the methodology while Chapter Four deals with result. Chapter five consists of discussion and conclusions.

Chapter 2

LITERATURE REVIEW

2.0 Introduction

In the new global economy, green marketing is one of the most important issues for producers. Understanding the customer's behavior is the key issue for successful marketing for green products. A considerable amount of literature has been published on green marketing. In the following sections I will discuss in some details some of the literatures related to the customer's characteristics to pay more for green products from different perspective and different context (i.e. countries) that show the willing of customers to pay more for green products.

2.1 Model of consumer behavior

The aim is to bring together our present understanding by presenting a series of model that endeavour to explain the purchase decision process in relation to pertinent variables.

2.1.1The Theory of Planned Behaviour (TPB)

The theory suggests that the level of 'intention' shown by an individual is the best predictor of behaviour. 'Intention' is influenced by internal and external control constructs, and is seen as a function of the individual's attitude toward behaviour and any subjective norms. Hence, 'intention' is a cognitive representation of an individual's behavioural tendency. In this sense, Kotchen & Reiling (2000) and Cooper et al. (2004) employed attitudes and beliefs to explain willing to pay (WTP), since WTP can be considered as a behavioural intention and, as postulated by Ajzen's (1991) Theory of Planned Behaviour (TPB) attitude predicts behavioural intention. WTP studies until fairly recently have neglected the psychological foundations of WTP and have focused rather narrowly on demographic correlates (Ajzen & Driver, 1992 ; Kotchen & Reiling, 2000) because respondents are unaccustomed to evaluating

monetary value of public goods , according to recent research findings (Ajzen & Driver, 1992) .In particular , in their judgement about WTP respondents tend to express their moral values toward public goods as well as why they believe other they respect think they should pay (subjective norms). Respondents also consider whether they have the ability (behaviour) to make required payments for the public good, WTP respondent rely more on intuition feelings and fundamental values in formulating their responses. Recent work has fond the environmental attitude and WTP for environmental improvement are often correlated with basic ethical beliefs about the environment (Spash & Hanley 1995; Kotchen and Reiling 2000).

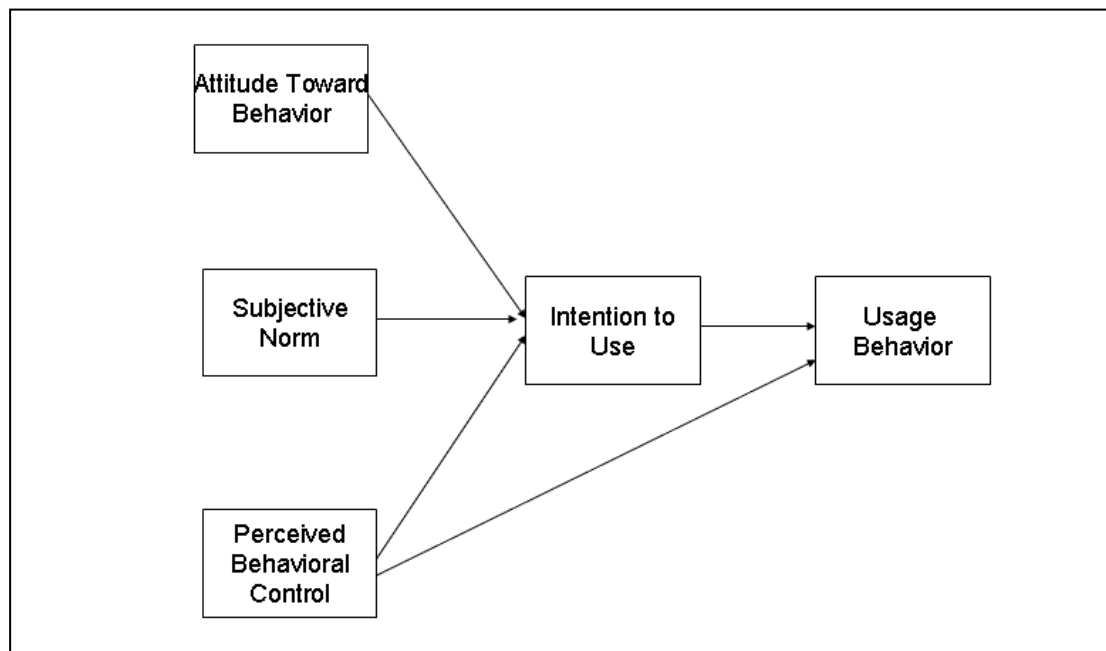


Figure 2.1. Theory of Planned Behaviour Ajzen's (1991)

2.2 Green marketing

According to the American Marketing Association, green marketing is defined as the marketing of products that are reputed to be environmentally safe. In another definition by Ottman (2002) from an organizational standpoint, environmental considerations should be integrated into all aspects of marketing — new product development and communications and all points in between. The term "green marketing" has also been described as an organization's efforts at designing a product (Richard et al., 1999). Marketing academics ought to aim to look up the green marketing practitioners whose products and services really protect or even improve the quality of the environment (Patrick & Vanessa, 2006). During the middle 1900s green marketing seemed to be a quite new fact at that time. On the other hand over the last two decades, growing concerns about eroding ecosystem quality have led to a renewed interest in environmentalism (Hokey & William, 2001). Green marketing is often joined up with terms as risk reduction, re-engineering, or cost cutting (Fred, 1998). Although the environmental movement has been underway for years, green marketing still seems to be a relatively new phenomenon. The growing attention in environmental problems, towards a sustainable development, has encouraged both a deeper consciousness new challenges for enterprises (Maria, 1999). Environmental issues and requirement for environmentally friendly products will enhance the expectations of customers to have safe products (Jari, 2002). Marketers are typically not slow to adopt an innovation, but green marketing is in some ways fraught with peril which means that firms may lose its customer and its reputation if they do not have the ability and tools to propose green products of service (Shrum, McCarty, & Lowrey, 1995).

2.3 Green consumer

A green consumer is someone who is very concerned about the environment and, therefore, purchases service or products that are environmentally-friendly or eco-friendly (Ian, 2002; Geuens, 2005). Another definition of suggest that green consumers who will make sure through label information looking for environmental validation for the product (D'Souza, 2004). In other words, it has been suggested that these are the consumers who would be encouraged to purchase green goods even if they were rather lower in quality and higher in price in contrast to other products.

These are consumers who will make an effort to buy products that favour the environment. Tina et al. (1997) found that greatest number of respondents had based their purchases on environmental impact was laundry detergent (30%), followed by household cleansers (29%), paper products (29%), garbage bags (17%), light bulbs (14%), and other products (9%). These consumers are often known as "ultra-green" who is the driving force of environmentalism (Volsky et al., 1999).

Although consumers do not always support product choice on environmental attitudes, it appears that it is gradually becoming a more prominent factor among other selection criteria (Irland, 1993). At the same time, it has been suggested that the more involved consumers become with the environment, the more likely they would purchase green products (Schuhwerk & Lefkock-Hagius, 1995).

2.4 Green products

What exactly is a "green" product? A "green" product is essentially a product that is environmentally friendly. So, what does environmentally friendly entail? There are many different explanations that answer this question. (Laurence) 1991 Explained, that how we can decides whether a product is environmentally friendly. (Laurence) 1991 stated, first we

consider the product's life cycle - its manufacture, use, and disposal - to determine its total impact on the environment. Then we weigh its benefit to humans against its environmental costs. Third, we ask whether any less harmful alternatives are available. (Joel) 1997, author of *The E-Factor*, states, "At its essence, being 'green,' for all the many things it entails boils down to two basic goals: reducing waste and maximizing resource efficiency". Waste includes human effort, energy, use of facilities, and money. Resources include those used by the company such as materials, energy, supplies, and inventory. Resources also include those that come from the environment such as water, air, plants, and land. It is clear that each company has their own definition of what a "green" product is. Most definitions are similar, however, and usually contain at least one of the following words: sustainable, organic, natural, biodegradable, or chemical free. According to Vining (1990) Products with little or no packaging, products made from natural ingredients and products that are made without causing pollution are all examples of eco-friendly products. Defining a product as "green" is not often straightforward since green building is a whole-systems approach to designing, constructing, operating and maintaining buildings (Shrum, 1995). To accurately assess the true greenness of a product, consideration must be given not only to particular environmental and health impacts of a product from its manufacturing, use, and disposal phases—but also to how the product is utilized within the larger system (Castle, 2007). According to D'Souza (2007) Green products have to represent a significant achievement in reducing environmental impact; they may also have to incorporate strategies of recycling, recycled content, reduced packaging or using less toxic materials. The rising number of customers demanding environmentally responsible products and the need to remain competitive has prompted many marketing managers to seek information concerning environmentally responsible purchase behaviour (Scott & Jobber, 2000).

2.5 Consumer characteristics towered green product

In the following subsection I will discuss briefly some of the most important characteristics that influence customer behavior toward environmentally friendly products.

2.5.1 Attitude

According to Gagne & Medsker (1996) attitude is defined as an internal state that influences an individual's choices of personal action, or a response tendency. According to an already traditional definition, we can understand by attitude the learned predisposition to respond in a way consistently favourable or unfavourable with respect to a certain object (Ajden, 1991). Attitude has as its antecedents, cognitive, affective and behavioural processes (Eagly and Chaiken, 1993). Thus, there exists a cognitive learning process that occurs when the person obtains information (directly or indirectly) about the object, forming in this way, beliefs about it. Attitudes cannot be observed directly, they are mental positions that marketers must try to infer through research measures (Wilkie, 1994).

2.5.1.1 Relationship between Attitude and willingness to pay more for green products

A variety of definitions of the term attitude have been suggested. Attitude can be defined as an individual enduring evaluation of feeling about and behavioral tendencies towards an objective of idea (Pride et al., 2006). Attitude is enduring system of favorable and unfavorable evaluation about the brand (David & Nigel 2006). Many literatures agree that attitude is one of the most important factors that affect customer perception towards green products (Bodo, 1996; Chyong-Huey, 2006; Patrick, Vanessa & Sainz, 2005). Some researchers believe that attitude and behavior of customers towards green should be depending on trust and effectiveness of their existing green messages (Gunne, Ulf, & Anders 2004). In another finding, it has been suggested that attitude, can also be effected by culture and green groups (Ian, Paul, & Daniel, 2002). In a survey conducted by Shrum, McCarty & Lowrey (1995)

revealed that the customer attitudes are linked to the tendency to buy green. Attitudes such as environmental concern, political orientation, and in particular 'perceived consumer effectiveness' (PCE) have been proven to be causal links to behaviour (Roberts, 1996; Lee et al., 1999).

2.5.1.2 Important of being of environmentally friendly

Our lives impact on the environment in many ways. All the choices we make on a daily basis will have some effect on our environment - whether to drive or walk to the shops, whether to buy free range or factory-farmed eggs, whether to switch the television off at the plug each night. According to David & Allen (2001), Eco-friendly and nature friendly are synonyms used to refer for goods and services considered to inflict minimal harm on the environment which mean it is important to avoid products which contain ingredients derived for example from the petroleum industry.

In Study done by Bhate & Lawler (1996), they found that environmentally friendly behaviour correlates significantly with innovativeness and go for green practice. Consumers can be influenced by their ethics and beliefs, for example, if they are motivated by 'moral' or 'material' ethics. Where consumers are motivated on 'moral' grounds, they move away from material consumerism that impact on environment (Lavoie, 2004).

2.5.1.3 Severity of environmental problem

According to Dresner & Blatner (2006), a variety of environmental problems now affect our entire world. As evidence grows that the rate of human-driven ecological change is on the rise, the struggle to create environmental policies that reconcile environmental protection with human needs. As globalization continues and the earth's natural processes transform local problems into international issues, few societies are being left untouched by major environmental problems. Stafford (2003) found that consumer tend to consume little energy

in understanding the severity of the environmental problem. Environment is the physical, biological, and social setting for living things. But environment, viewed as a set of unsolved problems for humans, itself unfolds in a social context, an evolving framework of economic, political, and intellectual relations. The solutions to environmental problems, and even notions of what constitutes an environmental problem, have been profoundly altered (Michael, 1995). Schuhwerk & Lefkoff-Hagius (1995) suggested that by directing alertness to environmental attributes through prominence, a green application may generate positive responses from customers regardless of their level of involvement with the environment.

2.5.1.4 Level of responsibility of corporations

Consumer's perception of the firm's corporate strategies toward environmental issues is expected to contribute to the formation of the overall perception about green products. It reflects corporate reputation by way of being socially responsible and responsive to environmental concerns and the extent to which this perception influences the consumer's intention to purchase green products (Chan, 1996).

Environmental regulations have provided a clear parameter of the legally acceptable level of corporate responsibility, accountability, and expectations. At the same time, in anticipation of their target markets' expectations, businesses have formulated and implemented the strategy of caution with respect to the environmentally safe business conduct (Clare et al., 2006). For instance, the type of information to be provided to the customer; and the credible methods of the presentation of the claim of environmentally safe products to assist the customers' decisions process. For many firms, the challenge is to balance their consumers' environmental concerns with their cash flow, profitability and the sustainable corporate strategic approach to the intensity of competition in their specific target markets (Berry & Rondinelli, 1998).

2.5.2 Behaviour

Behaviour can be conscious or unconscious, overt or covert, and voluntary or involuntary. There has been substantial research on consumer behaviour, examining the decision process, and influences upon it, in terms of both brand/store attributes and consumer characteristics. Central to these models is the belief that consumers go through a decision process of varying complexity, depending on the nature of the decision they are making, with a number of possible variables which influence this process at a number of stages.

It is believed that the buying process begins with need recognition. Having recognised a need, consumers then search for information about retailers/products that might satisfy the need. Having gathered information, consumers will then evaluate the alternatives, and make a purchase decision. Following purchase will be some form of post-purchase feeling/behaviour, when the decision is assessed (Kotler, 2005).

Whether consumers actually do go through each of the stages outlined, and the amount of time spent at any one stage, is likely to vary with the nature of the purchase. Where the purchase is perceived to be of high risk, it is likely that the consumer will spend more time in the information search and evaluation stages. Such buying decisions are termed complex or high involvement decisions (chan,2004).

2.5.2.1 Relationship between behaviour and willingness to pay more for green products

Customers who consider environmental issues when making a purchase are more likely to spend more for green products (Laroche et al., 2001). Customers are willing to modify their use behavior to protect the environment (Rice, 1996). Another study revealed that behaviours strongly effected by society (Michel et al., 2002).

Marketing practitioners and academics are attempting to identify and understand green customers and their needs, also to develop market offerings that meet these needs.

Another study done by Gerald & Nagle (2002) suggested that motivation and empathy shape customer behaviours to be more environmentally consuming.

The rising number of customers demanding environmentally responsible products and the need to remain competitive has prompted many marketing managers to seek information concerning environmentally responsible purchase behavior (Scott & Jobber, 2000).

Greener purchasing has a key role in reducing the negative environmental impacts of consumption by focusing on reducing procurement and selecting greener alternatives.

2.52..2 Recycling considering

Recycling is the reprocessing of old materials into new products, with the aims of preventing the waste of potentially useful materials, reducing the consumption of fresh raw materials and reducing energy usage, and thereby lowering greenhouse gas emissions compared to virgin production (George et al, 2004).

Recycling is one of the best ways for you to have a positive impact on the world in which we live. Recycling is important to both the natural environment and us. According to Chyong-Huey et. al. (2006), considering recycling and environmental issues when making a purchase are the behaviors that are positively related to the customers' willingness to pay for green products. A survey taken by Gonzalo & Asunción (2006) found that recycling behavior has become a schedule with recognized awareness of natural balance and recycling, but without a high level of involvement.

2.52..3 Considering environmental issue when making a purchase

One type of environmentally conscious behavior is environmental consumerism (green buying)-purchasing and consuming products that are benign toward the environment. Some examples of these products are household items manufactured with post consumer plastics or paper, recyclable or reusable packaging, energy-efficient light bulbs, and detergents containing ingredients that are biodegradable, nonpolluting, and free of synthetic dyes or perfumes. These types of ecologically safe products are just a few of the many currently available items that can facilitate the long-term goal of protecting and preserving our natural habitat (Tina et al., 1997).

Chan (1996) found that more concerned about environmental issues tended to purchase more products which fit in with the three of Rs reduce, reuse, and recycle. However, customers seeking environmentally-directed products are having difficulty in finding acceptable products (Joseph & Russell 1998).

2.52..4 Buying environmentally harming products

Very recently studies show that customers are becoming more environmentally conscious, and green use more accepted (Phau & Denise Ong, 2007). Very promising finding showed that all the components of environmental consciousness such as energy efficiency and conservation, solid waste minimization, purchase local products, water conservation and environmental purchasing have been positively influenced by a positive disposition towards environment (Kamal & Jauhari, 2007).

It is necessary for a company to develop an appropriate corporate plan and outlook for their green products that avoid deception. Deceptive ad claims may have little positive influence on consumers and they have the potential to lead to negative consequences (Stephan, Ronald & Edgar, 1998).

2.5.3 Value

To acknowledge some feature of things as a value is to take it into account in decision making, or in other words to be inclined to advance it as a consideration in influencing choice and guiding oneself and others (Philosophy 2007). According to Schneider & Bowen (1999), respecting security and justice in particular seems more likely to produce satisfaction than delight; while boosting the customer's esteem is likely to generate customer delight. According to Kaufman (1998), are classified as: esteem value or “want”, exchange value or “worth”, and utility value or “need”. Kaufman asserts that each decision to acquire goods or services includes one or a combination of all the above value elements, where the sum of the elements results in a buy decision. According to Huber et al. (2001), postulates that linkages between product attributes, consequences produced through consumption and personal values of consumers underlie their decision-making processes. In term of value and brand People buy brands for three main reasons, namely: the functional needs that brands satisfy; the self-image of the customer; and at a more profound level, the customer identification with or philosophical or emotional connection with the attitude or ethos that the brand represents (Smith & Wheeler, 2002). This explains why some customers are willing to pay more for environment friendly products.

2.5.3.1 Relationship between value and willingness to pay more for green products

Value is considering as a customer's subjective assessment of benefits relative to costs in determining the worth of a product (Pride et al., 2006). It is strongly believed that value collectivism found to be much connected to customers' willingness to pay for environmentally friendly products (Chyong-Huey et al., 2006; Laroche et al., 2001). In context of green marketing, a relationship between values and customers' willingness to spend more for green

products translates into a certain concern for the welfare of others (Michel et al. 2002). One of the recent study shows that individuals, who most value ecological matters, have higher environmental behaviors, who try to fulfill them by taking up new challenges, present a higher ecological behavior (Elena et al., 2006).

It has been suggested that demographics may provide subtle indicators of a person's values. For example, Salmela & Varho (2006) also support the findings of other research where it was suggested that 'green' consumers were found within particular professions, such as social and healthcare sectors. However, these concepts show only indicators towards a person's values and may not provide the causal link to them. As a development, VBN theorises that individuals accept the values of a movement, and that their actions could improve the situation regarding those values that may be under threat. Thus, their behaviour has been 'normed' through their beliefs based on the values of the movement (Stern et al., 1999).

2.5.3.2 Collectivism

Collectivism is defined as the theory and practice that makes some sort of group rather than the individual the fundamental unit of political, social, and economic concern (Vinod, 2005). Environmental collectivism means fanatical opposition to energy production and energy infrastructure of any kind (including offshore wind farms) while professing ritual belief in renewable energy and conservation. On the other hand, collectivism implies cooperation, helpfulness, and consideration of the goals of the group relative to the individual. Being a collectivist means that one may forego individual motivations for that which is good for the group.

2.5.3.3 Security

Security is the condition of being protected against danger or loss. The trend to "green" or green security can be thought of from two perspectives: emotional and economic. On the emotional side, eco-friendly business practices make consumers feel good because the products they buy because less environmental impact than their non eco-friendly counterparts.

Reducing our carbon footprint is good for the planet. Not destroying the planet when manufacturing, using or disposing of a product is great (Hoff, 2008). Consumers willing to pay more for green products report that today's place a high importance on security and warm relationships with others, and often consider ecological issues when buying something (Michel et al., 2002).

2.5.3.4 Fun and enjoyment

McCarty & Shrum (1994) investigated the impact of two other relevant values on consumers' environmentally conscious behavior: fun/enjoyment and security. It was found that the fun/enjoyment value was positively related to attitudes about the importance of recycling and to the recycling behavior. This relationship makes sense if one considers that those who value fun and enjoyment in life may see a fulfillment of this end-state through interaction with the environment.

2.5.3.5 Individualism

Individualism represents how much a person focuses on his/her independent self (i.e. how he/she depends only on himself or herself). Individualist people engage in voluntary associations and they make sure that they remain distinct individuals, even when they belong to groups. They also compete with others for status, which depends on their accomplishments much more than on their group memberships. This type of individual is not very conducive to environmental friendliness (Kamal & Jauhari, 2007). On the other hand, collectivism implies

cooperation, helpfulness, and consideration of the goals of the group relative to the individual. Being a collectivist means that one may forego individual motivations for that which is good for the group.

2.5.4 Knowledge

Knowledge define as, "a fluid mix of framed experience, contextual information, values and expert insight that provides a framework for evaluating and incorporating new experiences and information(Davenport 1998). Knowledge is known in consumer research as a trait that influences all phases in the decision method. Specifically, knowledge is a relevant and significant construct that affects how consumers gather and organize information (Alba, 1987), and how consumers evaluate products and services (Murray, 1990).

2.5.4.1 Relationship between knowledge and willingness to pay more for green products

Experiential support for the influence of consumers' ecological knowledge on their ecologically favorable behavior is contradictory. On the other hand, (Vining, 1990), as well as (Chan, 1996), have shown that knowledge about ecological issues is a significant predictor of environmentally friendly behaviour. Amyx (1994) even found that individuals highly knowledgeable about environmental issues were more willing to pay a premium price for green products. Ecoliteracy was developed by (Laroche, 1996) to measure the respondent's ability to identify or define a number of ecologically-related symbols, concepts and behaviors. It was found to be correlated with some attitudes and behavior toward the environment.

2.5.5 Willing to pay for environmentally friendly products

Willing to pay (WTP) defined as the price a buyer is willing to pay for a given quantity of a good or service. The environmentally conscious buying behavior of customer can significantly affect the market performance of product consequently, there is a strong demand to examine customer preference attributes when they make buying decision. The customer markets for environmentally friendly goods and services are expected to grow for several years (Anil et al., 1999).

Study done by Clare et al. (2006) suggested that understanding of the background of green purchasing and emphasize that green customers rely more on personal experience with the product than the information provided by the marketer. As (Michel et al., 2002) remarked that pro-environmental actions are important, the more they are willing to spend on green products. In another study it was found that most of British people would accept new taxes on goods and services that damage the environment, according to a Guardian/ICM poll which reveals a widespread willingness to make personal sacrifices to tackle the threat of climate change. Some 63% said they approved of a green tax to discourage behavior that harms the environment, while 34% said they would not accept such price rises (Adam & Wintour, 2006).

According to survey by technology and market research group Forrester Research, 12 percent of U.S. adults, or some 25 million Americans, are willing to pay extra for consumer electronics that use less energy or come from a company that is environmentally responsible. Forrester says these consumers, called “bright greens,” are the vanguard of an emerging consumer market segment that will be an attractive target for technology companies (Castle, 2007).

2.6 Green behaviour of Malaysian customer

The green marketing of products and services is an important development in the context of emerging economies in Asia (Johri & Sahasakmontri, 1998). Environmental problems are multidimensional issues and therefore everyone, engineers, social scientists, industries, government and non-governmental organizations and individuals have to collaborate to resolve the matter (Aini et al., 2003).

New environmental standards are being rapidly proposed and implemented not only in the richer countries of Asia but also in many of the region's developing nations. Malaysian government is paying good attention to environmental problems which was clear in the prime Minister declaration on environment that Ecological concerns and the increasing awareness of the advantages of green homes have led to an upsurge in green homes in the country (Mohammad, 1996).

The environmental awareness of Malaysian customer was clear in the report about Malaysian customers which show that concerns about the impact of their homes on the environment have prompted some homebuyers to opt for green homes (Izrin & Tan, 2007). Data on customer green behavior in Malaysia is not enough to understand clearly their behavior towards green product. This lack of knowledge triggers me to conduct this study to fill this gap in knowledge about consumer behavior toward green products. study done by (Chyong-Huey et al., 2006) revealed that customers' attitudes, behaviors and values were manipulated to determine their relative influence on their willingness to pay for green products in the eastern part of Malaysia Kota Kinabalu. To the best of my knowledge, there is no any similar study conducted in waste Malaysia. Therefore I will do the same study in Penang in order to have better understanding of the whole context.